

**CONSTRUCTION PERMIT
OFFICE OF AIR MANAGEMENT**

**Mignone Communications, Inc.
880 East State Street
Huntington, Indiana 46750**

is hereby authorized to construct

a graphic art commercial printing operation, consisting of the following equipment:

- (a) one (1) heatset web lithographic printing press (ID No. 1), with a maximum line speed of 1400 feet per minute and a maximum printing width of 38 inches, with a catalytic oxidizer for VOC control, exhausting through one (1) stack (ID No. S1); and
- (b) one (1) natural gas-fired dryer for the press, with a maximum heat input of 2.422 million British thermal units (MMBtu) per hour, exhausting through one (1) stack (ID No. S1).

This permit is issued to the above mentioned company (herein known as the Permittee) under the provisions of 326 IAC 2-1 and 40 CFR 52.780, with conditions listed on the attached pages.

Construction Permit No.: CP-069-9963-00059	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

Construction Conditions

General Construction Conditions

1. That the data and information supplied with the application shall be considered part of this permit. Prior to any proposed change in construction which may affect allowable emissions, the change must be approved by the Office of Air Management (OAM).
2. That this permit to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

3. That pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.
4. That pursuant to 326 IAC 2-1-9(b)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. That notwithstanding Construction Condition No. 6, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

First Time Operation Permit

6. That this document shall also become a first-time operation permit pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:
 - (a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the facilities were constructed as proposed in the application. The facilities covered in the Construction Permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
 - (c) Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
 - (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1-7.1(Fees).
 - (e) Pursuant to 326 IAC 2-1-4, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. The operation permit issued shall contain as a minimum the conditions in the Operation Conditions section of this permit.

7. That when the facility is constructed and placed into operation the following operation conditions shall be met:

Operation Conditions

General Operation Conditions

1. That the data and information supplied in the application shall be considered part of this permit. Prior to any change in the operation which may result in an increase in allowable emissions exceeding those specified in 326 IAC 2-1-1 (Construction and Operating Permit Requirements), the change must be approved by the Office of Air Management (OAM).
2. That the permittee shall comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder.

Preventive Maintenance Plan

3. That pursuant to 326 IAC 1-6-3 (Preventive Maintenance Plans), the Permittee shall prepare and maintain a preventive maintenance plan, including the following information:
 - (a) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices.
 - (b) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions.
 - (c) Identification of the replacement parts which will be maintained in inventory for quick replacement.

The preventive maintenance plan shall be submitted to IDEM, OAM upon request and shall be subject to review and approval.

Transfer of Permit

4. That pursuant to 326 IAC 2-1-6 (Transfer of Permits):
 - (a) In the event that ownership of this graphic art commercial printing operation is changed, the Permittee shall notify OAM, Permit Branch, within thirty (30) days of the change. Notification shall include the date or proposed date of said change.
 - (b) The written notification shall be sufficient to transfer the permit from the current owner to the new owner.
 - (c) The OAM shall reserve the right to issue a new permit.

Permit Revocation

5. That pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:
 - (a) Violation of any conditions of this permit.
 - (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of 326 IAC 2-1 (Permit Review Rules).

Availability of Permit

6. That pursuant to 326 IAC 2-1-3(l), the Permittee shall maintain the applicable permit on the premises of this source and shall make this permit available for inspection by the IDEM, or other public official having jurisdiction.

Performance Testing

7. That pursuant to 326 IAC 2-1-3 (Construction and Operating Permit Requirements) compliance stack tests shall be performed for the catalytic oxidizer, to determine the operating parameters necessary for the oxidizer to maintain an overall control efficiency of 71.25% (the overall control efficiency includes the capture efficiency and destruction efficiency of the catalytic oxidizer), within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up. These tests shall be performed according to 326 IAC 3-2.1 (Source Sampling Procedures) using the methods specified in the rule or as approved by the Commissioner.
- (a) A test protocol shall be submitted to the OAM, Compliance Data Section, 35 days in advance of the test.
 - (b) The Compliance Data Section shall be notified of the actual test date at least two (2) weeks prior to the date.
 - (c) All test reports must be received by the Compliance Data Section within 45 days of completion of the testing.
 - (d) Whenever the results of the stack test performed exceed the level specified in this permit, appropriate corrective actions shall be implemented within thirty (30) days of receipt of the test results. These actions shall be implemented immediately unless notified by OAM that they are acceptable. The Permittee shall minimize emissions while the corrective actions are being implemented.
 - (e) Whenever the results of the stack test performed exceed the level specified in this permit, a second test to demonstrate compliance shall be performed within 120 days. Failure of the second test to demonstrate compliance may be grounds for immediate revocation of this permit to operate the affected facility.

Malfunction Condition

8. That pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

Opacity Limitations

9. That pursuant to 326 IAC 5-1-2 (Visible Emission Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), the visible emissions shall meet the following:

- (a) visible emissions shall not exceed an average of 40% opacity in 24 consecutive readings.
- (b) visible emissions shall not exceed 60% opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

Fugitive Dust Emissions

10. That pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), the permittee shall be in violation of 326 IAC 6-4 (Fugitive Dust Emissions) if any of the criteria specified in 326 IAC 6-4-2(1) through (4) are violated. Observations of visible emissions crossing the property line of the source at or near ground level must be made by a qualified representative of IDEM. [326 IAC 6-4-5(c)].

Volatile Organic Compound (VOC) Limitations

- 11. (a) That pursuant to 326 IAC 8-2-5 (Paper Coating Operations), the volatile organic compound (VOC) content of coatings applied to labels of any substrate, or pressure sensitive tapes, or paper, plastic or metal foil by means of web coating shall be limited to 2.9 pounds VOC per gallon of coating less water delivered to the applicator.
- (b) In order to comply with this VOC limit, the catalytic oxidizer shall operate at all times that the printing press (ID No. 1) and the 2.422 MMBtu per hour dryer for the press are in operation and shall maintain a minimum overall control efficiency of 49.6%.

Catalytic Oxidizer Operation

12. That the catalytic incinerator shall operate at all times that the printing press (ID No. 1) and the 2.422 MMBtu per hour dryer for the press are operated. When operating, the catalytic incinerator shall maintain a minimum operating temperature of 650° F or a temperature, fan amperage and duct velocity determined in the compliance tests (described in Operation Condition 7) to maintain a minimum 95% destruction of the volatile organic compound (VOC) captured.

Record Keeping Requirements

13. That a log of information necessary to document compliance with operation permit condition nos. 11 and 12 shall be maintained. These records shall include the coating/ink, thinner and clean up solvent usage, material safety data sheet (MSDS) and the date of use. These records shall also include the operating temperature, fan amperage and duct velocity for the catalytic oxidizer. These records shall be kept for at least the past 36 month period and made available upon request to the Office of Air Management (OAM).

Open Burning

14. That the permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6.

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
FAX NUMBER - (317) 233-5967**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE: IT HAS POTENTIAL TO EMIT 25 LBS/HR
PARTICULATES ? ____, 100 LBS/HR VOC ? ____, 100 LBS/HR SULFUR DIOXIDE ? ____ OR 2000 LBS/HR OF ANY OTHER
POLLUTANT ? ____ EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED
EMISSIONS IN EXCESS OF APPLICABLE LIMITATION ____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC ____ OR, PERMIT CONDITION # ____ AND/OR PERMIT
LIMIT OF ____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON THE NEXT PAGE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: Mignone Communications, Inc. PHONE NO. (219) 358-0266

LOCATION: (CITY AND COUNTY) Huntington, Huntington County

PERMIT NO. CP-069-9963 AFS PLANT ID: 069-00059 AFS POINT ID: _____ INSP: Jennifer Schick
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/19____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/19____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO₂, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY:

TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

**Please note - This form should only be used to report malfunctions
applicable to Rule 326 IAC 1-6 and to qualify for
the exemption under 326 IAC 1-6-4.**

326 IAC 1-6-1 Applicability of rule

Sec. 1. The requirements of this rule (326 IAC 1-6) shall apply to the owner or operator of any facility which has the potential to emit twenty-five (25) pounds per hour of particulates, one hundred (100) pounds per hour of volatile organic compounds or SO₂, or two thousand (2,000) pounds per hour of any other pollutant; or to the owner or operator of any facility with emission control equipment which suffers a malfunction that causes emissions in excess of the applicable limitation.

326 IAC 1-2-39 “Malfunction” definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. (Air Pollution Control Board; 326 IAC 1-2-39; filed Mar 10, 1988, 1:20 p.m. : 11 IR 2373)

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for New Construction and Operation

Source Background and Description

Source Name: Mignone Communications, Inc.
Source Location: 880 East State Street, Huntington, Indiana 46750
County: Huntington
Construction Permit No.: CP-069-9963-00059
SIC Code: 2759
Permit Reviewer: Trish Earls/EVP

The Office of Air Management (OAM) has reviewed an application from Mignone Communications, Inc. relating to the construction and operation of a graphic art commercial printing operation, consisting of the following equipment:

- (a) one (1) heatset web lithographic printing press (ID No. 1), with a maximum line speed of 1400 feet per minute and a maximum printing width of 38 inches, with a catalytic oxidizer for VOC control, exhausting through one (1) stack (ID No. S1); and
- (b) one (1) natural gas-fired dryer for the press, with a maximum heat input of 2.422 million British thermal units (MMBtu) per hour, exhausting through one (1) stack (ID No. S1).

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
S1	Printing Press	32	1.67	2000	650-1000

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Information, unless otherwise stated, used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on July 20, 1998.

Emissions Calculations

See Appendix A (Emissions Calculation Spreadsheets) for detailed calculations (3 pages).

Total Potential and Allowable Emissions

Indiana Permit Allowable Emissions Definition (after compliance with applicable rules, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Allowable Emissions (tons/year)	Potential Emissions (tons/year)
Particulate Matter (PM)	--	0.16
Particulate Matter (PM10)	--	0.16
Sulfur Dioxide (SO ₂)	--	0.01
Volatile Organic Compounds (VOC)	--	74.22
Carbon Monoxide (CO)	--	1.81
Nitrogen Oxides (NO _x)	--	2.16
Single Hazardous Air Pollutant (HAP)	--	1.64
Combination of HAPs	--	3.41

- (a) The potential emissions before control are used for the permitting determination.
- (b) Allowable emissions (as defined in the Indiana Rule) of VOC are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required.

County Attainment Status

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Huntington County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Huntington County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Emissions (ton/yr)
PM	0.16
PM10	0.16
SO ₂	0.01
VOC	21.42
CO	1.81
NO _x	2.16
Single HAP	0.47
Combination HAPs	0.99

- (a) This new source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

There are no New Source Performance Standards (326 IAC 12) and 40 CFR Part 63 applicable to this facility.

State Rule Applicability

326 IAC 2-6 (Emission Reporting)

This source is located in Huntington County and the potential to emit each criteria pollutant is less than 100 tons per year. The source is not one of the twenty-eight (28) listed sources and its potential to emit PM10 is less than one-hundred (100) tons per year including fugitive emissions, therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,

- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

326 IAC 8-2-5 (Paper Coating Operations)

The printing press (ID No. 1) is subject to the requirements of 326 IAC 8-2-5. Pursuant to this rule, the volatile organic compound (VOC) content of coating delivered to the coating applicator from a paper coating line shall be limited to 2.9 pounds of VOCs per gallon of coating excluding water.

The worst case coating that will be used in the printing press contains 4.76 pounds of VOC per gallon of coating less water, which exceeds the limit of 2.9 pounds of VOC per gallon of coating less water. However, the source will use a catalytic oxidizer to control VOC emissions in order to achieve this emission limitation.

Pursuant to 326 IAC 8-1-2(b), for surface coating operations using one of the compliance methods under 326 IAC 8-1-2(a), which in this case, is the use of the catalytic oxidizer, the equivalent emission limit in pounds of VOC per gallon of coating solids is determined using the following equation:

$$E = \frac{L}{1 - L / D}$$

where: L = Applicable emission limit in pounds of VOC per gallon of coating
= 2.9 pounds VOC per gallon of coating less water
D = Density of VOC in coating in pounds per gallon of VOC.
= 7.36 pounds of VOC per gallon of coating (from 326 IAC 8-1-2(b))
E = Equivalent emission limit in pounds of VOC per gallon of coating solids as applied
= 4.79 pounds VOC per gallon of coating solids

Pursuant to 326 IAC 8-1-2(c), the equivalent overall control efficiency of the capture system and control device, as a percentage, needed in order to meet the emission limitation is determined by the following equation:

$$O = \frac{V - E}{V} \times 100$$

where: V = The actual VOC content of the coating in pounds of VOC per gallon of coating solids as applied
= 9.51 pounds VOC per gallon of coating solids
E = 4.79 pounds VOC per gallon of coating solids
O = Equivalent overall control efficiency of the capture system and control device as a percentage
= 49.63%

The VOC capture system for the printing press has a capture efficiency of 75%. The catalytic oxidizer destruction efficiency is 95%. This is equivalent to an overall control efficiency of 71.25%. Therefore, the source is in compliance with the emission limit of 2.9 pounds VOC per gallon of coating less water under 326 IAC 8-2-5, since the catalytic oxidizer has an overall control efficiency which exceeds the required control efficiency of 49.63%.

326 IAC 8-1-6 (New Facilities, General Reduction Requirements)

The printing press is not subject to the requirements of 326 IAC 8-1-6 because it is subject to the requirements of 326 IAC 8-2-5.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 189 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This new source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Amendments to Clean Air Act.
- (b) See attached spreadsheets for detailed air toxic calculations.

Conclusion

The construction of this graphic art commercial printing operation will be subject to the conditions of the attached proposed **Construction Permit No. CP-069-9963-00059**.

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for New Construction and Operation

Source Name: Mignone Communications, Inc.
Source Location: 880 East State Street, Huntington, Indiana 46750
County: Huntington
Construction Permit No.: CP-069-9963-00059
SIC Code: 2759
Permit Reviewer: Trish Earls/EVP

On August 25, 1998, the Office of Air Management (OAM) had a notice published in the Herald Press, Huntington, Indiana, stating that Mignone Communications, Inc. had applied for a construction permit to construct and operate a graphic art commercial printing operation with a catalytic oxidizer as air pollution control. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review by the OAM, the following revisions shall be incorporated into Construction Permit CP-069-9963-00059:

- (A) Operating Condition #7 of the Construction Permit paragraph, the first sentence which reads "That pursuant to 326 IAC 2-1-3 (Construction and Operating Permit Requirements) compliance stack tests shall be performed for the catalytic oxidizer, to determine the operating parameters necessary for the oxidizer to maintain a 95% destruction efficiency", has been changed to read as follows:

"That pursuant to 326 IAC 2-1-3 (Construction and Operating Permit Requirements) compliance stack tests shall be performed for the catalytic oxidizer, to determine the operating parameters necessary for the oxidizer to maintain an overall control efficiency of 71.25% (the overall control efficiency includes the capture efficiency and destruction efficiency of the catalytic oxidizer)"

Mail to: Permit Administration & Development Section
Office Of Air Management
100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015

Mignone Communications, Inc.
880 East State Street
Huntington, Indiana 46750

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of _____ for _____.
(Title) (Company Name)
3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make
these representations on behalf of _____.
(Company Name)
4. I hereby certify that Mignone Communications, Inc., 880 East State Street, Huntington, Indiana, 46750, has constructed the graphic art commercial printing operation in conformity with the requirements and intent of the construction permit application received by the Office of Air Management on July 20, 1998 and as permitted pursuant to **Construction Permit No. CP-069-9963, Plant ID No. 069-00059** issued on _____.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature

Date

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of
Indiana on this _____ day of _____, 19 _____.
My Commission expires: _____

Signature

Name (typed or printed)

**Appendix A: Emissions Calculations
VOC From Printing Press Operations**

Company Name: Mignone Communications
Address City IN Zip: 880 East State Street, Huntington, Indiana 46750
CP: 069-9963
Plt ID: 069-00059
Reviewer: Trish Earls/EVP
Date: August 10, 1998

State Potential Emissions (uncontrolled):

Throughput for Presses:

Press I.D.		Maximum Line Speed (ft/min)	Convert Feet to Inches	Maximum Print Width (in)	Min/Hour	Hours/Year	1/1,000,000	MMin²/Year		
Press #1		1400	12	38.0	60	8760	1,000,000	335,543		

Solvent Name	Density (lb/gal)	Maxium Coverage lbs/ MMin²	Weight % Organics	Flash Off %	Through Put MMin²/ Year	Tons/ 2,000 lbs	VOC Pounds per Hour	VOC Tons per Year	Lb VOC / Gal Coating Less Water	Lb VOC / Gal Solids
Press #1										
Process Yellow Ink	10	1	47.56%	80.00%	335,543	2,000	14.57	63.83	4.76	9.51
Process Magenta Ink	10	1	41.77%	80.00%	335,543	2,000	12.80	56.06	4.18	7.59
Process Cyan Ink	10	1	44.77%	80.00%	335,543	2,000	13.72	60.09	4.48	8.95
Process Black Ink	10	1	42.48%	80.00%	335,543	2,000	13.02	57.02	4.25	8.02
307 TW Fountain Solution	8.38	0.1	4.49%	80.00%	335,543	2,000	0.14	0.60	2.31	2.43
One Step Wash Up WM 1488	6.98	0.0719999999999999	98.00%	80.00%	335,543	2,000	2.16	9.47	6.84	N/A
Blanket & Roller Wash Y-120 WM	6.69	0.0719999999999999	100.00%	80.00%	335,543	2,000	2.21	9.66	6.69	N/A

Total State Potential Emissions:

16.92 74.10

Federal Potential Emissions (controlled):

						Catalytic Incinerator Control Efficiency	Controlled VOC Pounds per Hour	Controlled VOC Tons per Year		
Total Federal Potential Emissions:						71.25%	4.86	21.30		

Note:

Heatset offset printing has an assumed flash off of 80%. Other types of printers have a flash off of 100%

Press #1 will comply with 326 IAC 8-2-5 by using a catalytic incinerator with a 75% capture efficiency and a 95% destruction efficiency to control VOC emissions.

Methodology:

Throughput = Maximum line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8,760 hours per year = MMin² per Year

VOC = Maximum Coverage pounds per MMin² * Weight percentage organics (volatiles minus water) * Flash off * Throughput * Tons per 2,000 pounds = Tons per Year

Pound VOC per pound Solid = (Density (lb/gal) * Weight percentage organics) / (Density (lb/gal) * Weight % Solids)

Total Emissions = Worst Case Ink Emissions + Fountain Solution Emissions + Worst Case Wash Solvent Emissions

Controlled Emissions = Uncontrolled Emissions * Material Usage Limitation

Appendix A: Emissions Calculations
HAPs From Printing Press Operations

Page 2 of 3 TSD App A

Company Name: Mignone Communications
Address City IN Zip: 880 East State Street, Huntington, Indiana 46750
CP: 069-9963
PIt ID: 069-00059
Reviewer: Trish Earls/EVP
Date: August 10, 1998

State Potential Emissions (uncontrolled):													
Solvent Name	Density (lb/gal)	Maxium Coverage lbs/ MMin²	Weight % Ethylene Glycol	Weight % Glycol Ethers	Weight % Xylene	Weight % Cumene	Flash Off %	Through Put MMin²/ Year	Tons/ 2,000 lbs	Ethylene Glycol Emissions (tons/yr)	Glycol Ethers Emissions (tons/yr)	Xylene Emissions (tons/yr)	Cumene Emissions (tons/yr)
Press #1													
Process Yellow Ink	10	1	0.00%	0.00%	0.00%	0.00%	80.00%	335,543	2,000	0.00	0.00	0.00	0.00
Process Magenta Ink	10	1	0.00%	0.00%	0.00%	0.00%	80.00%	335,543	2,000	0.00	0.00	0.00	0.00
Process Cyan Ink	10	1	0.00%	0.00%	0.00%	0.00%	80.00%	335,543	2,000	0.00	0.00	0.00	0.00
Process Black Ink	10	1	0.00%	0.00%	0.00%	0.00%	80.00%	335,543	2,000	0.00	0.00	0.00	0.00
307 TW Fountain Solution	8.38	0.1	10.00%	5.00%	0.00%	0.00%	80.00%	335,543	2,000	1.34	0.67	0.00	0.00
One Step Wash Up WM 1488	6.98	0.072	0.00%	10.00%	2.50%	2.00%	80.00%	335,543	2,000	0.00	0.97	0.24	0.19
Blanket & Roller Wash Y-120 WM	6.69	0.072	0.00%	0.00%	2.00%	1.60%	80.00%	335,543	2,000	0.00	0.00	0.19	0.15
Total State Potential Emissions:										1.34	1.64	0.24	0.19
Federal Potential Emissions (controlled):													
									Catalytic Incinerator Control Efficiency	Controlled Ethylene Glycol Emissions (tons/yr)	Controlled Glycol Ether Emissions (tons/yr)	Controlled Xylene Emissions (tons/yr)	Controlled Cumene Emissions (tons/yr)
Total Federal Potential Emissions:									71.25%	0.39	0.47	0.07	0.06

Note:

Heatset offset printing has an assumed flash off of 80%. Other types of printers have a flash off of 100%

Methodology:

Throughput = Maxium line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8,760 hours per year = MMin² per Year

VOC = Maximum Coverage pounds per MMin² * Weight percentage organics (volatiles minus water) * Flash off * Throughput * Tons per 2,000 pounds = Tons per Year

Pound VOC per pound Solid = (Density (lb/gal) * Weight percentage organics) / (Density (lb/gal) * Weight % Solids)

Total Emissions = Worst Case Ink Emissions + Fountain Solution Emissions + Worst Case Wash Solvent Emissions

Controlled Emissions = Uncontrolled Emissions * Material Usage Limitation

Appendix A: Emission Calculations
Natural Gas Combustion
MM Btu/hr 0.3 - < 100

Company Name: Mignone Communications
Address City IN Zip: 880 East State Street, Huntington, Indiana 46750
CP: 069-9963
Pit ID: 069-00059
Reviewer: Trish Earls/EVP
Date: August 10, 1998

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

4.9

43.1

Heat Input Capacity includes:

one (1) dryer for the press, rated at 2.422 MMBtu/hr, and supplementary fuel input to the catalytic incinerator of 2.5 MMBtu per hour.

	Pollutant					
Emission Factor in lb/MMCF	PM 7.6	PM10 7.6	SO2 0.6	NOx 100.0	VOC 5.5	CO 84.0
Potential Emission in tons/yr	0.16	0.16	0.01	2.16	0.12	1.81

Methodology:

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 50, Flue gas recirculation = 32

All PM is assumed to be less than 1.0 micrometer in diameter. Therefore, the PM emission factors may be used to estimate PM10, PM2.5, and PM1

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1 and 1.4-2, SCC #1-01-006-02, #1-02-006-02, #1-03-006-02, #1-03-006-03

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton