

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF THE DIRECTOR

In the matter of administrative proceedings)
against **ROGERS PRINTING, INC.**, a)
company organized under the laws of the)
State of Michigan and doing business at)
3350 Main Street, City of Ravenna, County)
of Muskegon, State of Michigan)
)

AQD No. 29-2013
SRN: A4216

STIPULATION FOR ENTRY OF FINAL ORDER
BY CONSENT

This proceeding resulted from allegations by the Michigan Department of Environmental Quality (MDEQ) Air Quality Division (AQD) against Rogers Printing, Inc. (Company), a Michigan corporation located at 3350 Main Street in the City of Ravenna, County of Muskegon, State of Michigan, with State Registration Number (SRN) A4216. The MDEQ alleges that the Company is in violation of Permit to Install (PTI) No. 114-01 Special Conditions I.1 & I.4. Specifically, the MDEQ alleges that the Company has exceeded the hourly volatile organic compound (VOC) emission limit for emissions coming from two lithographic heat-set printing presses (Presses). Furthermore, the MDEQ alleges that the Company failed to operate the catalytic oxidizer used to control VOC emissions from the Presses during the VOC emission exceedance. These violations are detailed in Violation Notice dated April 26, 2013 referred to herein as the Violation Notice. The Company and MDEQ stipulate to the termination of this proceeding by entry of a Stipulation for Entry of a Final Order by Consent (Consent Order).

The Company and MDEQ stipulate as follows:

1. The Natural Resources and Environmental Protection Act, 1994 PA 451 (Act 451), MCL 324.101 *et seq.* is an act that controls pollution to protect the environment and natural resources in this State.
2. Article II, Pollution Control, Part 55 of Act 451 (Part 55), MCL 324.5501 *et seq.* provides for air pollution control regulations in this State.

3. The MDEQ was created as a principal department within the Executive Branch of the State of Michigan pursuant to Executive Order 2011-1 and has all statutory authority, powers, duties, functions and responsibilities to administer and enforce all provisions of Part 55.

4. The Director has delegated authority to the Chief of the AQD (AQD Chief) to enter into this Consent Order.

5. The termination of this matter by a Consent Order pursuant to Section 5528 of Part 55 is proper and acceptable.

6. The Company and the MDEQ agree that the signing of this Consent Order is for settlement purposes only and does not constitute an admission by the Company that the law has been violated.

7. This Consent Order becomes effective on the date of execution (effective date of this Consent Order) by the AQD Chief.

8. The Company shall achieve compliance with the aforementioned regulations in accordance with the requirements contained in this Consent Order.

COMPLIANCE PROGRAM AND IMPLEMENTATION SCHEDULE

9. A. Malfunction Abatement Plan (MAP)

1. Within 90 days after the issuance of PTI 114-01B, the Company shall fully implement and comply with the AQD approved MAP for the regenerative thermal oxidizer (RTO). The MAP is attached as Exhibit A, incorporated by reference, and made an enforceable part of this Consent Order.

2. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the Company shall amend the MAP within 45 days after such an event occurs. The Company shall submit the MAP and any amendments to the MAP to the AQD Grand Rapids District Supervisor for review and approval. The revised MAP shall replace the MAP referred to in Paragraph 9.A.1 and shall be attached and become an enforceable part of this Consent Order.

B. Proper Operation of the RTO

1. The Company shall not operate Flexible Emission Unit FGOFFSET2 unless the RTO is installed, maintained and operated in a satisfactory manner. Satisfactory operation of the RTO

currently includes a minimum VOC destruction efficiency of 98 percent (by weight), a minimum retention time of 0.5 seconds and a minimum combustion temperature of 1500 Degrees F. The minimum combustion chamber temperature may be adjusted based on the most recent acceptable stack test which achieved a minimum overall destruction efficiency of 98 percent and as specified in the approved MAP.

2. The AQD acknowledges that under Rule 915, a MAP developed in accordance with Rule 911 that has been implemented and being followed by the Company may be used as evidence for consideration in determining what, if any, enforcement action (including a demand for stipulated penalties) is warranted in the event the RTO is not operated in a satisfactory manner.

GENERAL PROVISIONS

10. This Consent Order in no way affects the Company's responsibility to comply with any other applicable state, federal, or local laws or regulations, including without limitation, any amendments to the federal Clean Air Act, 42 USC 7401 *et seq.*, Act 451, Part 55 or their rules and regulations, or to the State Implementation Plan.

11. This Consent Order constitutes a civil settlement and satisfaction as to the resolution of the violations specifically addressed herein; however, it does not resolve any criminal action that may result from these same violations.

12. Within thirty (30) days after the effective date of this Consent Order, the Company shall pay to the General Fund of the State of Michigan, in the form of a check made payable to the "State of Michigan" and delivered to the Michigan Department of Environmental Quality, Financial and Business Services Division, Revenue Control, P.O. Box 3 0657, Lansing, Michigan 48909-8157, a settlement amount of \$25,000.00 which includes AQD costs for investigation and enforcement. This total settlement amount shall be paid within thirty (30) days of the effective date of this Consent Order. To ensure proper credit, all payments made pursuant to this Consent Order shall include the Agreement Identification No. AQD40035 on the face of the check. This settlement amount is in addition to any fees, taxes, or other fines that may be imposed on the Company by law.

13. On and after the effective date of this Consent Order, if the Company fails to comply with paragraph 9.A of this Consent Order, the Company is subject to a stipulated fine of up to \$5000.00 per violation. On and after the effective date of this Consent Order, if the Company fails to comply with

paragraph 9.B.1 of this Consent Order, the Company is subject to a stipulated fine of up to \$500.00 per violation per day. On and after the effective date of this Consent Order, if the Company fails to comply with any other provision of this Consent Order the Company is subject to a stipulated fine of up to \$500.00 per violation. The amount of the stipulated fines imposed pursuant to this paragraph shall be within the discretion of the MDEQ. Stipulated fines submitted under this Consent Order shall be by check, payable to the State of Michigan within thirty (30) days of written demand and shall be delivered to the Michigan Department of Environmental Quality, Financial and Business Services Division, Revenue Control, P.O. Box 30657, Lansing, Michigan 48909-8157. To ensure proper credit, all payments shall include the Agreement Identification No. AQD40035-S on the face of the check. Payment of stipulated fines shall not alter or modify in any way the Company's obligation to comply with the terms and conditions of this Consent Order.

14. The AQD, at its discretion, may seek stipulated fines or statutory fines for any violation of this Consent Order which is also a violation of any provision of applicable federal and state law, rule, regulation, permit, or MDEQ administrative order. However, the AQD is precluded from seeking both a stipulated fine under this Consent Order and a statutory fine for the same violation.

15. To ensure timely payment of the settlement amount assessed in paragraph 12 and any stipulated fines assessed pursuant to paragraph 13 of this Consent Order, the Company shall pay an interest penalty to the State of Michigan each time it fails to make a complete or timely payment under this Consent Order. The interest payment shall be determined at a rate of interest that is equal to one percent (1%) plus the average interest rate paid at auctions of 5-year United States treasury notes during the six months immediately preceding July 1 and January 1, as certified by the state treasurer, compounded annually, and using the full increment of amount due as principal, calculated from the due date specified in this Consent Order until the date that delinquent payment is finally paid in full. Payment of an interest penalty by the Company shall be made to the State of Michigan in accordance with paragraph 14 of this Consent Order. Interest payments shall be applied first towards the most overdue amount or outstanding interest penalty owed by the Company before any remaining balance is applied to subsequent payment amount or interest penalty.

16. The Company agrees not to contest the legal basis for the settlement amount assessed pursuant to paragraph 12. The Company also agrees not to contest the legal basis for any stipulated fines assessed pursuant to paragraph 13 of this Consent Order, but reserves the right to dispute in a court of competent jurisdiction the factual basis upon which a demand by MDEQ of stipulated fines is made. In addition, the Company agrees that said fines have not been assessed by the MDEQ pursuant to Section 5529 of Part 55 and therefore are not reviewable under Section 5529 of Part 55.

17. This compliance program is not a variance subject to the 12 month limitation specified in Section 5538 of Part 55.

18. This Consent Order shall remain in full force and effect for a period of at least two (2) years. Thereafter, the Consent Order shall terminate only upon written notice of termination issued by the AQD Chief. Prior to issuance of a written notice of termination, the Company shall submit a request, to the AQD Chief at the Michigan Department of Environmental Quality, Air Quality Division, P.O. Box 30260, Lansing, Michigan 48909-7760, consisting of a written certification that the Company has fully complied with all the requirements of this Consent Order and has made all payments including all stipulated fines required by this Consent Order. Specifically, this certification shall include: (i) the date of compliance with each provision of the compliance program and the date any payments or stipulated fines were paid; (ii) a statement that all required information has been reported to the AQD Grand Rapids District Supervisor; (iii) confirmation that all records required to be maintained pursuant to this Consent Order are being maintained at the facilities; and, (iv) such information as may be requested by the AQD Chief.

19. In the event Rogers Printing Inc. sells or transfers any of the facility, with SRN A4216, it shall advise any purchaser or transferee of the existence of this Consent Order in connection with such sale or transfer. Within thirty (30) calendar days, the Company shall also notify the AQD Grand Rapids District Office Supervisor, in writing, of such sale or transfer, the identity and address of any purchaser or transferee, and confirm the fact that notice of this Consent Order has been given to the purchaser and/or transferee. As a condition of the sale, Rogers Printing Inc. must obtain the consent of the purchaser and/or transferee, in writing, to assume all of the obligations of this Consent Order. A copy of that

agreement shall be forwarded to the AQD Grand Rapids District Office within thirty (30) days of assuming the obligations of this Consent Order.

20. Prior to the effective date of this Consent Order and pursuant to the requirements of Sections 5511 and 5528(3) of Part 55, the public was notified of a 30-day public comment period and was provided the opportunity for a public hearing.

21. Section 5530 of Part 55 may serve as a source of authority but not a limitation under which the Consent Order may be enforced. Further, Part 17 of Act 451 and all other applicable laws and any other legal basis or applicable statute may be used to enforce this Consent Order.

22. The Company hereby stipulates that entry of this Consent Order is a result of an action by MDEQ to resolve alleged violations at 3350 Main Street in Ravenna. The Company further stipulates that it will take all lawful actions necessary to fully comply with this Consent Order, even if the Company files for bankruptcy in the future. The Company will not seek discharge of the settlement amount and any stipulated fines imposed hereunder in any future bankruptcy proceedings, and the Company will take necessary steps to ensure that the settlement amount and any future stipulated fines are not discharged. The Company, during and after any future bankruptcy proceedings, will ensure that the settlement amount and any future stipulated fines remain an obligation to be paid in full by the Company to the extent allowed by applicable bankruptcy law.

The undersigned certifies that he/she is fully authorized by the Company to enter into this Consent Order and to execute and legally bind the Company to it.

ROGERS PRINTING, INC.

JEFFREY S RAAP MANUFACTURING MANAGER
Print Name and Title

Jeff S Raap Date: 12/10/13
Signature

The above signatory subscribed and sworn to before me this 16th day of December, 2013.

Linda S. Nichols
Notary Public

Linda S. Nichols
Notary Public of Michigan
Newaygo County
Expires 05/02/2019
Acting in the County of Muskegon

Approved as to Content:

Approved as to Form:

G. Vinson Hellwig
G. Vinson Hellwig, Chief
AIR QUALITY DIVISION
DEPARTMENT OF
ENVIRONMENTAL QUALITY

Neil Gordon
Neil Gordon, Section Head
ENVIRONMENTAL REGULATION SECTION
ENVIRONMENT, NATURAL RESOURCES,
AND AGRICULTURE DIVISION
DEPARTMENT OF ATTORNEY GENERAL

Dated: 1/8/14

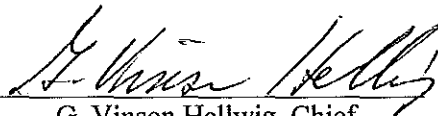
Dated: Jan. 5, 2014

FINAL ORDER

The Chief of the Air Quality Division having had opportunity to review the Consent Order and having been delegated authority to enter into Consent Orders by the Director of the Michigan Department of Environmental Quality pursuant to the provisions of Part 55 of Act 451 and otherwise being fully advised on the premises,

HAS HEREBY ORDERED that the Consent Order is approved and shall be entered in the record of the MDEQ as a Final Order.

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY


G. Vinson Hellwig, Chief
Air Quality Division

Effective Date: 1/8/14

EXHIBIT A
MALFUNCTION ABATEMENT PLAN (MAP)

MALFUNCTION ABATEMENT PLAN
FOR THE
FGOFFSET2
REGENERATIVE THERMAL OXIDIZER SYSTEM

*Rogers Printing, Inc.
Ravenna, Michigan*

September 30, 2013

REGENERATIVE THERMAL OXIDIZER SYSTEM

Rogers Printing, Inc. produces printed materials for various business sectors, using offset lithographic printing technology. Offset lithography is based on the repulsion of oil and water whereby the image to be printed receives ink from ink rollers while the non-printing area attracts a water-based film (called fountain solution), keeping the non-printing areas ink-free.

Rogers Printing has two heatset webfed presses which are equipped with multiple printing units to allow for multiple colors to be printed to the surface of paper. Paper which has been coated with Ink and fountain solution is transferred through a dryer which dries the surface of the paper, evaporating available solvents and sets the ink in place.

The exhaust from the two dryers (one for each unit) is collected in a common header and directed to a regenerative thermal oxidizer (RTO) designed and installed by TANN Corporation. The RTO is a TANN Model TR595 with a design air flow rating of 4,500 scfm, a thermal efficiency of 95% and a destruction efficiency of 98%.

The RTO has two heat transfer media canisters (i.e. 2 can) filled with 1 inch random-pack ceramic media. Inlet / outlet air plenums are located beneath the beds with a combustion / retention chamber located above the beds which connects the two media canisters. There is a single burner which maintains the retention chamber temperature and has a design retention time of 1.0 seconds.

The process air is directed through the first ceramic media bed where it uses the heat from the pre-heated bed to raise the exhaust gas temperature. Once the air leaves the first can it enters the combustion zone where a natural gas fired burner further elevates the process air to a temperature greater than 1500 °F where the VOCs are oxidized into carbon dioxide and water. The oxidized process air then flows out of the combustion zone and through the second ceramic media bed where the process air gives up its heat to the ceramic media prior to entering the outlet plenum on its way to the being discharged from the exhaust stack.

As one bed of ceramic media heats up (oxidized exhaust) the other bed of ceramic media is cooling down (heating the incoming process air). A system of inlet and outlet isolation valves operates sequentially to select which bed the VOC laden process air enters and through which bed the clean exhaust stream exits. Sequential cycle time is approximately 90 seconds. During each airflow direction change, pneumatic actuators are signaled to

change the damper systems associated with to each bed inlet and outlet in a synchronized fashion allowing for a smooth reversal of the air flow.

The TANN unit is equipped with a force draft fan which maintains a positive pressure throughout the system. The system flow is controlled via a pressure transmitter located in the inlet duct. A fail-safe outside air damper located on the inlet manifold remains open at all times when process fumes are disabled to allow for a purge of the RTO.

Table 1 presents the operational set points of the RTO.

Parameter	Units	Range / Setpoint
Combustion Chamber Temperature	° F	1500 – 1600
Compressed Air Pressure	In. WC	50 - 80

The RTO is equipped with an operating computer system which monitors the above listed parameters as well as fan motor temperatures, burner operation, process air flow, hydraulic fluid levels and hydraulic fluid temperatures. If the process senses an exceedance of any of the operational parameters an alarm is triggered and the oxidizer and process shuts down automatically.

In the event of a shut down of the RTO, the production process will be manually over-rode by use of the by-pass damper to allow the emissions to be exhausted directly to atmosphere until the current project is completed and until the residual ink can be manually cleaned from the rollers. While the current project is being completed the maintenance staff will work to determine the cause of the RTO shutdown and return the unit to operation.

The following table is a list of potential malfunctions and the planned response for each malfunction.

Parameter	Operating Variable	Monitoring Method	Responsibility	Corrective Procedure or Operational Change in the Event of a Malfunction
Combustion Zone Temperature	1,500 – 1,700 °F	Thermocouple	Maintenance Supervisor	If outside range, the RTO shuts down automatically – Maintenance staff will investigate and make repairs as necessary
Compressed Air Pressure	50 – 80 psi	Regulator	Maintenance Supervisor	If unit exceeds the range, the RTO shuts down automatically – Maintenance staff will investigate and make repairs as necessary

PREVENTIVE MAINTENANCE PLAN - RTO

The operation of the Regenerative Thermal Oxidizers (RTO) is critical to the operation of the heatset lithographic presses (FGOFFSET2). Therefore, the facility has a routine maintenance program to ensure that the RTO is operating properly which in turns minimizes malfunctions resulting in a loss of production on the either press. In addition to the periodic checks performed by facility staff, the company contracts with an outside service to perform annual inspection of the unit.

The following is a schedule of the routine maintenance performed on the unit, supervised by the facility Maintenance Manager.

Frequency	Task
Monthly	Lubricate all fan bearings and motor bearings
	Inspect flame rod
	Test interlocks
	Check ignition spark plug
	Check valve motors and control valves are free and smooth action
	Test flame safeguard
	Clean or replace the combustion air blower filter
Semi-annual	Inspect poppet valve blade
	Inspect poppet valve seat assembly
	Verify proper blade to seat connection
	Test manual gas valves operation
	Check air / gas ratio
	Inspect fan coupling
Annual	Replace flame rod
	Test pressure switches
	Visually check ignition cable and connectors
	Inspect piping for leaks
	Inspect burner components
	Clean orifice plate
	Inspect motor
	Inspect fan shaft
Inspect fan support structure	
Inspect fan wheel	

The Maintenance Manager will maintain on file a log of all preventive maintenance activities to demonstrate compliance with this Malfunction Abatement Plan.

The manufacturer maintains a readily available list of replacement parts such that replacement parts can be delivered within 48 hours of ordering. Therefore the company does not retain an inventory of spare parts on site.

FUGITIVE EMISSION MINIMIZATION PLAN

Fugitive emissions are generated whenever solvent containing materials are exposed to atmospheric conditions. To minimize these emissions, all materials are to remain in closed containers until their use is required.

Fountain Solutions

Fountain solutions have an inherently low vapor pressure and are highly water soluble. Concentrates are added to a water bath where they tend to remain until either used in the process or drained from the system.

Blanket Wash

Roller cleaning operations are performed with either the use of an automatic blanket wash system or a manual cleaning using shop towels and blanket wash solvent. The blanket wash solvents used have a vapor pressure less than 10 mm Hg at 20°C. During manual cleaning of the rollers the spent shop towels are discarded into a fire safety container with a spring loaded lid. The towels are later transferred to a drum and the lid sealed for shipment.

Interlock System

Each press will be equipped with an interlock to the RTO such that if the RTO were to fail, both units would shut down operation.

Off-Line Operation

When only one of the two print lines is in operation, a by-pass damper is activated on the non-operating unit dryer to allow heat from the dryer to exhaust directly to atmosphere. This minimizes the amount of draw required by the RTO, minimizing supplemental fuel usage.