

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No.	MO-0000591
Owner:	Mid America Brick & Structural Clay Products, LLC
Address:	600 Green Boulevard, Mexico, MO 65265
Continuing Authority:	Same as above
Address:	Same as above
Facility Name:	Mid America Brick & Structural Clay Products
Facility Address:	One Green Boulevard, Mexico, MO 65265
Legal Description:	SEE PAGE TWO
Latitude/Longitude:	SEE PAGE TWO
Receiving Stream:	SEE PAGE TWO
First Classified Stream and ID:	SEE PAGE TWO
USGS Basin & Sub-watershed No.:	SEE PAGE TWO

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

SEE PAGE TWO

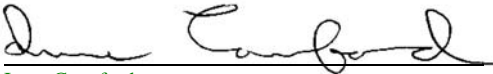
This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

April 24, 2009
Effective Date

July 30, 2010
Modification Date


Mark Templeton, Director
Department of Natural Resources

April 23, 2014
Expiration Date


Irene Crawford
Regional Director, Northeast Regional Office

FACILITY DESCRIPTION (continued)

Outfall #001 – Clay Refractory – SIC #3251

Settling basin / stormwater runoff

Actual flow is dependent upon rainfall.

Legal Description: NW ¼, NE ¼, Sec. 36, T51N, R9W, Audrain County
Latitude/Longitude: X=597958.418, Y=4335304.632

Receiving Stream: Unnamed tributary to South Fork Salt River (U)
First Classified Stream and ID: South Fork Salt River (C) (00142) 303(d) List
USGS Basin & Sub-watershed No.: (07110006-040003)

Outfall #002 – Clay Mining – SIC #1459

Storm water and Process Wastewater discharges from clay mining and stockpiles.

Settling basin / stormwater runoff

Actual flow is dependent upon rainfall.

Legal Description: NW ¼, NW ¼, NW ¼, Sec. 36, T51N, R9W, Audrain County
Latitude/Longitude: X=598698.212, Y=4335379.003

Receiving Stream: Unnamed tributary to South Fork Salt River (U)
First Classified Stream and ID: South Fork Salt River (C) (00142) 303(d) List
USGS Basin & Sub-watershed No.: (07110006-040003)

Outfalls #003 - #006, #008 - #029 – Eliminated

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 3 of 7	
PERMIT NUMBER MO-0000591						
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001 (Note 1)						
Flow	MGD	*		*	once/quarter****	24 hr. estimate
Rainfall	Inches	*		*	daily	measured
Settleable Solids	mL/L/hr	1.5		1.0	once/quarter****	grab
Total Suspended Solids	mg/L	*		*	once/quarter****	grab
Oil & Grease	mg/L	15		10	once/quarter****	grab
pH – Units	SU	***		***	once/quarter****	grab
Outfall #002						
Storm Water Runoff (Note 1)						
Flow	MGD	*		*	once/quarter****	24 hr. estimate
Settleable Solids**	ml/L/hr	1.5		1.0	once/quarter****	grab
pH – Units	SU	***		***	once/quarter****	grab
Oil and Grease	mg/L	15		10	once/quarter****	grab
Process Wastewater Discharges (Note 2)						
Flow	MGD	*		*	once/quarter****	24 hr. estimate
Total Suspended Solids**	mg/L	120		80	once/quarter****	grab
Settleable Solids**	ml/L/hr	1.5		1.0	once/quarter****	grab
pH – Units	SU	***		***	once/quarter****	grab
Oil and Grease	mg/L	15		10	once/quarter****	grab
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE OCTOBER 28, 2010. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED PART I STANDARD CONDITIONS DATED October 1, 1980, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** An emergency exceedence of effluent limitations for Total Suspended Solids and Settleable Solids is authorized due to precipitation exceeding the 1-in-10-year, 365-day rainfall or the 25-year, 24-hour storm event. The burden of proof lies with the permit holder to document that the precipitation event occurred. This exemption from effluent limits does not apply to process wastewater discharges such as dewatering of pits.
- *** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5-9.0 pH units.
- **** See table below for quarterly sampling

