INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

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Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

DATE: July 29, 2005
RE: Mason Corporation / 089-21543-00094

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-AM.dot 1/10/05

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July 29, 2005

Mr. Roderick Memering
Mason Corporation
P.O. Box 38
Schererville, Indiana 46375

Re: 089-21543-00094
Third Administrative Amendment to
FESOP F089-15312-00094

Dear Mr. Memering:

Mason Corporation was issued a Federally Enforceable State Operating Permit (FESOP) on November 25, 2002 for a stationary tin chloride and tin sulfate manufacturing plant located at 1049 U.S. Highway 41, Schererville, Indiana, 46375. A letter requesting a change to the permit was received on July 5, 2005. The source plans to add five (5) natural gas-fired sludge drying tanks to the source. A table summarizing the potential to emit regulated criteria pollutants and hazardous air pollutants from the new equipment is included as an attachment (see calculation page 1 of 1). The addition of the new equipment is considered a change by administrative amendment, since the new equipment has potential emissions of regulated criteria pollutants and hazardous air pollutants less than the ranges specified 326 IAC 2-8-11.1(d)(4) and 326 IAC 2-8-11.1(d)(5), respectively, and will not cause the source's potential to emit to be greater than the threshold levels specified in 326 IAC 2-2 or 326 IAC 2-3. The stack summary and rule applicability for these units is included below:

(a) Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (^{o}F)
S-19 and S-19A	Heated Tank T-1	25	0.5	550	300
S-20 and S-20A	Heated Tank T-2	25	0.5	550	300
S-21 and S-21A	Heated Tank T-3	25	0.5	550	300
S-22 and S-22A	Heated Tank T-4	25	0.5	550	300
S-23 and S-23A	Heated Tank T-5	25	0.5	550	300

(b) State and Federal Rule Applicability

(1) 326 IAC 6-1-2 (Particulate Emission Limitations)

Each of the sludge drying tanks is subject to the requirements of 326 IAC 6-1-2, since this source is located in Lake County, is not specifically listed in 326 IAC 6-1-8.1 through 326 IAC 6-1-18, and has actual emissions of ten (10) tons or more of particulate matter per year. Pursuant to 326 IAC 6-1-2(a), particulate matter (PM) emissions from each of the sludge drying tanks shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

(2) This source is not a major PSD stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 source categories listed in 326 IAC 2-2-1(y)(1). There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) or National Emission standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 20 and 40 CFR Part 61, 63) included in this approval.

Pursuant to the provisions of 326 IAC 2-8-10, the permit is hereby administratively amended as follows with deleted language as ~~strikeouts~~ and new language **bolded**:

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(b) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour:

(6) Five (5) natural gas-fired sludge drying tanks, identified as T-1 through T-5, each constructed in 2005, each exhausting water vapor to stacks S-19A through S-23A, respectively, and each equipped with two (2) burners rated at 0.3 million British thermal units per hour that exhaust to stacks S-19 through S-23, respectively.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities

(b) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour:

(6) Five (5) natural gas-fired sludge drying tanks, identified as T-1 through T-5, each constructed in 2005, each exhausting water vapor to stacks S-19A through S-23A, respectively, and each equipped with two (2) burners rated at 0.3 million British thermal units per hour that exhaust to stacks S-19 through S-23, respectively.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 Particulate Matter (PM) [326 IAC 6-1-2]

(c) Pursuant to 326 IAC 6-1-2(a), particulate matter (PM) emissions from each of the sludge drying tanks shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit. This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Nathan C. Bell, 100 North Senate Avenue, Indianapolis, Indiana, 46204, at 317-234-3350 or at 1-800-451-6027 (ext 43350).

Sincerely,
Origin signed by

Nysa L. James, Section Chief
Permits Branch
Office of Air Quality

ncb

Attachments: calculation page and revised permit pages

cc: File - Lake County
U.S. EPA, Region V
IDEM Northwest Regional Office
Lake County Health Department
Air Compliance Section Inspector - Rick Massoels
Compliance Data Section
Administrative and Development

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FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)

OFFICE OF AIR QUALITY

Mason Corporation
1049 U.S. Highway 41
Schererville, Indiana 46375

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No. F089-15312-00094	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: November 25, 2002 Expiration Date: November 25, 2007
First Administrative Amendment No. 089-19741-00094, issued December 10, 2004 Second Administrative Amendment No. 089-19070-00094, issued January 24, 2005	

Third Administrative Amendment No. 089-21543-00094	Pages Affected: 7, 33, 34
Issued by:Origin signed by Nysa L. James, Section Chief Office of Air Quality	Issuance Date: July 29, 2005

(6) Five (5) natural gas-fired sludge drying tanks, identified as T-1 through T-5, each constructed in 2005, each exhausting water vapor to stacks S-19A through S-23A, respectively, and each equipped with two (2) burners rated at 0.3 million British thermal units per hour that exhaust to stacks S-19 through S-23, respectively.

(c) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons: one (1) diesel storage tank.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities

(a) Emission units with PM and PM10 emissions less than five (5) tons per year, SO_2, NOx, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year:

(1) One (1) brushing chamber, identified as BC-1, constructed in 1992, with a maximum throughput of 0.587 pounds per hour, with emissions controlled by one (1) baghouse, identified as Baghouse 3, and exhausting to vent V-14 which discharges to the inside of the building.

(b) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour:

(1) One (1) natural gas-fired boiler, identified as B-1, constructed in 1990, with a maximum capacity of 3.5 million British thermal units per hour, and exhausting to stack S-1.

(2) One (1) natural gas-fired boiler, identified as B-2, constructed in 1992, with a maximum capacity of 3.5 million British thermal units per hour, and exhausting to stack S-2.

(3) One (1) natural gas-fired boiler, identified as B-3, constructed in 1995, with a maximum capacity of 2.5 million British thermal units per hour, and exhausting to stack S-3.

(4) One (1) natural gas-fired oil heater, identified as B-4, constructed in 1988, with a maximum capacity of 0.4 million British thermal units per hour, and exhausting to stack S-4.

(5) Eighteen (18) gas unit heaters.

(6) Five (5) natural gas-fired sludge drying tanks, identified as T-1 through T-5, each constructed in 2005, each exhausting water vapor to stacks S-19A through S-23A, respectively, and each equipped with two (2) burners rated at 0.3 million British thermal units per hour that exhaust to stacks S-19 through S-23, respectively.

(c) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons: one (1) diesel storage tank.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 Particulate Matter (PM) [326 IAC 6-1-2]

(a) Pursuant to 326 IAC 6-1-2(a) (Particulate Emission Limitations), particulate matter (PM) emissions from the brushing chamber (BC-1) shall be limited to 0.03 grain per dry standard cubic foot. The baghouse for particulate control shall be in operation at all times that the brushing chamber is in operation in order to ensure compliance with this condition.

(b) Pursuant to 326 IAC 6-1-2(b), the particulate emissions from each of the boilers shall be no greater than one-hundredth (0.01) grain per dry standard cubic foot (dscf).

(c) Pursuant to 326 IAC 6-1-2(a), particulate matter (PM) emissions from each of the sludge drying tanks shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

D.3.2 Volatile Organic Compounds (VOC) [326 IAC 8-9]

The diesel storage tank is subject to 326 IAC 8-9 (Volatile Organic Liquid Storage Vessels), but no specific emission limitations exist pursuant to this rule. Record keeping and reporting requirements do apply and they are described below in the Record Keeping and Reporting Requirements section.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.3.3 Record Keeping Requirements

(a) Pursuant to 326 IAC 8-9, the owner or operator of diesel storage tank shall maintain a record and submit to IDEM, OAQ a report containing the following information for each vessel:

(1) The vessel identification number;

(2) The vessel dimensions; and

(3) The vessel capacity.

The records shall be maintained for the life of the vessel.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: **Mason Corporation**
Address City IN Zip: **1049 U.S. Highway 41, Schererville, Indiana, 46375**
Permit Number: **089-21543**
Plt ID: **039-00094**
Reviewer: **Nathan C. Bell**
Date: **July 22, 2005**

				Pollutant	PM*	PM10*	SO2	NOx**	VOC	CO
				Emission Factor (lb/MMCF)	1.9	7.6	0.6	100	5.5	84.0
Emission Unit	Number of Units	Unit Heat Input Capacity MMBtu/hr	Combined Total Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Potential Emission tons/yr					
					PM*	PM10*	SO2	NOx**	VOC	CO
Sludge Drying Tank T-1 Burner	2	0.30	0.60	5.26	0.005	0.020	0.002	0.263	0.014	0.221
Sludge Drying Tank T-2 Burner	2	0.30	0.60	5.26	0.005	0.020	0.002	0.263	0.014	0.221
Sludge Drying Tank T-3 Burner	2	0.30	0.60	5.26	0.005	0.020	0.002	0.263	0.014	0.221
Sludge Drying Tank T-4 Burner	2	0.30	0.60	5.26	0.005	0.020	0.002	0.263	0.014	0.221
Sludge Drying Tank T-5 Burner	2	0.30	0.60	5.26	5.0E-03	0.020	0.002	0.263	0.014	0.221
Totals	**10**		**3.0**		**0.025**	**0.100**	**0.008**	**1.314**	**0.072**	**1.104**

Pollutant	Benzene	DCB	Formaldehyde	Hexane	Toluene	Pb	Cd	Cr	Mn	Ni
Emission Factor (lb/MMCF)	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
	Potential Emission tons/yr									
Emission Unit	Benzene	DCB	Formaldehyde	Hexane	Toluene	Pb	Cd	Cr	Mn	Ni
Sludge Drying Tank T-1 Burner	5.5E-06	3.2E-06	2.0E-04	0.005	8.9E-06	1.3E-06	2.9E-06	3.7E-06	1.0E-06	5.5E-06
Sludge Drying Tank T-2 Burner	5.5E-06	3.2E-06	2.0E-04	0.005	8.9E-06	1.3E-06	2.9E-06	3.7E-06	1.0E-06	5.5E-06
Sludge Drying Tank T-3 Burner	5.5E-06	3.2E-06	2.0E-04	0.005	8.9E-06	1.3E-06	2.9E-06	3.7E-06	1.0E-06	5.5E-06
Sludge Drying Tank T-4 Burner	5.5E-06	3.2E-06	2.0E-04	0.005	8.9E-06	1.3E-06	2.9E-06	3.7E-06	1.0E-06	5.5E-06
Sludge Drying Tank T-5 Burner	5.5E-06	3.2E-06	2.0E-04	0.005	8.9E-06	1.3E-06	2.9E-06	3.7E-06	1.0E-06	5.5E-06
Totals	**2.8E-05**	**1.6E-05**	**9.9E-04**	**0.024**	**4.5E-05**	**6.6E-06**	**1.4E-05**	**1.8E-05**	**5.0E-06**	**2.8E-05**

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32
The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Methodology
Potential Throughput (MMCF) = Combined Total Heat Input Capacity (MMBtu/hr) * 8,760 hrs/yr * 1 MMCF/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) * Emission Factor (lb/MMCF) / 2,000 lb/ton
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu, MMCF = 1,000,000 Cubic Feet of Gas

Abbreviations

PM = Particulate Matter	NOx = Nitrous Oxides	DCB = Dichlorobenzene	Cr = Chromium
PM10 = Particulate Matter (<10 um)	VOC - Volatile Organic Compounds	Pb = Lead	Mn = Manganese
SO2 = Sulfur Dioxide	CO = Carbon Monoxide	Cd = Cadmium	Ni = Nickel