



DEPARTMENT ORDER

**The Dingley Press, Inc.
Androscoggin County
Lisbon, Maine
A-506-71-R-M**

**Departmental
Findings of Fact and Order
Air Emission License
Amendment #1**

FINDINGS OF FACT

After review of the air emission license amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

The Dingley Press, Inc. (Dingley) was issued Air Emission License A-506-70-Q-R/A on November 15, 2019, for the operation of emission sources associated with their printing facility. This Part 70 license identified the facility as major for volatile organic compounds (VOC) only.

Dingley has requested a minor revision to their license in order to reclassify the facility as a minor source of VOC emissions.

The equipment addressed in this license amendment is located at 119 Lisbon St, Lisbon, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license amendment:

Air Handlers

Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Fuel Type, % sulfur	Manufacture Date
Air Handler #1	6.05	natural gas/propane, negligible	2002
Air Handler #2	6.05	natural gas/propane, negligible	2002

Process Equipment

Equipment	Unit Capacity	Manufacture Date
Pre-press Operations	N/A	N/A
Press #4	1,800 ft/min	1995
Press #5	3,000 ft/min	1999
Press #7	1,800 ft/min	1986
Press #8	1,800 ft/min	1997
Press #9 (A&B)	3,000 ft/min	2017
Inkjet Operations	250-333 catalogs per min per line	N/A
Cold Cleaning Degreasers (4)	N/A	N/A
Trim Collection System 1&2	N/A	N/A

Dryers

Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Fuel Type, % sulfur
Press #4 Dryers (2)	9.2 (combined)	natural gas/propane, negligible
Press #5 Dryers (2)	5.34 (combined)	natural gas/propane, negligible
Press #7 Dryers (2)	10.2 (combined)	natural gas/propane, negligible
Press #8 Dryers (2)	11.0 (combined)	natural gas/propane, negligible
Press #9 (A&B) Dryers (2)	11.2 (combined)	natural gas/propane, negligible

Control Equipment

Equipment	Presses Controlled	Auxiliary Heat Input Capacity (MMBtu/hr)	Auxiliary Fuel Type, % sulfur	Manufacture Date
RTO #1	4, 5, 7, 8	9.0	natural gas/propane, negligible	1988
RTO #2	4, 5, 7, 8	3.0	natural gas/propane, negligible	2004

Dingley may operate small stationary engines smaller than 0.5 MMBtu/hr. These engines are considered insignificant activities and are not required to be included in this license. However, they are still subject to applicable State and Federal regulations. More information regarding requirements for small stationary engines is available on the Department's website at the link below.

<http://www.maine.gov/dep/air/publications/docs/SmallRICEGuidance.pdf>

Additionally, Dingley may operate portable engines used for maintenance or emergency-only purposes. These engines are considered insignificant activities and are not required to be included in this license. However, they may still be subject to applicable State and Federal regulations.

C. Revision Description

On February 3, 2022, the US Environmental Protection Agency (EPA) granted a petition from the State of Maine requesting removal of a portion of the state from the Ozone Transport Region (OTR). This approval was published in the Federal Register on February 10, 2022, and became effective on March 14, 2022.

As of the effective date mentioned above, Dingley is no longer in the OTR, and therefore the major source threshold (significant emissions) for VOC has changed from 50 tons/year to 100 tons/year. Because of this change and their established annual limit for VOC between 50 and 100 tons/year, Dingley has requested to convert their Part 70 Air Emission License to a Minor Source Air Emission License. All conditions of the existing Part 70 license will be re-established in this license amendment.

Because the facility is no longer considered a major source and not required to have a Part 70 Air Emission License, it is no longer subject to *Compliance Assurance Monitoring*, 40 C.F.R. Part 64, and its conditions will be removed from this license. Appropriate control requirements have been maintained as Best Practical Treatment (BPT) under the authority of 06-096 C.M.R. ch. 115.

This license shall replace Air Emission License A-506-70-Q-R/A upon issuance.

D. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the date this license was issued.

This amendment will not increase licensed emissions of any pollutant. Therefore, this amendment is determined to be a minor revision and has been processed as such.

E. Facility Classification

With the annual facility-wide NO_x and VOC limits, the facility is licensed as follows:

- As a synthetic minor source of air emissions for NO_x and VOC, because Dingley is subject to license restrictions that keep facility emissions below major source thresholds for criteria pollutants; and
- As an area source of hazardous air pollutants (HAP), because the licensed emissions are below the major source thresholds for HAP.

Emissions of VOC are licensed above 80% of the major source threshold. Therefore, this facility is classified as an “80% Synthetic Minor” for the purpose of determining the minimum required compliance inspection frequency in accordance with Maine’s Compliance Monitoring Strategy.

II. **BEST PRACTICAL TREATMENT (BPT)**

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. VOC RACT (Reasonably Available Control Technology)

Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds, 06-096 C.M.R. ch. 134 (as amended) is applicable to sources that have the potential to emit quantities of VOC equal to or greater than 40 tons/year.

VOC emissions from the presses, dryers, and the associated control equipment are exempt from VOC RACT because their emissions were addressed in a BACT analysis.

[06-096 C.M.R. ch.134 1(C)(2)]

The air handlers are exempt from VOC RACT because their emissions of VOC are the product of incomplete combustion per Section 1(C)(4) of the rule. The presses and associated dryers are also exempted from VOC RACT per Section 1(C)(2). Therefore, 06-096 C.M.R. ch.134 is not applicable to this source because potential emissions from non-exempt equipment and processes do not exceed 40 tons/year.

C. NO_x RACT (Reasonably Available Control Technology)

Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides, 06-096 C.M.R. ch. 138 (NO_x RACT) is applicable to sources that have the potential to emit quantities of NO_x equal to or greater than 100 tons/year. Dingley has a facility wide NO_x emissions cap of 49.9 tons/year therefore is not subject to NO_x RACT.

D. Air Handlers #1 and #2

Air Handlers #1 and #2 are natural gas/propane fired air makeup handlers, with a designed heat input capacity of 6.05 MMBtu/hr each and were installed in 2003.

1. BPT Findings

The BPT emission limits for Air Handlers #1 and #2 were based on the following:

- PM/PM₁₀ – 0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
- SO₂ – 0.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
- NO_x – 100 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
- CO – 84 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
- VOC – 5.5 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
- Visible Emissions – 06-096 C.M.R. ch. 115, BPT

The BPT emission limits for Air Handlers #1 and #2 are the following:

Unit	Pollutant	lb/MMBtu
Air Handler #1	PM	0.05
Air Handler #2	PM	0.05

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Air Handler #1	0.30	0.30	0.01	0.59	0.49	0.03
Air Handler #2	0.30	0.30	0.01	0.59	0.49	0.03

Visible emissions from Air Handlers #1 and #2 shall each not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 15, BPT]

2. New Source Performance Standards (NSPS)

Air Handlers #1 and #2 do not heat water; therefore, they are not subject to the New Source Performance Standards (NSPS) titled *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, 40 C.F.R. Part 60, Subpart Dc.

3. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

Air Handlers #1 and #2 are used to heat incoming air into the facility and do not heat water or create steam; therefore, they are not subject to *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJJ.

4. Periodic Monitoring

Dingley shall operate, record data, and maintain records from the following periodic monitors for Air Handlers #1 and #2.

- a. Hours of operation for Air Handlers #1 and #2 on a monthly and calendar year basis. [06-096 C.M.R. ch. 137]
- b. Natural gas and propane usage for Air Handlers #1 and #2 on a monthly and calendar year basis. [06-096 C.M.R. ch. 137]

E. Pre-Press Operations

Dingley operates several pieces of equipment used for pre-press processing including developing film, cleaning film, developing plates, and cleaning plates. These plates are later used on the press line. Dingley also operates a proof machine which allows a single copy proof to be printed out before running the order on the press.

Best Available Control Technology (BACT) was addressed for the processes associated with pre-press operations in air emission license A-506-71-H-A, issued January 13, 1998. BACT for the pre-press operations was determined to be the continuation of good housekeeping practices.

Periodic monitoring for the pre-press operations shall include records of chemical usage including VOC and HAP content on a monthly and rolling 12-month total basis.

F. Presses & Dryers

Press #4

Lithographic Printing Press #4, model number L-1100, was manufactured by Mitsubishi in 1995 with a nominal process rate of 1,800 ft/min.

The Press #4 Dryers are two (2) Coanda Plus model dryers manufactured by Tec-Systems with a combined heat input of 9.2 MMBtu/hr firing natural gas or propane. VOC and HAP emissions are controlled by either RTO #1 or RTO #2.

Press #5

Lithographic Printing Press #5, model number M-3000, was manufactured by Heidelberg Harris in 1999 with a nominal process rate of 3,000 ft/min.

The Press #5 Dryers are two (2) model E 121-146 dryers manufactured by Heidelberg Harris with a combined heat input of 5.34 MMBtu/hr firing natural gas or propane. VOC and HAP emissions are controlled by either RTO #1 or RTO #2.

Press #7

Lithographic Printing Press #7, model number G-14, was manufactured by Baker Perkins in 1986 with a nominal process rate of 1,800 ft/min.

The Press #7 Dryers are two (2) model OF-4617 dryers manufactured by Thermo Electron with a combined heat input of 10.2 MMBtu/hr firing natural gas or propane. VOC and HAP emissions are controlled by either RTO #1 or RTO #2.

Press #8

Lithographic Printing Press #8, model number GPX-1073, was manufactured by Mitsubishi Heavy Industries in 1997 with a nominal process rate of 1,800 ft/min.

The Press #8 Dryers are two (2) model 107144 dryers manufactured by MEGTEC with a combined heat input of 11.0 MMBtu/hr firing natural gas or propane. VOC and HAP emissions are controlled by either RTO #1 or RTO #2.

Press #9 (A&B)

Lithographic printing Press #9 (A&B), model Sunday 3000, was manufactured by Goss in 2017 with a nominal process rate of 3,000 ft/min.

Each side of the press side A and side B includes an Ecoset/T 146-1460 natural gas-fired dryer equipped with a burner with a maximum heat input of 5.6 MMBtu/hr, for a press total of 11.2 MMBtu/hr. The dryer burners also serve as afterburners to destroy the VOC-laden exhaust air from the press. The dryers exhaust through separate stacks which are each 38 feet above ground level.

1. Control Equipment

RTO #1 is a Wolverine RTO-25,000 regenerative thermal oxidizer, and RTO #2 is a TANN Corporation Model TR 2094 regenerative thermal oxidizer. RTO #1 and RTO #2 both fire natural gas or propane.

Emissions from Presses #4, #5, #7, and #8 all vent to a common header and can be controlled by either RTO #1 or RTO #2. Dingley operates RTO #2 as the primary VOC control device for these presses and uses RTO #1 as a backup control, primarily during times of RTO #2 outage or maintenance.

Each press is assigned a flow rate based on maximum operation. When RTO #1 is operating, there is sufficient capacity to control all presses at maximum production. However, RTO #2 is not large enough to accommodate all four presses operating at maximum capacity. Therefore, each RTO has programmed interlocks which prohibit presses with a combined total flow rate greater than the RTO design maximum to operate. If all presses are operating and one RTO goes down, interlocks shut down presses based on a preprogrammed priority system.

When in operation, RTO #1 and RTO #2 must each maintain either a minimum destruction efficiency of 97.5% or a maximum emission rate of 25 ppm VOC as propane, whichever is less stringent. Continuous compliance is demonstrated through maintaining a chamber temperature in each RTO of at least 1300°F.

Emissions of VOC and HAP from Press #9 (A&B) is controlled by thermal oxidation in the unit's dryers which must meet a minimum destruction efficiency of 98.0% removal of VOC or an output stack concentration of less than 25 ppmv as propane, whichever is less stringent. Continuous compliance is demonstrated by maintaining the combustion chamber temperature in Press #9 (A&B) at or above 1,400 °F. The press control system is equipped with interlocks which shut down the presses if the temperature drops below 1,400 °F for more than two continuous minutes.

2. BPT Findings

- a. The BPT emission limits for RTO #1, RTO #2, and Press #9 (A&B) were based on the following:

PM/PM ₁₀	–	06-096 C.M.R. ch. 115, BPT
SO ₂	–	0.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
NO _x	–	100 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
CO	–	84 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
VOC	–	06-096 C.M.R. ch. 115, BPT
Visible Emissions	–	06-096 C.M.R. ch. 115, BPT

- b. The BPT emission limits for RTO #1, RTO #2, and Press #9 (A&B) are the following:

Unit	Pollutant	lb/MMBtu
RTO #1	PM	0.12
RTO #2	PM	0.12
Press #9 (A&B)	PM	0.10

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)
RTO #1	0.50	0.50	0.40	6.20	5.70
RTO #2	0.10	0.10	0.01	2.80	1.20
Press #9 (A&B)	0.10	0.10	0.01	4.01	4.01

- c. VOC Emissions Limit

RTO #1 and RTO #2 shall each meet 97.5% VOC destruction efficiency or 25 ppmv (as propane), whichever is less stringent. This emission limit is inclusive of the press dryers that vent to RTO #1 and RTO #2.

Press #9 (A and B) shall meet 98% VOC destruction efficiency or 25 ppmv (as propane), whichever is less stringent.

- d. Visible Emissions

Visible emissions from RTO #1 shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

Visible emissions from RTO #2 shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

Visible emissions from each of Press #9 A&B stacks shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

3. 06-096 C.M.R. ch. 161

The presses are subject to the requirements of 06-096 C.M.R. ch. 161, *Graphic Arts – Offset Lithography and Letterpress Printing*.

- a. Assumptions

In accordance with 06-096 C.M.R. ch. 161 § 6, and in accordance with industry standards, it is assumed that 80% of the applied VOC & HAP in the ink, 70% of the VOC & HAP in the fountain solution, and 40% of the machine applied blanket

wash flashes off in the dryers, and the remaining VOC & HAP remains in the substrate.

b. Requirements

- (1) The as-applied VOC content of the fountain solution shall not exceed 5.0% by weight. Dingley shall not add any alcohol to the fountain solution. [06-096 C.M.R. ch. 161 § 3(A)(2)(a)(i)]
- (2) If diluted prior to use, compliance with the fountain solution VOC content shall be demonstrated by analytical data for the concentrated materials used to prepare the as-applied fountain solution and the proportions in which they are mixed to make the as-applied fountain solution. The analysis of the concentrated material(s) may be performed by the manufacturer/supplier(s) of those material(s). The analytical data may be derived from a Safety Data Sheet (SDS) or equivalent information from the supplier as long as it is based on US EPA Method 24 results. [06-096 C.M.R. ch. 161 § 4(B)(2)]
- (3) Dingley shall use only cleaning solvents (blanket wash) that have a composite partial vapor pressure less than 10 mm Hg at 20 °C, or have a VOC content less than 70% by weight. [06-096 C.M.R. ch. 161 § 3(A)(3)]
- (4) If diluted prior to use, compliance with the blanket wash VOC content shall be demonstrated by analytical data for the concentrated materials used to prepare the as-applied blanket wash and the proportions in which they are mixed to make the as-applied blanket wash. The analysis of the concentrated material(s) may be performed by the manufacturer/supplier(s) of those material(s). The analytical data may be derived from an SDS or equivalent information from the supplier as long as it is based on US EPA Method 24 results. [06-096 C.M.R. ch. 161 § 4(D)(2)]
- (5) If diluted prior to use, compliance with the as-applied blanket wash VOC composite vapor pressure shall be demonstrated by calculations as described in 06-096 C.M.R. ch. 161 § 4(E)(1). [06-096 C.M.R. ch. 161 § 4(E)(1)]
- (6) If not diluted prior to use, compliance with the blanket wash VOC content or composite vapor pressure shall be demonstrated by documentation from the supplier (such as an SDS sheet). [06-096 C.M.R. ch. 161 §§ 4(D)(3) and 4(E)(2)]

c. Work Practice Standards

- (1) New and used VOC-containing ink, fountain solution, and cleaning solvent shall be stored in a non-absorbent, non-leaking container. The container shall

be kept closed at all times except when the container is being filled, emptied, or is otherwise actively in use.

- (2) Spills and leaks of VOC-containing ink, fountain solution, and cleaning solvent shall be minimized. Any leaked or spilled VOC-containing ink, fountain solution, or cleaning solvent shall be absorbed and removed immediately to a sealed storage container. Spills of hazardous waste may also be subject to reporting pursuant to 30 M.R.S. § 1318-B(1) and the Hazardous Waste Management Rules, 06-096 C.M.R. chs. 850-857.
- (3) Absorbent applicators, such as cloth and paper, which are moistened with VOC containing ink, fountain solution, or cleaning solvent, shall be stored in a closed, non-absorbent, non-leaking container for disposal or recycling.
- (4) VOC-containing ink, fountain solution, and cleaning solvents shall be conveyed from one location to another in closed containers or pipes.
- (5) Cleaning shall be performed to minimize associated VOC emissions.
- (6) VOC containing waste materials as well as any hazardous waste may not be stored in any container which is rusted, bulging, or leaking. For specific details, refer to the *Standards for Generators of Hazardous Waste*, 06-096 C.M.R. ch. 851. Additionally, the tanks and containers used to store VOC or hazardous waste must be compatible with the waste stored in them, labeled, and stored according to hazardous waste management rules. Refer to Maine's Hazardous Waste Management Rules, 06-096 C.M.R. ch. 850-857, as well as federal regulations 40 C.F.R. § 265.172 and 40 C.F.R. § 265.177 regarding compatible containers and wastes.
- (7) Vapor-tight containers shall be used for the storage of spent or fresh VOC and for the storage or disposal of cloth or paper impregnated with VOC that are used for surface preparation, clean up, or coating removal.
- (8) The use of compounds containing VOC is prohibited for the cleanup of spray equipment unless equipment is used to collect the cleaning compounds and to minimize their evaporation to the atmosphere.
- (9) Some VOC containing material may also be designated as hazardous wastes. The handling, storage and disposal of hazardous wastes including VOC and cloth or paper impregnated with VOC are also subject to hazardous waste management standards as stipulated in Maine's Hazardous Waste Management Rules, 06-096 C.M.R. chs. 850-857.

4. New Source Performance Standards (NSPS)

Presses controlled by RTO #1 and RTO #2, and Press #9 (A&B) are not subject to *Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing*, 40 C.F.R. Part 60, Subpart QQ since none are a rotogravure printing press.

5. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

RTO #1, RTO #2, and Press #9 (A&B) are not subject to *National Emission Standards for the Printing and Publishing Industry*, 40 C.F.R. Part 63, Subpart KK. Dingley is considered an area source of HAP, and this subpart does not apply to area sources.

6. Stack Testing

Once every five years, Dingley shall demonstrate compliance with the VOC limits through stack testing of RTO #2 and Press #9 (A&B). If, within the five-year period concurrent with the testing of RTO #2, the operating hours of RTO #1 exceed 720 hours, Dingley shall perform performance testing on RTO #1 concurrent with the testing of RTO #2. [06-096 C.M.R. ch. 15, BPT]

7. Periodic Monitoring

Dingley shall operate, record data, and maintain records from the following periodic monitors for the presses, their dryers, and their associated air pollution control equipment:

- a. Date, time, and duration of all operating hours for RTO #1 and/or RTO #2. [06-096 C.M.R. ch. 137 and 06-096 C.M.R. ch. 115, BPT]
- b. Date, time, and duration of all operating hours for Press #9 (A&B). [06-096 C.M.R. ch. 137 and 06-096 C.M.R. ch. 115, BPT]
- c. Amount of ink, fountain solution, and blanket wash used on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 137 and 06-096 C.M.R. ch. 115, BPT]
- d. VOC and HAP content of the ink, fountain solution, and blanket wash used. [06-096 C.M.R. ch. 137 and 06-096 C.M.R. ch. 115, BPT]
- e. Records of all recipes used to prepare the as-applied fountain solution to meet the limits specified. Each recipe shall identify the items specified in 06-096 C.M.R. ch. 161 § 5(A)(3).

8. Parameter Monitors

During all operating times, Dingley shall operate, record data, and maintain the following parameter monitors for the presses and their associated air pollution control equipment in accordance with Dingley's approved CAM plan:

- a. RTO #1 combustion chamber temperature (°F) shall be monitored continuously and recorded continuously.
- b. RTO #2 combustion chamber temperature (°F) shall be monitored continuously and recorded continuously.
- c. Press #9 (A&B) combustion chamber temperature (°F) shall be monitored continuously and recorded continuously.
- d. The presses in operation whenever only one RTO is in operation and the maximum design flow rate from those presses shall be monitored continuously and recorded continuously.

[06-096 C.M.R. ch. 115, BPT]

G. Inkjet Printing

Once the material has been printed on one of the presses at Dingley, it is conveyed to an inkjet printing process where names, addresses, and other information are printed on the cover of the publications. These printers are licensed to use methanol, acetone, or methyl ethyl ketone (MEK) based inks.

Methanol is both a VOC and a HAP. Dingley does not routinely use methanol-based inks. However, they would like to maintain the flexibility to use methanol-based ink in the future. A previous analysis for the inkjet printing operation (A-506-70-F-A, issued 9/17/2004) determined BACT to be the use of solvent recovery systems on inkjet printers using methanol-based inks.

MEK is a VOC but not a HAP. Solvent recovery for MEK-based inks has not been shown to be effective or appropriate. Therefore, it has not been required on the inkjet printers using MEK-based inks.

Acetone is neither a VOC nor HAP. Therefore, the use of acetone-based inks does not require the use of solvent recovery units.

Dingley shall monitor and record the following periodic monitors for the inkjet printers:

1. The type of ink used in the inkjet printers.
2. Whether ink was MEK-based.
3. Amount of each ink used on a monthly and 12-month rolling total basis.
4. VOC and HAP content of the inkjet inks used.
5. Amount of VOC and HAP emitted on a monthly and 12-month rolling total basis.

[06-096 C.M.R. ch. 137]

H. Parts Washers

Dingley operates multiple cold cleaning degreasers (parts washers). Each of these units uses solvents to clean metal parts and is subject *Solvent Degreasers*, 06-096 C.M.R. ch.130. Dingley may add/subtract parts washers without applying for a license amendment.

This equipment is exempt from *Industrial Cleaning Solvents*, 06-096 C.M.R. ch. 166 per Section (3)(B).

Periodic monitoring for the parts washers shall consist of recordkeeping including records of solvent added and removed.

I. Emissions Caps

1. NO_x

Without an enforceable limitation, Dingley has the facility-wide potential to emit annual emissions of NO_x over the levels for which an ambient air quality impact analysis would be required.

Therefore, Dingley has requested an annual cap on facility-wide emissions of NO_x of 49.9 tpy (based on a 12-month rolling total) from the following units:

Press #4 Dryers (2)
Press #5 Dryers (2)
Press #7 Dryers (2)
Press #8 Dryers (2)
Press #9 (A&B) Dryers (2)
RTO #1
RTO #2
Air Handler #1
Air Handler #2

Compliance shall be demonstrated by calculations of NO_x emissions on a monthly and 12-month rolling total basis. NO_x emissions shall be calculated based on the following:

- a. Hours of runtime for RTO #1, RTO #2, and Press #9 (A&B) and their licensed lb/hr emission limits.
- b. Fuel use for Air Handlers #1 and #2 and an emission factor of 100 lbs of NO_x per million scf of natural gas and 13 lbs per 1,000 gallons of propane.
- c. Fuel use for the dryers associated with Presses #4, #5, #7, and #8 and an emission factor of 100 lbs of NO_x per million scf of natural gas and 13 lbs per 1,000 gallons of propane.

2. VOC and HAP

Dingley is limited to facility wide emissions of 94.4 tpy of VOC, 9.9 tpy of any single HAP, and 24.9 tpy for all HAP combined, all on a 12-month rolling total basis.

In NSR license A-506-77-4-A (7/26/17), Dingley accepted an annual VOC limit for Press #9 (A&B) of 34.0 tpy. This limitation was included to demonstrate that the Press #9 (A&B) project was a minor modification. In a guidance letter from the US EPA Region 7 to the Iowa Department of Natural Resources¹ dated September 1, 2021, EPA stated that if a facility is no longer a major stationary source, a limit that was enacted in the past to keep a modification below major modification thresholds could be abandoned if it is not needed to maintain the facility in a synthetic minor status in the current licensing scenario. Therefore, this limit will be removed as of this amendment.

J. Performance Test Protocol

For any performance testing required by this license, Dingley shall submit to the Department for approval a performance test protocol, as outlined in the Department's Performance Testing Guidance, at least 30 days prior to the scheduled date of the performance test. [06-096 C.M.R. ch. 115, BPT]

The Department's Performance Testing Guidance is available online at:
<https://www.maine.gov/dep/air/emissions/testing.html>.

K. Trim Collection Systems 1&2

Dingley operates three separate pneumatic conveying systems for the collection and handling of waste paper throughout the facility.

Trim Collection System #1 and Trim Collection System #2 collect trimmings from bindery lines utilizing material handling blowers via ductwork. Trim Collection System #3 collects and shreds bulk waste from the press lines as well as waste from the bindery lines which may incorporate spine glue. The paper from all three lines is separated from the air stream using dedicated cyclones and then baled.

The air stream from Trim Collection System #1 & #2 are vented to the atmosphere directly from the cyclone exhaust. Exhaust from the cyclone associated with Trim Collection System #3 is routed through small baghouses that exhaust within the building for heat recovery. There are six baghouses associated with Trim Collection System #3.

Trim Collection System #3 has had the external vent capped and now passes through baghouses that vent inside the building and is therefore considered an insignificant activity.

Visible emissions from the exhaust on the Trim Collection Systems #1 and #2 shall not exceed 10% opacity on a six-minute block average basis.

¹ https://www.epa.gov/system/files/documents/2021-09/johndeere_52.21r4.pdf

L. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a five-minute block average basis.

M. General Process Emissions

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis.

N. Emission Statements

Dingley is subject to emissions inventory requirements contained in *Emission Statements*, 06-096 C.M.R. ch. 137. Dingley shall maintain the following records in order to comply with this rule:

1. The amount and type of fuel fired in Press Dryers #4, #5, #7, #8 (each) on a monthly basis;
2. The amount and type of fuel fired in RTOs #1 and #2 (each) on a monthly basis;
3. The amount and type of fuel fired in Press #9 (A&B) on a monthly basis;
4. Calculations of the VOC and/or HAP emissions from Presses #4, #5, #7, #8, #9 (A&B), Pre-Press Operations, and Inkjet Printing on a calendar year total basis;
5. Hours each emission unit addressed in this license was operating on a monthly basis.

In reporting year 2023 and every third year thereafter, Dingley shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). The Department will use these reports to calculate and invoice for the applicable annual air quality surcharge for the subsequent three billing periods. Dingley shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

O. Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee and establishing the facility's potential to emit (PTE). Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included except when required by state or federal regulations. Maximum potential emissions were calculated based on the following assumptions:

- Facility-wide caps on NO_x, VOC, and HAP emissions; and
- Operating Air Handler #1, Air Handler #2, RTO #1, RTO #2, and Press #9 (A&B) for 8,760 hr/yr each.

Please note, this information should not be construed to represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

Total Licensed Annual Emissions for the Facility
Tons/year
 (used to calculate the annual license fee)

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
RTO #1	2.2	2.2	1.8	–	25.0	–
RTO #2	0.4	0.4	0.1	–	5.3	–
Press #9 (A&B)	0.4	0.4	0.1	–	17.6	–
Air Handler #1	1.3	1.3	–	–	2.2	–
Air Handler #2	1.3	1.3	–	–	2.2	–
Facility Wide	–	–	–	49.9	–	94.4
Total TPY	5.6	5.6	2.0	49.9	52.3	94.4

Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

Pollutant	Tons/Year
PM ₁₀	25
SO ₂	50
NO _x	50
CO	250

This determination is based on information provided by the applicant regarding the expected construction and operation of the proposed emission units. If the Department determines that any parameter (e.g., stack size, configuration, flow rate, emission rates, nearby structures, etc.) deviates from what was included in the application, the Department may require Dingley to submit additional information and may require an ambient air quality impact analysis at that time.

The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license amendment.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License Amendment A-506-71-R-M subject to the following conditions.

Severability. The invalidity or unenforceability of any provision of this License Amendment or part thereof shall not affect the remainder of the provision or any other provisions. This License Amendment shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

The following shall replace all conditions of Air Emission License A-506-70-Q-R/A.

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S. § 347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [06-096 C.M.R. ch. 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 C.M.R. ch. 115]

- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 C.M.R. ch. 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S. § 353-A. [06-096 C.M.R. ch. 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 C.M.R. ch. 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 C.M.R. ch. 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 C.M.R. ch. 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 C.M.R. ch. 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department, the licensee shall:
 - A. Perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 1. Within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 2. Pursuant to any other requirement of this license to perform stack testing.

- B. Install or make provisions to install test ports that meet the criteria of 40 C.F.R. Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - C. Submit a written report to the Department within thirty (30) days from date of test completion.
[06-096 C.M.R. ch. 115]
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- A. Within thirty (30) days following receipt of the written test report by the Department, or another alternative timeframe approved by the Department, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department; and
 - B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - C. The licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
[06-096 C.M.R. ch. 115]
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or license requirement. [06-096 C.M.R. ch. 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 C.M.R. ch. 115]

- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 C.M.R. ch. 115]
- (16) The licensee shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S. § 605). [06-096 C.M.R. ch. 115]

SPECIFIC CONDITIONS

(17) **Air Handlers #1 & #2**

A. Air Handlers #1 & #2 shall fire natural gas or propane only.
[06-096 C.M.R. ch. 115, BPT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Air Handler #1	PM	0.05	06-096 C.M.R. ch. 115, BPT
Air Handler #2	PM	0.05	06-096 C.M.R. ch. 115, BPT

C. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Air Handler #1	0.30	0.30	0.01	0.59	0.49	0.03
Air Handler #2	0.30	0.30	0.01	0.59	0.49	0.03

D. Visible emissions from Air Handlers #1 and #2 shall each not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

E. Periodic Monitoring

Dingley shall operate, record data, and maintain records from the following periodic monitors for Air Handlers #1 and #2:

- Hours of operation for Air Handlers #1 and #2 on a monthly and calendar year basis. [06-096 C.M.R. ch. 137]
- Natural gas and propane usage for Air Handlers #1 and #2 on a monthly and calendar year basis. [06-096 C.M.R. ch. 137]

(18) Pre-Press Operations

- A. Dingley shall maintain good housekeeping practices for the Pre-Press Operations. [06-096 C.M.R. ch. 115, BPT]
- B. Dingley shall keep records of chemical usage in Pre-Press Operations, including VOC and HAP content on a monthly and rolling 12-month total basis.

(19) Printing Presses and Dryers

- A. Dingley shall fire only natural gas or propane in the press dryers, RTO #1, and RTO #2. [06-096 C.M.R. ch. 115, BPT]
- B. The as-applied VOC content of the fountain solution shall not exceed 5.0% by weight. Dingley shall not add any alcohol to the fountain solution. [06-096 C.M.R. ch. 161 § 3(A)(2)(a)(i)]
- C. If diluted prior to use, compliance with the fountain solution VOC content shall be demonstrated by analytical data for the concentrated materials used to prepare the as-applied fountain solution and the proportions in which they are mixed to make the as-applied fountain solution. The analysis of the concentrated materials may be performed by the manufacturer/suppliers of those materials. The analytical data may be derived from a Safety Data Sheet (SDS) or equivalent information from the supplier as long as it is based on US EPA Method 24 results. [06-096 C.M.R. ch. 161 § 4(B)(2)]
- D. Dingley shall use only cleaning solvents (blanket wash) that have a composite partial vapor pressure less than 10 mm Hg at 20 °C, or have a VOC content less than 70% by weight. [06-096 C.M.R. ch. 161 § 3(A)(3)]
- E. If diluted prior to use, compliance with the blanket wash VOC content shall be demonstrated by analytical data for the concentrated materials used to prepare the as-applied blanket wash and the proportions in which they are mixed to make the as-applied blanket wash. The analysis of the concentrated material(s) may be performed by the manufacturer/supplier(s) of those material(s). The analytical data may be derived from an SDS or equivalent information from the supplier as long as it is based on US EPA Method 24 results. [06-096 C.M.R. ch. 161 § 4(D)(2)]
- F. If diluted prior to use, compliance with the as-applied blanket wash VOC composite vapor pressure shall be demonstrated by calculations as described in 06-096 C.M.R. ch. 161 § 4(E)(1). [06-096 C.M.R. ch. 161 § 4(E)(1)]
- G. If not diluted prior to use, compliance with the blanket wash VOC content or composite vapor pressure shall be demonstrated by documentation from the supplier (such as an SDS sheet). [06-096 C.M.R. ch. 161 §§ 4(D)(3) and 4(E)(2)]

H. Control Equipment

1. Emissions of VOC and HAP from Presses #4, #5, #7, and #8 shall be controlled by either RTO #1 or RTO #2. [06-096 C.M.R. ch. 115, BPT]
2. Emissions of VOC and HAP from Presses #9 (A&B) shall be controlled by the integrated thermal oxidizer. [06-096 C.M.R. ch. 115, BPT]

I. Emission Limits

1. Emissions from RTOs #1 and #2 shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Emission Unit	Pollutant	lb/MMBtu
RTO #1	PM	0.12
RTO #2	PM	0.12

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)
RTO #1	0.50	0.50	0.40	6.20	5.70
RTO #2	0.10	0.10	0.01	2.80	1.20

2. RTO #1 and RTO #2 shall each meet a minimum destruction efficiency of 97.5% removal of VOC or an output stack concentration of less than 25 ppmv as propane. [06-096 C.M.R. ch. 115, BPT]
3. Once every five years Dingley shall demonstrate compliance with the VOC limits through stack testing of RTO #2 and Press #9 (A&B). If the operating hours of RTO #1 exceed 720 hours within the five-year period, Dingley shall perform performance testing on RTO #1 concurrent with the testing of RTO #2. [06-096 C.M.R. ch. 115, BPT]
4. RTO #1 and RTO #2 shall each maintain a chamber temperature of at least 1300 °F. The RTO control systems shall be equipped with interlocks which shut down the presses if the temperature drops below 1300 °F. [06-096 C.M.R. ch. 115, BPT]
5. Dingley shall not operate more presses at any one time than the RTO(s) in operation can accommodate by design. The RTO system shall include interlocks that will either shut down presses or not allow start-up of more presses than the operating RTO(s) can accommodate by design. [06-096 C.M.R. ch. 115, BPT]
6. Visible emissions from RTO #1 and RTO #2 shall each not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

7. Emissions from Press #9 (A&B) shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Emission Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)
Press #9 (A&B)	0.10	0.10	0.01	4.01	4.01

8. Press #9 (A&B) shall meet a minimum destruction efficiency of 98% removal of VOC or an output stack concentration of less than 25 ppmv as propane. [06-096 C.M.R. ch. 115, BPT]
9. Press #9 (A&B) shall maintain a chamber temperature of at least 1400 °F. The control system shall be equipped with interlocks which shut down the press if the temperature drops below 1400 °F for more than two continuous minutes. [06-096 C.M.R. ch. 115, BPT]
10. Visible emissions from Press #9 (A&B) shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

J. Periodic Monitoring

Dingley shall operate, record data, and maintain records from the following periodic monitors for the presses, their dryers, and their associated air pollution control equipment:

1. Dingley shall keep records of all operating hours for RTO #1 on a monthly basis sufficient to calculate the number of operating hours in the five-year period to determine concurrent testing requirements with RTO #2. [06-096 C.M.R. ch. 115, BPT]
2. Date, time, and duration of all operating hours for RTO #1 and RTO #2. [06-096 C.M.R. ch. 137 and 06-096 C.M.R. ch. 115, BPT]
3. Date, time, and duration of all operating hours for Press #9 (A&B). [06-096 C.M.R. ch. 137 and 06-096 C.M.R. ch. 115, BPT]
4. Amount of ink, fountain solution, and blanket wash used on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 137 and 06-096 C.M.R. ch. 115, BPT]
5. VOC and HAP content of the ink, fountain solution, and blanket wash used. [06-096 C.M.R. ch. 137 and 06-096 C.M.R. ch. 115, BPT]

6. Records of all recipes used to prepare the as-applied fountain solution to meet the limits specified. Each recipe shall identify the items specified in 06-096 C.M.R. ch. 161 § 5(A)(3).

K. Parameter Monitors

During all operating times, Dingley shall operate, record data, and maintain records from the following parameter monitors for the presses and their associated air pollution control equipment [06-096 C.M.R. ch. 115, BPT]

1. RTO #1 combustion chamber temperature (°F) shall be monitored continuously and recorded continuously.
2. RTO #2 combustion chamber temperature (°F) shall be monitored continuously and recorded continuously.
3. The presses in operation whenever only one RTO is in operation and the maximum design flow rate from those presses shall be monitored continuously and recorded continuously.
4. Press #9 (A&B) combustion chamber temperature (°F) shall be monitored continuously and recorded continuously.

(20) Work Practice Standards

Dingley shall use the following work practices:
[06-096 C.M.R. ch. 161 §§ 3(A)(1) and 7]

- A. New and used VOC-containing ink, fountain solution, and cleaning solvent shall be stored in a non-absorbent, non-leaking container. The container shall be kept closed at all times except when the container is being filled, emptied, or is otherwise actively in use.
- B. Spills and leaks of VOC-containing ink, fountain solution, and cleaning solvent shall be minimized. Any leaked or spilled VOC-containing ink, fountain solution, or cleaning solvent shall be absorbed and removed immediately to a sealed storage container. Spills of hazardous waste may also be subject to reporting pursuant to 30 M.R.S. § 1318-B (1) and the Hazardous Waste Management Rules, 06-096 C.M.R. chs. 850- 857.
- C. Absorbent applicators, such as cloth and paper, which are moistened with VOC-containing ink, fountain solution, or cleaning solvent, shall be stored in a closed, non-absorbent, non-leaking container for disposal or recycling.

- D. VOC-containing ink, fountain solution, and cleaning solvents shall be conveyed from one location to another in closed containers or pipes.
- E. Cleaning shall be performed to minimize associated VOC emissions.
- F. VOC containing waste materials as well as any hazardous waste may not be stored in any container which is rusted, bulging, or leaking. For specific details, refer to the *Standards for Generators of Hazardous Waste*, 06-096 C.M.R. ch. 851. Additionally, the tanks and containers used to store VOC or hazardous waste must be compatible with the waste stored in them, labeled, and stored according to hazardous waste management rules. Refer to Maine's Hazardous Waste Management Rules, 06-096 C.M.R. ch. 850-857, as well as federal regulations 40 C.F.R. § 265.172 and 40 C.F.R. § 265.177 regarding compatible containers and wastes.
- G. Vapor-tight containers shall be used for the storage of spent or fresh VOC and for the storage or disposal of cloth or paper impregnated with VOC that are used for surface preparation, clean up, or coating removal.
- H. The use of compounds containing VOC is prohibited for the cleanup of spray equipment unless equipment is used to collect the cleaning compounds and to minimize their evaporation to the atmosphere.
- I. Some VOC containing material may also be designated as hazardous wastes. The handling, storage and disposal of hazardous wastes including VOC and cloth or paper impregnated with VOC are also subject to hazardous waste management standards as stipulated in Maine's Hazardous Waste Management Rules, 06-096 C.M.R. chs. 850-857.

(21) **Inkjet Printing**

- A. Dingley shall use solvent recovery systems on any inkjet printers using methanol-based ink. [06-096 C.M.R. ch. 115, BPT]
- B. Dingley shall monitor and record the following information for the inkjet printers [06-096 C.M.R. ch. 137]:
 - 1. The type(s) of ink used in the inkjet printers;
 - 2. Whether each ink was MEK based;
 - 3. The amount of each ink used on a monthly and 12-month rolling total basis;
 - 4. The VOC and HAP content of each inkjet ink used; and

5. The amount of VOC and HAP emitted on a monthly and 12-month rolling total basis.

(22) Facility-Wide Emission Limits

- A. Facility-wide emissions of VOC shall not exceed 94.4 tpy, based on a 12-month rolling total. [06-096 C.M.R. ch. 115, BPT]
- B. Facility-wide emissions of HAP shall not exceed 9.9 tpy for any single HAP and 24.9 tpy for all HAP combined, based on a 12-month rolling total. [06-096 C.M.R. ch. 115, BPT]
- C. Compliance with annual VOC and HAP emission limits shall be demonstrated by calculations of VOC and HAP emissions on a monthly and 12-month rolling total basis using the following assumptions:
 1. 70% of the fountain solution flashes off in the dryers.
 2. 40% of the machine applied blanket wash flashes off in the dryers.
 3. 20% of the VOC and HAP in the ink are retained in the substrate.
 4. The remaining 80% of the VOC and HAP in the ink flash off in the dryers.
 5. 100% of the remaining VOC and HAP that are not shipped off-site as hazardous waste are emitted.
 6. VOC destruction efficiencies for RTO #1, RTO #2, and Press #9 A&B are to be based on either stack test results or factors approved by the Department. [06-096 C.M.R. ch. 161 § (6) and 06-096 C.M.R. ch. 115, BPT]
- D. Facility-wide emissions of NO_x shall not exceed 49.9 tpy, based on a 12-month rolling total. [06-096 C.M.R. ch. 115, BPT]
- E. Compliance with the annual NO_x emission limit shall be demonstrated by calculations of NO_x emissions on a monthly and 12-month rolling total basis. NO_x emissions shall be calculated based on the following [06-096 C.M.R. ch. 15, BPT]:
 1. Hours of runtime for RTO #1, RTO #2, and Press #9 A&B and their licensed lb/hr emission limits; and
 2. Fuel use for Air Handlers #1 and #2 and an emission factor of 100 lbs of NO_x per million scf of natural gas and 13 lbs per 1000 gallons of propane.

3. Fuel use for the dryers associated with for Presses #4, #5, #7, and #8 and an emission factor of 100 lbs of NO_x per million scf of natural gas and 13 lbs per 1000 gallons of propane.

(23) Parts Washers

- A. Dingley shall keep records of the amount of solvent added and removed to each parts washer. [06-096 C.M.R. ch. 115, BPT]
- B. The following are exempt from the requirements of 06-096 C.M.R. ch. 130 [06-096 C.M.R. ch. 130]:
 1. Solvent cleaners using less than two liters (68 oz) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68 °F);
 2. Wipe cleaning; and,
 3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.
- C. The following standards apply to cold cleaning machines that are subject to 06-096 C.M.R. ch. 130.
 1. Dingley shall attach a permanent conspicuous label to each unit summarizing the following operational standards:
 - a. Waste solvent shall be collected and stored in closed containers.
 - b. Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
 - c. Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized, or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.
 - d. The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
 - e. Sponges, fabric, wood, leather, paper products, and other absorbent materials shall not be cleaned in the parts washer.

- f. When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.
 - g. Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.
 - h. Work area fans shall not blow across the opening of the washer unit.
 - i. The solvent level shall not exceed the fill line.
2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches.
 3. Each parts washer shall be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent
[06-096 C.M.R. ch. 130]

(24) Trim Collection Systems

Visible emissions from the exhaust on the Trim Collection Systems shall not exceed 10% opacity on a six-minute block average basis.
[06-096 C.M.R. ch. 115, BPT]

(25) Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a five-minute block average basis.
[06-096 C.M.R. ch. 101(C)]

(26) General Process Sources

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101(3)(B)(4)]

(27) Parameter Monitors

If any parameter monitor is recording accurate and reliable data less than 98% of the source-operating time within any quarter of the calendar year, the Department may initiate enforcement action. The Department may include in that enforcement action any period of time that the parameter monitor was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the Department's satisfaction that the failure of the system to record such data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.
[06-096 C.M.R. ch. 115, BPT]

(28) Performance Test Protocol

For any performance testing required by this license, Dingley shall submit to the Department for approval a performance test protocol, as outlined in the Department's Performance Testing Guidance, at least 30 days prior to the scheduled date of the performance test. [06-096 C.M.R. ch. 115, BPT]

(29) Annual Emission Statements

A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, Dingley shall annually report to the Department, in a format prescribed by the Department, the information necessary to accurately update the State's emission inventory. The emission statement shall be submitted as specified by the date in 06-096 C.M.R. ch. 137.

B. Dingley shall keep the following records in order to comply with 06-096 C.M.R. ch. 137:

1. The amount and type of fuel fired in Press Dryers #4, #5, #7, #8 (each) on a monthly basis;
2. The amount and type of fuel fired in RTOs #1 and #2 (each) on a monthly basis;
3. The amount and type of fuel fired in Press #9 (A&B) on a monthly basis;
4. Calculations of the VOC and/or HAP emissions from Presses #4, #5, #7, #8, #9 (A&B), Pre-Press Operations, and Inkjet Printing on a calendar year total basis; and
5. Hours each emission unit addressed in this license was operating on a monthly basis.

[06-096 C.M.R. ch. 137]

C. In reporting year 2023 and every third year thereafter, Dingley shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). Dingley shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3).

[38 M.R.S. § 353-A(1-A)]

(30) If the Department determines that any parameter value pertaining to construction and operation of the proposed emissions units, including but not limited to stack size, configuration, flow rate, emission rates, nearby structures, etc., deviates from what was submitted in the application or ambient air quality impact analysis for this air emission license, Dingley may be required to submit additional information. Upon written request from the Department, Dingley shall provide information necessary to demonstrate AAQS

**The Dingley Press, Inc.
Androscoggin County
Lisbon, Maine
A-506-71-R-M**

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will not be exceeded, potentially including submission of an ambient air quality impact analysis or an application to amend this air emission license to resolve any deficiencies and ensure compliance with AAQS. Submission of this information is due within 60 days of the Department's written request unless otherwise stated in the Department's letter. [06-096 C.M.R. ch. 115, § 2(O)]

DONE AND DATED IN AUGUSTA, MAINE THIS 6th DAY OF JUNE, 2022.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:  for
MELANIE LOYZIM, COMMISSIONER

The term of this license and all associated amendments shall be effective until November 15, 2024.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 3/22/22

Date of application acceptance: 3/23/22

Date filed with the Board of Environmental Protection:

This Order prepared by Chris Ham, Bureau of Air Quality.

FILED
JUN 06, 2022
State of Maine
Board of Environmental Protection