Sample discharge at least once for the months of:	Report is due:
January, February, March (1st Quarter)	April 28
April, May, June (2nd Quarter)	July 28
July, August, September (3rd Quarter)	October 28
October, November, December (4th Quarter)	January 28

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

Note 1 - A representative grab sample shall be collected within the first 60 minutes of discharge that occurs as a result of precipitation events of 0.1 inches or greater. Precipitation events include rainfall as well as run-off from the melting of frozen precipitation.

Note 2 – Process Wastewater Discharge is defined in Special Condition #16.

C. SPECIAL CONDITIONS

1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

2. This permit does not authorize the discharge of waters other than storm water.
3. All outfalls must be clearly marked in the field.
4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
 - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
 - (c) That the effluent limit established in part A of the permit will be exceeded.
4. Report as no-discharge when a discharge does not occur during the report period.
 5. Water Quality Standards
 - (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
 - (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;

C. SPECIAL CONDITIONS (continued)

- (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
6. The permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must be prepared within 60 days and implemented within 90 days of the permit issuance. A copy of the SWPPP must be available on site at all times. The SWPPP must be made available to a department representative upon request. The SWPPP should not be submitted to the department unless it is requested. The SWPPP must incorporate Best Management Practices specific to site conditions and provide for maintenance and adherence to the plan.

Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators, (Document number EPA 833-B-09-002) published by the United States Environmental Protection Agency (USEPA) in February 2009.

The SWPPP must include the following:

- (a) An assessment of all storm water discharges associated with the facility including but not limited to disturbed areas related to mining activities, clay stockpiles, overburden, vehicle maintenance, mechanical repairs, painting, fueling, lubrication, and equipment cleaning. This must include a list of potential contaminants and an annual estimate of amounts that will be used in the described activities.
 - (b) A listing of Best Management Practices (BMPs) and a narrative explaining how BMPs will be implemented to control and minimize the amount of sediment or other potential contaminants that may enter storm water. Minimum BMPs are listed in SPECIAL CONDITIONS #8 below.
 - (c) A schedule for implementing the BMPs.
 - (d) An assessment of all chemical handling and storage procedures are required to be addressed under the conditions of this section.
 - (e) Provisions for preventing the spillage or loss of fluids, oil, grease, fuel, etc. from activities that occur at the facility / vehicle maintenance, equipment cleaning, or warehousing activities and prevent the contamination of storm water from these substances.
 - (f) All involved personnel shall be trained in material handling and storage, and housekeeping of maintenance areas. Upon request, proof of training shall be submitted to the Department.
 - (g) The SWPPP must include a schedule for a twice per month site inspections and a brief written report. The reports must note any spills, leaks, or maintenance needs of any of the structures or practices. The reports must also describe action taken to correct or repair deficiencies. The inspections must include observations of the facility in general, including material stockpile locations and outfall locations for sedimentation or erosion damage, and observation and evaluation of BMP effectiveness. Deficiencies must be corrected within seven days and the actions taken to correct the deficiencies shall be included with the written report, including photographs. Any corrective measure that necessitates major construction may also need a construction permit. Inspection reports must be kept on site with the SWPPP and maintained for a period of five years. These must be made available to DNR personnel upon request.
 - (h) A provision for designating an individual to be responsible for environmental matters who will serve as a contact for the department. Permittee shall notify the department in writing of a personnel change for this position.
7. The purpose of the SWPPP and the BMPs listed therein is the prevention of pollution of waters of the state. A deficiency of a BMP means it was not effective in preventing pollution [10 CSR20-2.010(56)] of waters of the state, and corrective action means the facility took steps to eliminate the deficiency.
8. Amending/Updating the SWPPP: The permittee shall amend and update the SWPPP as appropriate. The permittee shall amend the SWPPP, at a minimum, whenever the:
- a. Design, operation, or maintenance of BMPs is changed;
 - b. Permittee's inspections indicate deficiencies in the SWPPP or any BMP;
 - c. MDNR notifies the permittee in writing of deficiencies in the SWPPP;
 - d. SWPPP is determined to be ineffective in significantly minimizing or controlling pollutants (e.g., there is visual evidence, such as sediment deposits offsite or into waters of the state, or effluent limit violations);
 - e. MDNR determines violations of Water Quality Standards may occur or have occurred.

C. SPECIAL CONDITIONS (continued)

9. Permittee shall adhere to the following minimum Best Management Practices:
 - a. Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from activities that occur at the facility, vehicle maintenance, equipment cleaning, fuel storage, or warehouse activities and thereby prevent the contamination of storm water from these substances.
 - b. Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
 - c. Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so that these materials are not exposed to storm water or provide other prescribed BMP's such as plastic lids and/or portable spill pans to prevent the commingling of storm water with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.
 - d. Provide good housekeeping practices on the site to keep trash from entry into waters of the state.
 - e. Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property. This could include the use of straw bales, silt fences, or sediment basins, if needed, to comply with effluent limits.
10. Collection facilities shall be provided on-site, and arrangement made for proper disposal of waste products, including but not limited to petroleum waste products, and solvents.
11. All fueling facilities present on the site shall adhere to applicable federal and state regulations concerning underground storage, above ground storage, and dispensers, including spill prevention, control and counter measures.
12. If fuel storage with secondary containment is provided onsite, the facility shall examine water that has accumulated in secondary containment areas for hydrocarbon odor and presence of a sheen. If the presence of hydrocarbons is indicated the water shall be removed and taken to a permitted Wastewater Treatment Plant.
13. Substances, regulated by federal law under the Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERLA), that are transported, stored, or used for maintenance, cleaning or repair, shall be managed according to RCRA and CERLA.
14. Any pesticide discharge from any point source shall comply with the requirements of Federal Insecticide, Fungicide and Rodenticide Act, as amended (7 U.S.C. 136 et. seq.) and the use of such pesticides shall be in a manner consistent with its label.
15. This permit does not authorize the mining activity, only water discharges that result from the activity. A permit authorizing mining activities must be obtained from the Land Reclamation Program.
16. Process wastewater discharges from the mining activities includes pumping of accumulated storm water or infiltrated groundwater out of mining pits, and washing of equipment and vehicles [10 CSR 20-6.020(1)(B)4.]. These discharges shall be subjected to treatment processes as necessary to comply with the effluent limits in Table A. Such discharges are a process wastewater discharge even if it occurs during a precipitation event. This permit does not authorize the discharge of waters with added detergents or solvents.
17. Clay stockpiles, overburden and other residuals shall not be located within the 10-year flood plain or within 300 ft. of a losing stream as defined in the Water Quality Standards 10 CSR 20-7.031 or determined by the or where they may drain into an existing sinkhole or any other topographical feature that would be a direct conduit to groundwater. In the event that a sinkhole develops or a losing stream or sinkhole is discovered during mining operations, the permit holder shall have 30 days to comply with setbacks prescribed in this permit or begin reclamation of the facility.
18. All outfalls shall be clearly marked in the field and clearly identified on a map kept on file at the mine/plant office.
19. Permittee shall maintain records of all discharges of process wastewater. These records must include an estimate of the volume and the date and time(s) of each discharge.

REPORTING OF EFFLUENT VIOLATIONS

If any of the sampling results from any of the outfalls show any violation of the permit discharge limitations, written notification shall be made to the Department of Natural Resources within five (5) days of notification of analytical results. Notification shall indicate the date(s) of sample collection, the analytical results, and permit number, and shall include a statement concerning the revisions or modifications in management practices that are being implemented to address the violation of the limitations that occurred.

After a violation has been reported, a sample of storm water runoff resulting from the next rainfall greater than 0.1 inches shall be collected at outfall(s) for which the violation occurred. Analytical results of this sample shall be submitted in writing to the Department of Natural Resources (this section supersedes Standard Conditions Part I, Section B: Noncompliance Notification).

RECORDS, RETENTION AND RECORDING

Monitoring reports shall be submitted within 28 days after the end of each quarter. All sampling data shall be maintained by the permittee for a period of five (5) years and shall be supplied to the Department of Natural Resources upon request (supersedes Standard Conditions Part I, Section A, #7 - Records Retention). A summary of all of the sampling data must be submitted with an application for reissuance of this permit.

PERMIT TRANSFER

This permit may be transferred to a new owner by submitting an "Application for Transfer of Operating Permit" signed by the seller and buyer of the facility, along with the appropriate modification fee.

PERMIT RENEWAL REQUIREMENTS

Unless this permit is terminated, the permittee shall submit an application for the renewal of this permit no later than six (6) months prior to the permit's expiration date. Failure to apply for renewal may result in termination of this permit and enforcement action to compel compliance with this condition and the Missouri Clean Water Law.

TERMINATION

In order to terminate this permit, the permittee shall notify the department by submitting Form J, included with the State Operating Permit. The permittee shall complete Form J and mail it to the department at the address noted in the cover letter of this permit. Proper closure of any storage structure is required prior to permit termination. A closure plan shall be submitted to the department and approved prior to initiating closure activities.

DUTY OF COMPLIANCE

The permittee shall comply with all conditions of this permit. Any noncompliance with this permit constitutes a violation of Chapter 644, Missouri Clean Water Law, and 10 CSR 20-6. Noncompliance may result in enforcement action, termination of this authorization, or denial of the permittee's request for renewal. This permit authorizes only the activities described in this permit.

Missouri Department of Natural Resources
Statement of Basis
Mid America Brick & Structural Clay Products
NPDES #: MO-0000591

This Statement of Basis (Statement) gives pertinent information regarding minor/simple modification(s) to the above listed operating permit without the need for a public comment process.

A Statement is not an enforceable part of a Missouri State Operating Permit.

FACILITY DESCRIPTION

Outfall #001 – Clay Refractory – SIC #3251

Settling basin / stormwater runoff

Actual flow is dependent upon rainfall.

Outfall #002 – Clay Mining – SIC #1459

Storm water and Process Wastewater discharges from clay mining and stockpiles.

Settling basin / stormwater runoff

Actual flow is dependent upon rainfall.

Receiving Stream:	Unnamed tributary to South Fork Salt River (U)
First Classified Stream and ID:	South Fork Salt River (C) (00142) 303(d) List
USGS Basin & Sub-watershed No.:	(07110006-040003)

Outfalls #003 - #006, #008 - #029 – Eliminated

Comments: The previous firebrick clay refractory operation at this site went out of business in 2002 and the site has been inactive since. A portion of the original permitted property was purchased by Mid America Brick & Structural Clay Products, LLC in 2010 to make residential brick. The processes for making residential brick do not require the use of cooling water; therefore temperature was removed from Table A. The facility is planning on mining clay on property just east of the main plant; therefore Outfall #002 was established for the new activity. Effluent limits for the new outfall were obtained from the Missouri State Operating Permit for clay mining, #MO-840000.

MODIFICATION RATIONALE

This operating permit is hereby modified to add an additional outfall for clay mining activities, remove outfalls that are no longer needed due to the change in the change in activities of the new facility at the plant, to update the outfall locational data to UTM coordinates, and to add additional special conditions that apply to this facility. The enclosed permit is for your official record.

ADMINISTRATIVE REQUIREMENTS

On the basis of preliminary staff review and the application of applicable standards and regulations, the Department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the operating permit. The proposed determinations are tentative pending public comment.

Date of Statement of Basis: July 23, 2010

Brant Farris, Environmental Specialist
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Brant Farris Date

Lantz Tipton Date