# MICHIGAN DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT AIR QUALITY DIVISION

PERMIT TO INSTALL
297-01E

ISSUED TO
Sheridan Books, Inc.

LOCATED AT
613 East Industrial Drive
Chelsea, Michigan

IN THE COUNTY OF
Washtenaw

STATE REGISTRATION NUMBER
N7029

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Natural Resources and Environment. 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:  January 29, 2010				
DATE PERMIT TO INSTALL APPROVED: February 5, 2010	SIGNATURE:			
DATE PERMIT VOIDED:	SIGNATURE:			
DATE PERMIT REVOKED:	SIGNATURE:			

# **PERMIT TO INSTALL**

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# **Common Abbreviations / Acronyms**

	Common Acronyms		ollutant/Measurement Abbreviations
AQD	Air Quality Division	BTU	British Thermal Unit
ANSI	American National Standards Institute	°C	Degrees Celsius
BACT	Best Available Control Technology	СО	Carbon Monoxide
CAA	Clean Air Act	dscf	Dry standard cubic foot
CEM	Continuous Emission Monitoring	dscm	Dry standard cubic meter
CFR	Code of Federal Regulations	°F	Degrees Fahrenheit
COM	Continuous Opacity Monitoring	gr	Grains
EPA	Environmental Protection Agency	Hg	Mercury
EU	Emission Unit	hr	Hour
FG	Flexible Group	H <sub>2</sub> S	Hydrogen Sulfide
GACS	Gallon of Applied Coating Solids	hp	Horsepower
GC	General Condition	lb	Pound
HAP	Hazardous Air Pollutant	m	Meter
HVLP	High Volume Low Pressure *	mg	Milligram
ID	Identification	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram
MAP	Malfunction Abatement Plan	NO <sub>x</sub>	Oxides of Nitrogen
MDNRE	Michigan Department of Natural Resources & Environment (Department)	PM	Particulate Matter
MIOSHA	Michigan Occupational Safety & Health Administration	PM10	PM less than 10 microns diameter
MSDS	Material Safety Data Sheet	PM2.5	PM less than 2.5 microns diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	pph	Pound per hour
NSPS	New Source Performance Standards	ppm	Parts per million
NSR	New Source Review	ppmv	Parts per million by volume
PS	Performance Specification	ppmw	Parts per million by weight
PSD	Prevention of Significant Deterioration	psia	Pounds per square inch absolute
PTE	Permanent Total Enclosure	psig	Pounds per square inch gauge
PTI	Permit to Install	scf	Standard cubic feet
RACT	Reasonably Available Control Technology	sec	Seconds
ROP	Renewable Operating Permit	SO <sub>2</sub>	Sulfur Dioxide
SC	Special Condition	THC	Total Hydrocarbons
SCR	Selective Catalytic Reduction	tpy	Tons per year
SRN	State Registration Number	μg	Microgram
TAC	Toxic Air Contaminant	VOC	Volatile Organic Compounds
TEQ	Toxicity Equivalence Quotient	yr	Year
VE	Visible Emissions		

<sup>\*</sup> For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (psig).

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#### **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 Natural Resources & Environment, P.O. Box 30260, Lansing, Michigan 48909, 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 Natural Resources and Environment. (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) 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)	Flexible Group ID
EU_Heidelberg-05	Heidelberg No. 5: Sheet fed, 28" × 40", 8 Color, Automatic Wash	FG_OffsetLitho_SF
EU_Heidelberg-02	Heidelberg No. 2: Sheet fed, 28" × 40", 4 Color, Automatic Wash	FG_OffsetLitho_SF
EU_Heidelberg-03	Heidelberg No. 3: Sheet fed, 28" × 40", 8 Color, Automatic Wash	FG_OffsetLitho_SF
EU_Kamori-02	Kamori No. 2: Sheet fed, 21" × 28", 5 Color, Automatic Wash	FG_OffsetLitho_SF
EU_Planeta-03	Planeta No. 1: Sheet fed, 38" x 50", 1 Color, Manual Wash	FG_OffsetLitho_SF
EU_Timson-01	Timson No. 1: Heatset, Web fed, 53" Wide, 1 Color, Automatic Wash	FG_OffsetLitho_H
EU_Timson-02	Timson No. 2: Heatset, Web fed, 40" Wide, 1 Color, Automatic Wash	FG_OffsetLitho_H
EU_Timson-03	Timson No. 3: Heatset, Web fed, 40" Wide, 1 Color, Automatic Wash	FG_OffsetLitho_H
EU_Timson-04	Timson No. 4: Heatset, Web fed, 53" Wide, 1 Color, Automatic Wash	FG_OffsetLitho_H
EU_Timson-05	Timson No. 5: Heatset, Web fed, 53" Wide, 1 Color, Automatic Wash	FG_OffsetLitho_H

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_OffsetLitho_SF	Total Five (5) Sheetfed (SF) Offset Lithographic Printing Presses.	EU_Heidelberg-05 EU_Heidelberg-02, EU_Heidelberg-03, EU_Kamori-02, EU Planeta-03
FG_OffsetLitho_H	Total Five (5) Heatset Webfed Offset Lithographic Printing Presses.	EU_Timson-01, EU_Timson-02, EU_Timson-03, EU_Timson-04, EU_Timson-05
FGFACILITY	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	

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#### The following conditions apply to: FG\_OffsetLitho\_SF

**DESCRIPTION:** Total Five (5) Sheetfed (SF) Offset Lithographic Printing Presses

Emission Units: EU\_Heidelberg-01, EU\_Heidelberg-02, EU\_Heidelberg-03, EU\_Kamori-02, EU\_Planeta-03

**POLLUTION CONTROL EQUIPMENT: N/A** 

#### I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC Content	< 5% By	Per change in type	Each Emission Unit	GC 13,	R 336.1702(a)
of the Fountain	Weight as	of fountain solution	of the	SC VI.1,	
Solution	Applied		FG_OffsetLitho_SF	SC VI.3,	
				SC VI.4,	
				Appendix	
2. VOC	17.3 tpy	12-month rolling time	FG_OffsetLitho_SF	SC VI.1,	R 336.1205(3),
		period as determined		SC VI.2,	R 336.1702(a)
		at the end of each		SC VI.4	
		calendar month.			

#### \* Limits:

#### Ink:

• Retention rate of 95 percent of the VOC in the non-heatset ink applied to the paper.

#### Shop Towels:

Retention rate of 50 percent of the VOC in the clean-up retained in the used shop towels.

#### References:

- Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, EPA-453/R-06-002, September 2006
- Alternative Control Techniques Document: Offset Lithographic Printing, USEPA 453/R-94-054, June 1994
   DRAFT Guideline Series Control of VOC Emissions from Offset Lithographic Printing, USEPA, Sept. 1993

#### II. MATERIAL LIMITS

1. The permittee shall not use more than 200 gallons of isopropyl alcohol (IPA, CAS #67-63-0) per 12-month rolling time period as determined at the end of each calendar month. (R 336.1225, R 336.1702(a))

#### III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall recover and reclaim, recycle, or dispose of all inks, fountain solutions, roller wash, and blanket wash (materials), in accordance with all applicable regulations. (R 336.1225, R 336.1702(a), R 336.1901)
- 2. The permittee shall capture all waste materials and shall 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 336.1225, R 336.1702(a), R 336.1901)
- 3. The permittee shall handle all VOC and/or 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 336.1225, R 336.1702(a), R 336.1901)

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- 4. The permittee shall implement the following listed pollution prevention exercise for FG\_OffsetLitho\_SF: (R 336.1225, R 336.1702(a), R 336.1901)
  - a) If applicable, collect and reuse cleaning solvent.
  - b) Ensure that used solvents and solvent saturated towels or wipes are not disposed with the trash.
  - c) Send solvents that cannot be reused off-site for recycling.
  - d) Conduct training on proper cleaning methods to assure success when using new materials and practices.
  - e) All press related cleaning solvents (blanket and roller washes) shall have composite partial vapor pressures that do not exceed 10 mmHg@20°C (68°F).
  - f) All containers of new and used VOC-containing press related cleaning materials (blanket and roller washes, and solvent-containing cleaning towels) shall be kept closed at all times.

#### IV. DESIGN/EQUIPMENT PARAMETERS

N/A

#### V. TESTING/SAMPLING

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

1. The VOC content of any material, as received and as applied, shall be determined using federal Reference Test Method 24 (inks, coatings, fountain solution additives and cleaning solvents) or 24A (only applies to solvent-borne inks and related coatings used in the publication rotogravure industry) pursuant to Rule 1040(5). Upon prior written approval by the AQD District Supervisor, VOC content may be determined from manufacturer's formulation data. If the Method 24 or 24A and the formulation values should differ, the Method 24 or 24A results shall be used to determine compliance. (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. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 20th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1225, R 336.1702(a))
- 2. The permittee shall keep a separate written record of the following for the FG\_OffsetLitho\_SF on a calendar month basis:
  - a) The type of each material used.
  - b) The VOC content of each material, with water, (in percent by weight or pounds per gallon), as received and as applied.
  - c) The usage rate (in pounds or gallons) of each material as applied.
  - d) The amount (in pounds) of each material reclaimed.
  - e) The amount of solvent retained in shop towels used for clean-up.
  - f) Record to demonstrate compliance with Special Condition III.4.
  - g) IPA usage calculations determining the annual usage rate in gallons per 12-month rolling time period as determined at the end of each calendar month.
  - h) 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 records shall be kept in a format acceptable to the AQD District Supervisor. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1205(3), R 336.1225, R 336.1702(a))

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3. The permittee shall calculate the VOC content of the fountain solution using the method detailed in Appendix or an alternate method approved by the AQD District Supervisor. Calculations shall include both dampening aid and wetting agent, as used, in percent by weight. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1225, R 336.1702(a))

4. 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. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1225, R 336.1702(a), R 336.1901)

#### VII. REPORTING

N/A

#### **VIII. STACK/VENT RESTRICTIONS**

N/A

#### IX. OTHER REQUIREMENTS

1. Within thirty days of issuance of this permit, the permittee shall label each emission unit 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:

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

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# The following conditions apply to: FG\_OffsetLitho\_H

**<u>DESCRIPTION:</u>** Total Five (5) Heatset Webfed Offset Lithographic Printing Presses

Emission Units: EU\_Timson-01, EU\_Timson-02, EU\_Timson-03, EU\_Timson-04, and EU\_Timson-05

**POLLUTION CONTROL EQUIPMENT: N/A** 

#### I. <u>EMISSION LIMITS</u>

Pollutant	Limit*	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
VOC Content of the Fountain Solution		solution.	Each Emission Unit of the: FG_OffsetLitho_H	GC 13, SC VI.1, SC VI.3, SC VI.4, Appendix	R 336.1702(a)
	30.1 tpy (Total Combined Emissions, <i>i.e.</i> Stack & Fugitive Emissions)	12-month rolling time period as determined at the end of each calendar month.	FG_OffsetLitho_H	SC VI.1, SC VI.2, SC VI.4	R 336.1205(3), R 336.1702(a)

#### \* Limits:

#### Ink:

Retention rate of 20 percent of the VOC in the heatset ink applied to the paper.

#### Shop Towels:

Retention rate of 50 percent of the VOC in the clean-up retained in the used shop towels.

#### References:

- Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, EPA-453/R-06-002, September 2006
- Alternative Control Techniques Document: Offset Lithographic Printing, USEPA 453/R-94-054, June 1994
   DRAFT Guideline Series Control of VOC Emissions from Offset Lithographic Printing, USEPA, Sept. 1993

# II. MATERIAL LIMITS

N/A

#### III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall recover and reclaim, recycle, or dispose of all inks, fountain solutions, roller wash, blanket wash (materials), in accordance with all applicable regulations. (R 336.1225, R 336.1702(a), R 336.1901)

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2. The permittee shall capture all waste materials and shall 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 336.1225, R 336.1702(a), R 336.1901)

- 3. The permittee shall handle all VOC and/or 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 336.1225, R 336.1702(a), R 336.1901)
- 4. The permittee shall implement the following listed pollution prevention exercise for FG\_OffsetLitho\_H: (R 336.1225, R 336.1702(a), R 336.1901)
  - a) If applicable, collect and reuse cleaning solvent.
  - b) Ensure that used solvents and solvent saturated towels or wipes are not disposed with the trash.
  - c) Send solvents that cannot be reused off-site for recycling.
  - d) Conduct training on proper cleaning methods to assure success when using new materials and practices.
  - e) All press related cleaning solvents (blanket and roller washes) shall have composite partial vapor pressures that do not exceed 10 mmHg@20°C (68°F).
  - f) All containers of new and used VOC-containing press related cleaning materials (blanket and roller washes, and solvent-containing cleaning towels) shall be kept closed at all times.

#### IV. DESIGN/EQUIPMENT PARAMETERS

N/A

#### V. TESTING/SAMPLING

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

1. The VOC content of any material, as received and as applied, shall be determined using federal Reference Test Method 24 (inks, coatings, fountain solution additives and cleaning solvents) or 24A (only applies to solvent-borne inks and related coatings used in the publication rotogravure industry) pursuant to Rule 1040(5). Upon prior written approval by the AQD District Supervisor, VOC content may be determined from manufacturer's formulation data. If the Method 24 or 24A and the formulation values should differ, the Method 24 or 24A results shall be used to determine compliance. (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. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 20th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1225, R 336.1702(a))
- 2. The permittee shall keep a separate written record of the following for the FG\_OffsetLitho\_H on a calendar month basis:
  - a) The type of each material used.
  - b) Chemical composition of fountain solution, including weight percent of each component.
  - c) The VOC content of each material, with water, (in percent by weight or pounds per gallon), as received and as applied.
  - d) The usage rate (in pounds or gallons) of each material as applied.
  - e) The amount of solvent retained in shop towels used for clean-up.
  - f) The amount (in pounds) of each material reclaimed.
  - g) Record to demonstrate compliance with Special Condition III.4

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h) 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 records shall be kept in a format acceptable to the AQD District Supervisor. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1205(3), R 336.1225, R 336.1702(a))

- 3. The permittee shall calculate the VOC content of the fountain solution using the method detailed in Appendix or an alternate method approved by the AQD District Supervisor. Calculations shall include both dampening aid and wetting agent, as used, in percent by weight. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1225, R 336.1702(a))
- 4. 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. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1225, R 336.1702(a), R 336.1901)

#### VII. REPORTING

1. N/A

#### **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_Timson-01	14.0	33.5	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SV_Timson-02	16.0	31.5	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
3. SV_Timson-03	16.0	33.5	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
4. SV_Timson-04	16.0	33.5	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
5. SV_Timson-05	16.0	33.5	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

#### IX. OTHER REQUIREMENTS

1. Within thirty days of issuance of this permit, the permittee shall label each emission unit 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)

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#### The following conditions apply Source-Wide to: FG\_FACILITY

#### **POLLUTION CONTROL EQUIPMENT:** N/A

#### I. EMISSION LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Each Individual HAP	< 9.0 tpy	12-month rolling time period as determined at the end of each calendar month.	FG_Facility	SC VI.1, SC VI.2	R 336.1205(3)
2. Aggregate HAPs	< 22.5 tpy	12-month rolling time period as determined at the end of each calendar month.	FG_Facility	SC VI.1, SC VI.2	R 336.1205(3)

#### **II. MATERIAL LIMITS**

N/A

#### III. PROCESS/OPERATIONAL RESTRICTIONS

N/A

#### IV. DESIGN/EQUIPMENT PARAMETERS

1. N/A

#### V. TESTING/SAMPLING

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

1. The HAP content of any ink, fountain solution, roller wash, and blanket wash (material), as applied and as received, shall be determined using manufacturer's formulation data. Upon request of the District Supervisor, the HAP content of manufacturer's formulation data shall be verified using Method 311. (R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)

# VI. MONITORING/RECORDKEEPING

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

- 1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 20th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1225, R 336.1702(a))
- 2. The permittee shall keep the following information on a calendar month basis for FG\_Facility:
  - a) Gallons or pounds of each material used.

- b) Where applicable, gallons or pounds of each material reclaimed.
- c) HAP content, in pounds per gallon or pounds per pound, of each 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.

The records shall be kept in a format acceptable to the AQD District Supervisor. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1205, R 336.1224, R 336.1225, R 336.1901)

3. 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. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1205(3), R 336.1225, R 336.1702(a))

#### VII. REPORTING

N/A

#### VIII. STACK/VENT RESTRICTIONS

N/A

#### IX. OTHER REQUIREMENTS

N/A

# Appendix Weight Percent of VOCs\* in Fountain Solution For Offset Lithographic Printing

Month/Year:

		Α	В	С	D	E <sup>1</sup>
Date	Material ID	Material Used as received (gallons)	Material Density (Ibs/gal)	VOC Content as received (wt %)	Water Used (gallons)	VOC Content as used (wt %)

<sup>\*</sup> Include both dampening aid and wetting agent, as used, in percent by weight.

VOC Weight Percent Limit = 5%

$$E = \frac{\left(A \times B \times \frac{C}{100}\right) \times 100}{\left(A \times B\right) + \left(D \times 8.34\right)} = \frac{\left(A \times B \times C\right)}{\left(A \times B\right) + \left(D \times 8.34\right)}$$

For C, if 9% use 9 not 0.09 E shall be less than or equal to 5%

<sup>&</sup>lt;sup>1</sup> To Calculate the VOC weight percent use the following equation: