



## DEPARTMENT OF NATURAL RESOURCES

## MISSOURI AIR CONSERVATION COMMISSION

## PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: 122006-005 Project Number: 2006-10-082

Parent Company: CTS Cement Manufacturing Corporation

Parent Company Address: 11065 Knott Avenue, Suite A, Cypress, CA 90630

Installation Name: CTS Manufacturing Corporation  
Mexico Loadout/Bagging Facility

Installation Address: 23876 Highway J, Mexico, MO 65265

Location Information: Audrain County, S13, T51N, R9W

Application for Authority to Construct was made for:  
Construction of new cement truck loadout and bagging operation. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

- 
- Standard Conditions (on reverse) are applicable to this permit.
- Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

DEC - 8 2006

EFFECTIVE DATE

  
DIRECTOR OR DESIGNEE  
DEPARTMENT OF NATURAL RESOURCES

## STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

**You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review.** In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the department's Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located with 15 days after the actual start up of this (these) air contaminant source(s).

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

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## SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

*The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."*

CTS Manufacturing Corporation – Mexico Loadout/Bagging Facility  
Audrain County, S13, T51N, R9W

1. Emission Limitation
  - A. CTS Manufacturing Corporation – Mexico Loadout/Bagging Facility shall emit less than 15 tons of particulate matter less than ten (10) microns in diameter (PM<sub>10</sub>) in any consecutive 12 month period from the entire installation.
  - B. CTS Manufacturing Corporation – Mexico Loadout/Bagging Facility shall maintain an accurate record of PM<sub>10</sub> emitted into the atmosphere from the entire installation. Attachment A or an equivalent form, approved by the Air Pollution Control Program, shall be used for this purpose. CTS Manufacturing Corporation – Mexico Loadout/Bagging Facility shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.
  - C. CTS Manufacturing Corporation – Mexico Loadout/Bagging Facility shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 1(B) indicate that the source exceeds the limitation of Special Condition Number 1(A).
2. CTS Manufacturing Corporation – Mexico Loadout/Bagging Facility shall control emissions from the emission points listed in Table 1 using dust collection filters as specified in the permit application. The dust collection filters shall be operated and maintained in accordance with the manufacturer's specifications. The dust collection filter shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that the DNR employees may easily observe them. Replacement filters for the dust collection filters shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
3. CTS Manufacturing Corporation – Mexico Loadout/Bagging Facility shall monitor and

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**SPECIAL CONDITIONS:**

The permittee is authorized to construct and operate subject to the following special conditions:

record the operating pressure drop across the dust collection filters at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.

4. CTS Manufacturing Corporation – Mexico Loadout/Bagging Facility shall maintain an operating and maintenance log for the dust collection filters which shall include the following:
  - A. Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
  - B. Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

Table 1. Dust Collectors

Emission Point	Control Device No.	Control Device Description
EP-02	CD-1	Cement Silo Bin Vents
EP-03	CD-2	Truck Loadout Filter Module
EP-04	CD-3	Cement Batch Bin Vents
EP-05	CD-4	Receiver Bin Vent
EP-06	CD-5	Mixer Equipment Dust Collector
EP-07	CD-6	Fine Sand Batch Bin Vent
EP-15	CD-7	Aggregate Bin Vents
EP-16	CD-8	Aggregate Line Dust Collector

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT  
SECTION (5) REVIEW

Project Number: 2006-10-082  
Installation ID Number: 007-0065  
Permit Number:

CTS Manufacturing Corporation  
Mexico Loadout/Bagging Facility  
23876 Highway J  
Mexico, MO 65265

Complete: 10/18/2006  
Reviewed: 11/01/2006

Parent Company:  
CTS Manufacturing Corporation  
11065 Knott Avenue, Suite A  
Cypress, CA 90630

Audrain County, S13, T51N, R9W

REVIEW SUMMARY

- CTS Manufacturing Corporation - Mexico Loadout/Bagging Facility has applied for authority to construct a new cement truck loadout and bagging operation.
- Hazardous Air Pollutant (HAP) emissions are not expected from the proposed equipment.
- None of the New Source Performance Standards (NSPS) apply to the proposed equipment.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) or currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.
- Dust collection filters are being used to control the PM<sub>10</sub> emissions from the equipment in this permit.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM<sub>10</sub> are conditioned below de minimis levels.
- This installation is located in Audrain County, an attainment area for all criteria air pollutants.
- This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].
- Ambient air quality modeling was not performed since potential emissions of the

application are below de minimis levels.

- Emissions testing is not required for the equipment.
- No Operating Permit is required for this installation.
- Approval of this permit is recommended with special conditions.

## INSTALLATION/PROJECT DESCRIPTION

CTS Cement Manufacturing Corporation - Mexico Loadout/Bagging Facility has applied for authority to construct a new cement truck loadout and bagging facility in Mexico, Missouri. The installation will be situated in Audrain County.

Cement will be delivered by railcar and will be unloaded using either a pneumatic system or a bottom dump hopper into cement silos. Some of the cement delivered to the installation will be loaded to bulk trucks and hauled off-site. The rest of the cement will be mixed with aggregate (stone and sand) and bagged. The bagged product will be loaded on to trucks and delivered to customers off-site.

Sand and stone will be delivered in dump trucks and unloaded to 200-ton storage piles. The aggregates will then be loaded to hoppers using a front-end loader and transferred to aggregate bins. A belt conveyor and skip hoist will be used to transport the aggregate to the mixer.

Table 2 below summarizes the emission point information at CTS Cement Manufacturing Corporation - Mexico Loadout/Bagging Facility.

Table 2. Installation Emission Points and associated control devices

Emission Point No.	Point Description	Control Device No.	SCC	MHDR
EP-02	Cement Silo Bin Vents	CD-1	3-05-011-07	30
EP-03	Truck Loadout	CD-2	3-05-011-07	100
EP-04	Cement Batch Bin Vent	CD-3	3-05-011-07	15
EP-05	Receiver Bin Vent	CD-4	3-05-011-08	15
EP-06	Mixer Equipment Dust Collector	CD-5	3-05-011-09	30
EP-07	Fine Sand Batch Bin Vent	CD-6	3-05-011-05	7.2
EP-08	Haul Road	No control devices	3-05-011-99	1.57
EP-09	Coarse Sand Unloading		3-05-011-05	22
EP-10	Coarse Sand Storage Pile – Wind Erosion		3-05-011-99	0.05
EP-11	Coarse Sand Hopper Loading		3-05-011-05	10
EP-12	Stone Unloading		3-04-011-04	22
EP-13	Stone Storage Pile – Wind Erosion		3-05-011-99	0.05
EP-14	Storage Hopper Loading		3-05-011-04	10
EP-15	Aggregate Bin Vents	CD-7	3-05-011-06	15
EP-16	Aggregate Line Dust Collector	CD-8	3-05-011-06	15

No permits have been issued to CTS Manufacturing Corporation – Mexico Loadout/Bagging Facility from the Air Pollution Control Program.

## EMISSIONS/CONTROLS EVALUATION

Emission factors and control efficiencies used in this analysis were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 11.12, *Concrete Batching* (06/2006) and Section 13.2.2, *Unpaved Roads* (12/2003), EPA *Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures* (09/1992). Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year).

Since this is a new installation there are no existing actual emissions or existing potential emissions under construction permits. The applicant requested an installation-wide limit on PM<sub>10</sub> emissions to remain a de minimis source. Therefore, a 15 ton per year PM<sub>10</sub> limit for the entire installation was imposed. The following table provides an emissions summary for this project.

Table 3. Emissions Summary (tons per year)

Pollutant	Regulatory De Minimis Levels	Existing Potential Emissions	Existing Actual Emissions	Potential Emissions of the Application	Installation Conditioned Potential
PM <sub>10</sub>	15.0	N/A	N/A	23.45	<15.00
SO <sub>x</sub>	40.0	N/A	N/A	0.00	N/A
NO <sub>x</sub>	40.0	N/A	N/A	0.00	N/A
VOC	40.0	N/A	N/A	0.00	N/A
CO	100.0	N/A	N/A	0.00	N/A
HAPs	10.0/25.0	N/A	N/A	0.00	N/A

\*N/A = Not Applicable

### PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM<sub>10</sub> are conditioned below de minimis levels.

### APPLICABLE REQUIREMENTS

CTS Manufacturing Corporation – Mexico Loadout/Bagging Facility shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements.

Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved.

## GENERAL REQUIREMENTS

Submission of Emission Data, Emission Fees and Process Information, 10 CSR 10-6.110

The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required April 1 for the previous year's emissions.

- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-3.090

## SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400



## STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

\_\_\_\_\_  
Maurice Chemweno  
Environmental Engineer

\_\_\_\_\_  
Date

### PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated October 17, 2006, received October 18, 2006, designating CTS Manufacturing Corporation as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- U.S. EPA Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures (09/1992)
- Northeast Regional Office Site Survey, dated October 30, 2006.

## Attachment A – PM<sub>10</sub> Compliance Worksheet

CTS Manufacturing Corporation – Mexico Loadout/Bagging Facility  
 Audrain County, S13, T51N, R9W  
 Project Number: 2006-10-082  
 Installation ID Number: 007-0065  
 Permit Number:

This sheet covers the period of \_\_\_\_\_ to \_\_\_\_\_  
(Month, year)
Month, year)

Copy as needed.

	<i>Column A</i>	<i>Column B</i>	<i>Column C*</i>
	Monthly Cement Receipts (tons)	Composite Emission Factor (lb/ton)	Monthly PM <sub>10</sub> Emissions (Tons)
1		0.2004	
2		0.2004	
3		0.2004	
4		0.2004	
5		0.2004	
6		0.2004	
7		0.2004	
8		0.2004	
9		0.2004	
10		0.2004	
11		0.2004	
12		0.2004	
Total PM <sub>10</sub> Emissions Calculated for this Period (12 Months)			

\*Column C = Column A X Column B X 0.0005

**A 12-Month Total PM<sub>10</sub> emissions total of less than 15 tons for Column C indicates compliance.**

Mr. James Dalton  
Plant Manager  
CTS Manufacturing Corporation  
Mexico Loadout/Bagging Facility  
23876 Highway J  
Mexico, MO 65265

RE: New Source Review Permit - Project Number: 2006-10-082

Dear Mr. Dalton:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files.

Operation in accordance with these conditions and your new source review permit application is necessary for continued compliance.

The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact me at (573) 751-4817, or you may write to me at the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, Missouri 65102. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale  
New Source Review Unit Chief

KBH:mcl

Enclosures

c: Northeast Regional Office  
PAMS File: 2006-10-082  
Permit Number: