

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, 92<sup>nd</sup> Congress) as amended,

Permit No. MO-0134091

Owner: Mike Trager  
Address: 6468 State Hwy Y, Chillicothe, MO 64601

Continuing Authority: Same as above  
Address: Same as above

Facility Name: Trager Limestone L.L.C.  
Facility Address: 21008 Unity Avenue, Gallatin, MO 64640

Legal Description: See Page 2  
UTM Coordinates: See Page 2

Receiving Stream: See Page 2  
First Classified Stream and ID: See Page 2  
USGS Basin & Sub-watershed No.: See Page 2

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 2

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.

June 1, 2013  
Effective Date

  
Sara Parker Pauley, Director, Department of Natural Resources

March 31, 2017  
Expiration Date

  
John Madros, Director, Water Protection Program

Outfall #001 - Eliminated

Outfall #002 - Eliminated

Outfall #003 - Eliminated

Outfall #S1 – Instream monitoring, upstream of outfall #001; SIC #1422  
Legal Description: NW ¼, NW ¼, Sec. 13, T58N, R28W, Daviess County  
UTM Coordinates: X=414172, Y=4410878

Receiving Stream: Dog Creek (C)  
First Classified Stream and ID: Dog Creek (C) (0510) 303(d) List  
USGS Basin & Sub-watershed No.: (10280101-1001)

Outfall #S2 – Instream Monitoring, downstream from outfall #001; SIC #1422  
See D. RECEIVING WATER MONITORING CONDITIONS  
Legal Description: SE ¼, NW ¼, Sec. 13, T58N, R28W, Daviess County  
UTM Coordinates: X=414514, Y=4410471

Receiving Stream: Dog Creek (C)  
First Classified Stream and ID: Dog Creek (C) (0510) 303(d) List  
USGS Basin & Sub-watershed No.: (10280101-1001)

Outfall #004

Sedimentation Basin/Storm water runoff from limestone quarry – SIC 1422  
Actual flow is precipitation dependent.

Legal Description: NW ¼, NW ¼, Sec. 13, T58N, R28W, Daviess County  
UTM Coordinates: X=414358, Y=4410645

Receiving Stream: Dog Creek (C)  
First Classified Stream and ID: Dog Creek (C) (0510) 303(d) List  
USGS Basin & Sub-watershed No.: (10280101-1001)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 3 of 6	
					PERMIT NUMBER MO-0134091	
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
<u>Outfall #004</u>						
Flow	GPD	*		*	once/month	24 hr. estimate
Precipitation	in	*		*	once/day	total
Total Suspended Solids	mg/L	70		70	once/month	grab
Settleable Solids	mg/L	1.5		1.0	once/month	grab
pH – Units	SU	**		**	once/month	grab
Oil & Grease	mg/L	15		10	once/month	grab
Total Petroleum Hydrocarbons	mg/L	10		10	once/month	grab
<u>Outfall S1 &amp; S2</u>						
Visual Survey (see D. Receiving Stream Monitoring Conditions)		*		*	once/month	report
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>October 28, 2013</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
<b>B. STANDARD CONDITIONS</b>						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I</u> STANDARD CONDITIONS DATED <u>October 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- \* Monitoring requirement only.
- \*\* 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.

C. SPECIAL CONDITIONS

1. This permit does not authorize mining activity, only water discharges that result from mining activity. A permit authorizing mining activities must be obtained from the Land Reclamation Program.
2. This permit does not authorize discharges of waste material, such as concrete and water from washing of concrete delivery trucks, into waters of the state. This permit does not authorize discharges to waters of the state from any location other than the outfalls described on page one of this permit.
3. This permit does not authorize the discharge of waters with added detergents, acids, caustics, solvents, or other additives.
4. Stormwater samples shall be collected within the first 60 minutes of storm events of 0.1 inches or greater, that result in a discharge.
5. If a discharge does not occur during the reporting period, the permittee shall submit a report of no discharge to the Department.

C. SPECIAL CONDITIONS (continued)

6. This permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP). The purpose of the SWPPP is to prevent pollution to waters of the state and comply with the effluent limitations and other permit conditions. The SWPPP must be prepared within 30 days, and implemented by the permittee within 60 days, of the permit issuance. Provisions of the SWPPP developed by the permittee become permit requirements and must be complied with at all times. The SWPPP must be kept on-site and should not be sent to DNR unless specifically requested. The permittee shall select, install, use, operate, and maintain the Best Management Practices prescribed in the SWPPP in accordance with the concepts and methods described in the following document:

Stormwater Management For Industrial Activities, Developing Pollution Prevention Plans and Best Management Activities, (Document number EPA 832-R-92-006) published by the United States Environmental Protection Agency (USEPA) in September 1992.

The SWPPP must include the following:

- (a) An assessment of all stormwater discharges.
  - (b) All aspects of quarry operations, including stockpiles, dewatering activities, vehicle washing/rinsing, and chemical and fuel storage procedures are required to be addressed under the conditions of this section.
  - (c) A listing of Best Management Practices (BMPs) and a narrative explaining how BMPs will be implemented to control and minimize the amount of potential contaminants that may enter stormwater, especially waste fines.
  - (d) A schedule for implementing the BMPs, if necessary.
  - (e) The SWPPP must include a schedule for inspection by facility staff, at least once per month, of all stormwater pollution prevention structures, stormwater and wastewater treatment structures, and of the facility in general to ensure that structures are properly maintained and effective, and that any Best Management Practices are continually implemented and effective. The inspections must include observation and evaluation of BMP effectiveness, deficiencies, and corrective measures that will be taken. Deficiencies must be corrected within seven days and the Department must be notified by letter. Inspection shall be documented in written reports or checklists, and must be kept on site with the SWPPP. These must be made available to DNR personnel upon request.
  - (f) A provision for designating an individual to be responsible for environmental matters. The permittee shall notify the Department in writing of a personnel change for this position. One individual may be the contact for multiple facilities so long as that person can effectively communicate with the Department on every facility.
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. Any fueling facilities present on-site shall adhere to applicable federal and state regulations concerning underground storage, above ground storage, and dispensers, including spill prevention, control and counter measures.
9. Substances regulated by federal law under the Resource Conservation and Recovery Act (RCRA) or the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) that are transported, stored, or used for maintenance, cleaning or repair shall be managed according to the provisions of RCRA and CERCLA.
10. Permittee shall provide sediment and erosion control sufficient to prevent pollution to waters of the state and comply with the effluent limitations and other permit conditions. This may require the construction of properly designed sediment basins or other treatment structures. The permittee shall not allow mined material, waste material, or overburden to enter waters of the state.
11. If vehicle or equipment washing/rinsing is conducted at the facility or other similar process wastewater is generated, permittee shall treat the resulting wastewater prior to discharge to waters of the state in order to meet the effluent limitations and other permit conditions.
12. If dumping or disposal of waste concrete is conducted at the facility, permittee shall prevent the material from entering waters of the state. Any resulting wastewater or leachate from these activities must be treated prior to discharge. Discharging these materials into waters of the state during off site activities is also prohibited.
13. Permittee shall prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment maintenance, or warehousing activities and thereby prevent the contamination of stormwater from these substances.

C. SPECIAL CONDITIONS (continued)

14. Permittee shall store all paint, solvents, petroleum products, petroleum waste products, and storage containers (such as drums, cans, or cartons) so that these materials are not exposed to stormwater, or provide other prescribed BMPs such as plastic lids, portable spill pans or containment to prevent the commingling of stormwater with container contents. Commingled water may not be discharged under this permit. Permittee shall 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.
15. Permittee shall maintain records of all pumped discharges that enter surface waters of the state, such as dewatering activities. These records must include an estimate of the volume, the date and time(s), and the location of each discharge.
16. All outfalls must be clearly marked in the field.
17. Monitoring of additional locations or further improvements may be required if Department staff determine that the improvements at this facility are not adequate to protect water quality.
18. 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 Federal 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 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 current 303(d) List.

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

19. 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.
  - (a) 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;
    - (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.

D. RECEIVING WATER MONITORING CONDITIONS

1. Instream monitoring shall consist of a visual survey of the receiving stream at outfalls S1 and S2 as noted on page 2 of this permit. In the event that a safe, accessible location is not present at this location, a suitable location can be negotiated with the Department.
2. Each visual survey shall include examination of the nearest downstream pool\* and the nearest downstream riffle\*\* (see definitions of pool and riffle below) from the locations indicated in condition #1., above. This means there will be a total of four areas examined. The permittee shall choose a 10-foot-long by 10-foot-wide square section of the wetted stream area of both the pool and riffle. In the event that the wetted stream width is less than 10 feet wide, the area examined shall be 10 feet long and encompass the entire stream width.
3. For each pool and riffle at each site, report the estimated percent (0-100%) of the stream bottom covered by light colored limestone fine material washed from the permitted facility.
4. On your data sheets, report this under, "Visual survey of bottom sediments," and report your finding as a percent. This report shall be submitted with your monthly discharge monitoring reports.
5. When conducting in-stream monitoring, the permittee shall record the date, weather conditions and submit them with the visual survey.
6. The exact same site location for each pool and each riffle shall be examined during each survey. A durable marker shall be placed at the survey locations that will survive weather and high water events. Should hydrologic changes, such as natural stream meandering, require a change in monitoring location, please contact the Department.
7. Should the permittee require additional instructions or training, please contact the Department.

\*Pool: That portion of a stream that is relatively deep and slow moving.

\*\*Riffle: The portion of the stream characterized by a steep descent in the streambed and where the water breaks over rocks and/or boulders.

**Missouri Department of Natural Resources**  
**FACT SHEET**  
**FOR THE PURPOSE OF MODIFICATION**  
**OF**  
**MO-0134091**  
**TRAGER LIMESTONE LLC**

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollution Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of stormwater from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (MSOPs) are issued by the Director of the Missouri Department of Natural Resources (Department) under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended). MSOPs are issued for a period of five (5) years unless otherwise specified.

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)2.] a Factsheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the Missouri State Operating Permit (operating permit) listed below.

A Factsheet is not an enforceable part of an operating permit.

This Factsheet is for a Major , Minor , Industrial Facility ; Variance ;  
 Master General Permit ; General Permit Covered Facility ; and/or permit with widespread public interest .

**Part I – Facility Information**

Facility Type: Limestone Quarry  
 Facility SIC Code(s): 1422

**Facility Description:**

Trager Quarry is a limestone quarry, in the past, the facility has contributed to impairments on Dog Creek. Dog Creek was listed on the 2002 303(d) list for suspended solids. A permit in lieu of a TMDL was issued in 2007. The facility was required to relocate stockpiles of mined materials, submit a plan on the removal of mined material from stream banks and remove that material, develop a Stormwater Pollution Prevention Plan (SWPPP) and have in-stream monitoring which was submitted and approved in 2010 . Permitted flow is routed to a sediment basin located at the outfall where sedimentation occurs. When the sediment basin fills with stormwater, excess is routed to an existing inactive pit (a.k.a. Bethany Falls Pit) where it is stored until infiltrated. The combination of the sediment basin and the inactive pit provides enough storage for the entire 2 year return period 24 hour rainfall event so all storms smaller than the 2 year storm are infiltrated. During storms in excess of this size the outfall contributes flow to Dog Creek through a stable overflow spillway.

Two of the three outfalls (Outfall #002/003) in the effective operating permit have been removed while the third (Outfall #001) was relocated and renamed as outfall #004; therefore, the previous three outfalls were combined into one relocated and properly constructed outfall to allow the release of stormwater following a sedimentation basin. Additionally secondary containment for the four tanks containing diesel fuel and a private refueling area for quarry equipment has been installed along with the development of a spill containment and countermeasure plan.

**Locational Data for the Trager Limestone Gallatin Quarry**

Reference Point	Easting	Northing	Comment
Outfall# 001	414239	4410731	Eliminated with modification made at facility as required by the approved SWPPP
Outfall #002	414375	4410598	
Outfall #003	414481	4410521	
Outfall #004	414358	4410645	Active outfall
Bethany Falls Pit	414454	4410732	Stormwater collected in the sedimentation basin will be diverted away from Dog Creek towards the Bethany Falls Pit

KCRO water pollution staff completed site visits on March 3, and 23, 2011 to document construction progress at the facility. The SWPPP also include the following activities which have either being completed or have been started but not completed;

- Material will need to be removed from the stream banks (partially completed as of March 23, 2011),
- stockpiles of waste fines and gravel relocated (completed as of March 23, 2011),
- stormwater flow redirected (partially completed as of March 23, 2011), and
- Best Management Practices (BMPs) installed (partially completed as of March 23, 2011).

**OUTFALL(S) TABLE:**

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
004	Varies	BMPs	Industrial Stormwater	0.05

Outfall #004 - Sedimentation Basin/Stormwater from limestone quarry – SIC 1422  
 Actual flow is precipitation dependent.  
 Legal Description: NW ¼, NW ¼, Sec. 13, T58N, R28W, Daviess County  
 UTM: 414358/4410645  
 Receiving Stream: Dog Creek (C)  
 First Classified Stream and ID: Dog Creek (C) (0510) 303(d) List  
 USGS Basin & Sub-watershed No.: (10280101-1001)

Outfall #S1 – Instream monitoring, upstream of outfall #001; SIC #1422  
 Legal Description: NW ¼, NW ¼, Sec. 13, T58N, R28W, Daviess County  
 UTM: 414172/4410878  
 Receiving Stream: Dog Creek (C)  
 First Classified Stream and ID: Dog Creek (C) (0510) 303(d) List  
 USGS Basin & Sub-watershed No.: (10280101-1001)

Outfall #S2 – Instream monitoring, downstream from outfall #001; SIC #1422  
 See D. RECEIVING WATER MONITORING CONDITIONS  
 Legal Description: SE ¼, NW ¼, Sec. 13, T58N, R28W, Daviess County  
 UTM: 414514/4410471  
 Receiving Stream: Dog Creek (C)  
 First Classified Stream and ID: Dog Creek (C) (0510) 303(d) List  
 USGS Basin & Sub-watershed No.: (10280101-1001)

Receiving Water Body’s Water Quality & Facility Performance History:

Dog Creek is on Missouri’s 1998 303(d) List for sediment and on the 2002 303(d) List for nonvolatile suspended solids. The sole source of this pollution is stormwater runoff from the Trager Limestone quarry.

Comments:

The facility has started the necessary extensive remediation and site work to eliminate impacts to Dog Creek. The operating permit is being modified to reflect remediation and site work made at the Trager Quarry, Gallatin Facility required by the Stormwater Pollution Prevention Plan (SWPPP) dated March 9, 2010 and approval date of June 7, 2010.

**Part II – Operator Certification Requirements**

As per [10 CSR 20-6.010(8) Terms and Conditions of a Permit], permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions and regulations. Operators or supervisors of operations at regulated wastewater treatment facilities shall be certified in accordance with [10 CSR 20-9.020(2)] and any other applicable state law or regulation. As per [10 CSR 20-9.010(2)(A)], requirements for operation by certified personnel shall apply to all wastewater treatment systems, if applicable, as listed below:

Not Applicable ; This facility is not required to have a certified operator.

**Part III – Receiving Stream Information**

**APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:**

As per Missouri’s Effluent Regulations [10 CSR 20-7.015], the waters of the state are divided into the below listed seven (7) categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall’s Effluent Limitation Table and further discussed in the Derivation & Discussion of Limits section.

- Missouri or Mississippi River [10 CSR 20-7.015(2)]:
- Lake or Reservoir [10 CSR 20-7.015(3)]:
- Losing [10 CSR 20-7.015(4)]:
- Metropolitan No-Discharge [10 CSR 20-7.015(5)]:
- Special Stream [10 CSR 20-7.015(6)]:
- Subsurface Water [10 CSR 20-7.015(7)]:
- All Other Waters [10 CSR 20-7.015(8)]:

10 CSR 20-7.031 Missouri Water Quality Standards, the Department defines the Clean Water Commission water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and/or 1<sup>st</sup> classified receiving stream’s beneficial water uses to be maintained are located in the Receiving Stream Table located below in accordance with [10 CSR 20-7.031(3)].

**RECEIVING STREAM(S) TABLE:**

WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	8-DIGIT HUC	EDU**
Dog Creek	C	0510	LWW, AQL, WBC(B)***	10280101	Central Plains\Grand\ Chariton

\* - Irrigation (IRR), Livestock & Wildlife Watering (LWW), Protection of Warm Water Aquatic Life and Human Health-Fish Consumption (AQL), Cool Water Fishery(CLF), Cold Water Fishery (CDF), Whole Body Contact Recreation (WBC), Secondary Contact Recreation (SCR), Drinking Water Supply (DWS), Industrial (IND), Groundwater (GRW).

\*\* - Ecological Drainage Unit

\*\*\* - UAA has not been conducted.

**RECEIVING STREAM(S) LOW-FLOW VALUES TABLE:**

RECEIVING STREAM (U, C, P)	LOW-FLOW VALUES (CFS)		
	1Q10	7Q10	30Q10
Dog Creek (C)	0.0	0.0	0.1

Mixing Zone: Not Allowed [10 CSR 20-7.031(4)(A)4.B.(I)(a)].

Zone of Initial Dilution: Not Allowed [10 CSR 20-7.031(4)(A)4.B.(I)(b)].

**RECEIVING STREAM MONITORING REQUIREMENTS:**

**Site 01.** (Upstream)

PARAMETER(S)	SAMPLING FREQUENCY	SAMPLE TYPE	LOCATION
Presence/absence of solids as a percentage	Once/month	Visual survey	Upstream of outfall #001 at UTM 414172/4410878

**Site 02.** (Downstream)

PARAMETER(S)	SAMPLING FREQUENCY	SAMPLE TYPE	LOCATION
Presence/absence of solids as a percentage	Once/month	Visual survey	The first down stream pool and riffle from Outfall #001 at UTM 414514/4410471. See D. Receiving Water Monitoring Conditions

Comments: Instream monitoring required verifying efficacy of BMPs and treatment devices demonstrating that the receiving stream has returned to compliance with water quality standards.

## **Part IV – Rationale and Derivation of Effluent Limitations & Permit Conditions**

### **ANTI-BACKSLIDING:**

A provision in the Federal Regulations [CWA §303(d)(4); CWA §402(c); 40 CFR Part 122.44(I)] that requires a reissued permit to be as stringent as the previous permit with some exceptions.

- All limits in this operating permit are at least as protective as those previously established; therefore, backsliding does not apply.

### **ANTIDegradation:**

In accordance with Missouri's Water Quality Standard [10 CSR 20-7.031(2)], the Department is to document by means of Antidegradation Review that the use of a water body's available assimilative capacity is justified. Degradation is justified by documenting the socio-economic importance of a discharging activity after determining the necessity of the discharge.

- Upgrades to facility not subject to an Antidegradation review, please see **APPENDIX A – ANTIDegradation APPLICABILITY REVIEW**.

### **AREA-WIDE WASTE TREATMENT MANAGEMENT & CONTINUING AUTHORITY:**

As per [10 CSR 20-6.010(3)(B)], ...An applicant may utilize a lower preference continuing authority by submitting, as part of the application, a statement waiving preferential status from each existing higher preference authority, providing the waiver does not conflict with any area-wide management plan approved under section 208 of the Federal Clean Water Act or any other regional sewage service and treatment plan approved for higher preference authority by the Department.

### **BIOSOLIDS, SLUDGE, & SEWAGE SLUDGE:**

Bio-solids are solid materials resulting from wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). Sludge is any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effect. Sewage sludge is solids, semi-solids, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works. Additional information regarding biosolids and sludge is located at the following web address: <http://dnr.mo.gov/env/wpp/pub/index.html>, items WQ422 through WQ449.

Not applicable;

This condition is not applicable to the permittee for this facility.

### **COMPLIANCE AND ENFORCEMENT:**

Enforcement is the action taken by the Water Protection Program (WPP) to bring an entity into compliance with the Missouri Clean Water Law, its implementing regulations, and/or any terms and conditions of an operating permit. The primary purpose of the enforcement activity in the WPP is to resolve violations and return the entity to compliance.

Applicable .

The permittee/facility is currently under enforcement action at this time for multiple violations of Missouri Clean Water Law.

### **REASONABLE POTENTIAL ANALYSIS (RPA):**

Federal regulation [40 CFR Part 122.44(d)(1)(i)] requires effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause or contribute to an in-stream excursion above narrative or numeric water quality standard.

In accordance with [40 CFR Part 122.44(d)(iii)] if the permit writer determines that any give pollutant has the reasonable potential to cause, or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for that pollutant.

Not Applicable .

A RPA was not conducted for this facility.

**REMOVAL EFFICIENCY:**

Removal efficiency is a method by which the Federal Regulations define Secondary Treatment and Equivalent to Secondary Treatment, which applies to Biochemical Oxygen Demand 5-day (BOD<sub>5</sub>) and Total Suspended Solids (TSS) for Publicly Owned Treatment Works (POTWs)/municipals. Please see the United States Environmental Protection Agency's (EPA) website for interpretation of percent removal requirements for National Pollutant Discharge Elimination System Permit Application Requirements for Publicly Owned Treatment Works and Other Treatment Works Treating Domestic Sewage @ [www.epa.gov/fedrgstr/EPA-WATER/1999/August/Day-04/w18866.htm](http://www.epa.gov/fedrgstr/EPA-WATER/1999/August/Day-04/w18866.htm).

Not Applicable ;

Influent monitoring is not being required to determine percent removal.

**SCHEDULE OF COMPLIANCE (SOC):**

A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, operations, or milestone events) leading to compliance with the Missouri Clean Water Law, its implementing regulations, and/or the terms and conditions of an operating permit.

Not Applicable ;

This permit does not contain a SOC.

**STORMWATER POLLUTION PREVENTION PLAN (SWPPP):**

In accordance with 40 CFR 122.44(k) *Best Management Practices (BMPs)* to control or abate the discharge of pollutants when: (1) Authorized under section 304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities; (2) Authorized under section 402(p) of the CWA for the control of stormwater discharges; (3) Numeric effluent limitations are infeasible; or (4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.

In accordance with the EPA's *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], BMPs are measures or practices used to reduce the amount of pollution entering (regarding this operating permit) waters of the state. BMPs may take the form of a process, activity, or physical structure.

Additionally in accordance with the Stormwater Management, a SWPPP is a series of steps and activities to (1) identify sources of pollution or contamination, and (2) select and carry out actions which prevent or control the pollution of stormwater discharges.

Applicable ;

A SWPPP shall be developed and implemented for each site and shall incorporate required practices identified by the Department with jurisdiction, incorporate erosion control practices specific to site conditions, and provide for maintenance and adherence to the plan.

**VARIANCE:**

As per the Missouri Clean Water Law § 644.061.4, variances shall be granted for such period of time and under such terms and conditions as shall be specified by the commission in its order. The variance may be extended by affirmative action of the commission. In no event shall the variance be granted for a period of time greater than is reasonably necessary for complying with the Missouri Clean Water Law §§644.006 to 644.141 or any standard, rule or regulation promulgated pursuant to Missouri Clean Water Law §§644.006 to 644.141.

Not Applicable ;

This operating permit is not drafted under premises of a petition for variance.

**WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:**

As per [10 CSR 20-2.010(78)], the amount of pollutant each discharger is allowed by the Department to release into a given stream after the Department has determined total amount of pollutant that may be discharged into that stream without endangering its water quality.

Not Applicable ;

Wasteload allocations were not calculated.

**WLA MODELING:**

There are two general types of effluent limitations, technology-based effluent limits (TBELs) and water quality based effluent limits (WQBELs). If TBELs do not provide adequate protection for the receiving waters, then WQBEL must be used.

Not Applicable ;

A WLA study was either not submitted or determined not applicable by Department staff.

**WATER QUALITY STANDARDS:**

Per [10 CSR 20-7.031(3)], General Criteria shall be applicable to all waters of the state at all times including mixing zones. Additionally, [40 CFR 122.44(d)(1)] directs the Department to establish in each NPDES permit to include conditions to achieve water quality established under Section 303 of the Clean Water Act, including State narrative criteria for water quality.

**WHOLE EFFLUENT TOXICITY (WET) TEST:**

A WET test is a quantifiable method of determining if a discharge from a facility may be causing toxicity to aquatic life by itself, in combination with or through synergistic responses when mixed with receiving stream water.

Not Applicable ;

At this time, the permittee is not required to conduct WET test for this facility.

**303(d) LIST & TOTAL MAXIMUM DAILY LOAD (TMDL):**

Section 303(d) of the federal Clean Water Act requires that each state identify waters that are not meeting water quality standards and for which adequate water pollution controls have not been required. Water quality standards protect such beneficial uses of water as whole body contact (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock and wildlife. The 303(d) list helps state and federal agencies keep track of waters that are impaired but not addressed by normal water pollution control programs.

A TMDL is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan will be developed that shall include the TMDL calculation

Applicable ;

Dog Creek is listed on the 1998 Missouri 303(d) List for sediment, and on the 2002 303(d) List for nonvolatile suspended solids.

This facility was considered the sole source of the above-listed pollutant(s). It was decided to address the stormwater runoff impacts to Dog Creek through the operating permit process in lieu of TMDL.

**Part V – Effluent Limits Determination**

**Outfall #004 – Sedimentation Basin Overflow Spillway**

**EFFLUENT LIMITATIONS TABLE:**

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	GPD	1	*		*	NO	**
PRECIPITATION	IN	9	*		*	NO	**
TOTAL SUSPENDED SOLIDS	MG/L	8/9	70		70	NO	**
SETTLABLE SOLIDS	ML/L/HR	8/9	1.5		1.0	NO	**
pH	SU	1/2/3	6.5-9.0		6.5-9.0	NO	**
TOTAL PETROLEUM HYDROCARBONS	MG/L	2/8	10		10	NO	**
OIL & GREASE	MG/L	1/2/3	15		10	NO	**
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

\* - Monitoring requirement only.

\*\* - Parameter not previously established in previous state operating permit

**Basis for Limitations Codes:**

- |  |                                    |
|--|------------------------------------|
| 1. State or Federal Regulation/Law       | 7. Antidegradation Policy          |
| 2. Water Quality Standard (includes RPA) | 8. Water Quality Model             |
| 3. Water Quality Based Effluent Limits   | 9. Best Professional Judgment      |
| 4. Lagoon Policy                         | 10. TMDL or Permit in lieu of TMDL |
| 5. Ammonia Policy                        | 11. WET Test Policy                |
| 6. Dissolved Oxygen Policy               | 12. Antidegradation Review         |

**OUTFALL #004 – DERIVATION AND DISCUSSION OF LIMITS:**

By rerouting all storm water flow through the sedimentation basin, it will allow the elimination of Outfall 002/003 and relocation of Outfall 001; therefore modification of the existing operating permit is required. The proposed modification did not require any revision to the existing effluent limits within the NPDES State Operating Permit except the monitoring of daily rainfall.

Permitted flow is routed to a sediment basin located at the outfall where sedimentation occurs. When the sediment basin fills with storm water, excess is routed to an existing inactive pit (a.k.a. Bethany Falls Pit) where it is stored until infiltrated. The combination of the sediment basin and the inactive pit provides enough storage for the entire 2 year return period 24 hour rainfall event so all storms smaller than the 2 year storm are infiltrated. During storms in excess of this size the outfall contributes flow to Dog Creek through a stable overflow spillway.

## **Part VI – 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.

### **PERMIT SYNCHRONIZATION:**

The Missouri Department of Natural Resources is transitioning from the traditional methods with which Missouri's water resources have been managed to a Watershed Based Management (WBM) approach. The WBM approach will manage watersheds on the eight-digit Hydrological Unit Code (HUC8) scale. As permitting and permit synchronization is a key aspect of successful implementation of a Watershed Management Plan (WMP), the same HUC8 groups that will move through the WBM cycle will have their permit expirations and issuances synchronized in the same fiscal year. The typical five-year term of the permit issuances aligns with the proposed five-year WBM cycle and the two processes will be intimately tied together.

The immediate goals of the permit synchronization include the following:

- The administrative and technical streamlining of Water Protection Program and Regional Office activities such as permitting, inspections, and water quality monitoring.
- Providing the basis for future watershed permitting.
- Beginning to further examine Missouri's water resources on a watershed basis.

This permit will expire on March 31, 2017 in order to meet the permit synchronization goals.

### **PUBLIC NOTICE:**

The Department shall give public notice that a draft permit has been prepared and its issuance is pending. Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest in and water quality concerns related to a draft permit. No public notice is required when a request for a permit modification or termination is denied; however, the requester and permittee must be notified of the denial in writing.

The Department must issue public notice of a pending operating permit or of a new or reissued statewide general permit. The public comment period is the length of time not less than 30 days following the date of the public notice which interested persons may submit written comments about the proposed permit.

For persons wanting to submit comments regarding this proposed operating permit, then please refer to the Public Notice page located at the front of this draft operating permit. The Public Notice page gives direction on how and where to submit appropriate comments.

- The Public Notice period for this operating permit was 03/22/2013 to 04/22/2013. No responses were received.

**DATE OF FACT SHEET:** OCTOBER 2, 2012

### **COMPLETED BY:**

**Thabit. H. Hamoud, P.E., EE III**

Missouri Department of Natural Resources

Water Protection Section

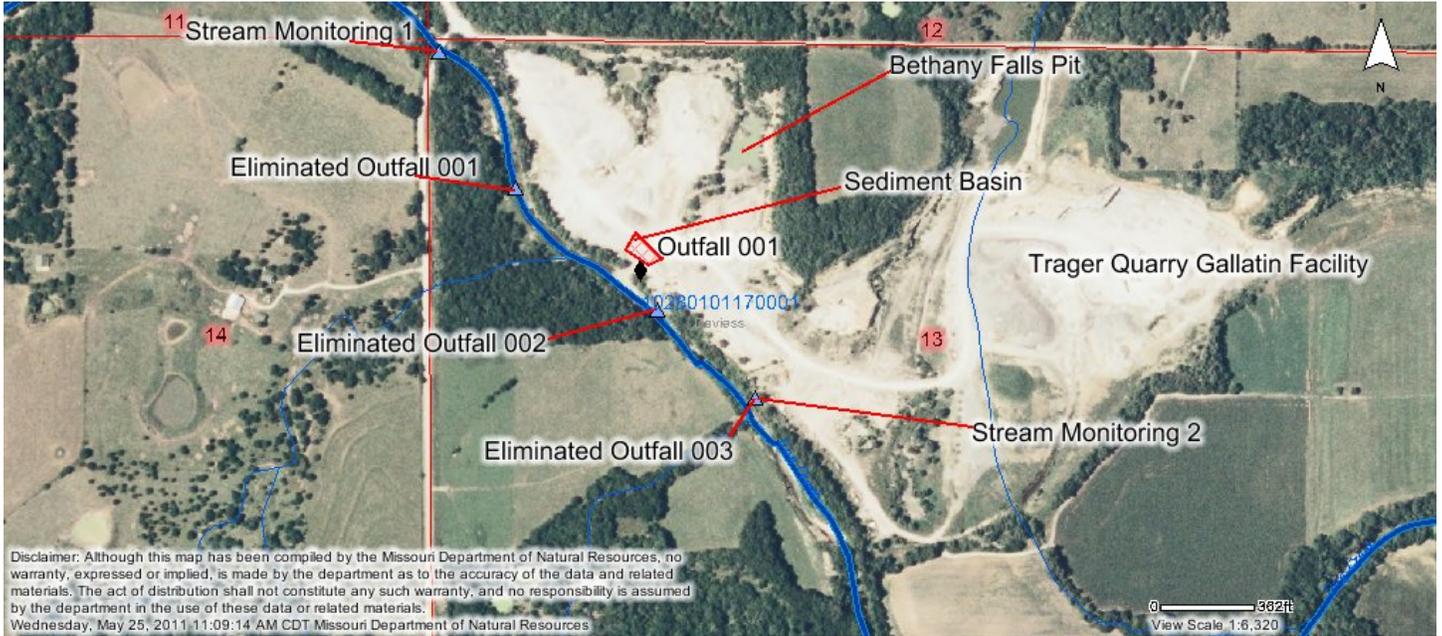
7545 S. Lindbergh, Suite 210, St. Louis, Missouri 63125

(314) 416-2453

[thabit.hamoud@dnr.mo.gov](mailto:thabit.hamoud@dnr.mo.gov)

**Appendices**

**APPENDIX A – FACILITY MAP**



APPENDIX B – ANTIDegradation APPLICABILITY REVIEW



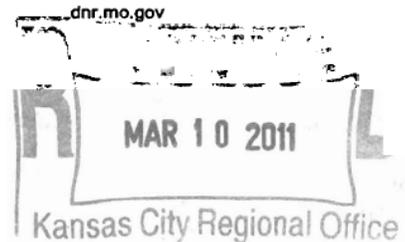
Jeremiah W. (Jay) Nixon, Governor

Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

MAR - 9 2011

Trager Limestone, LLC  
Trager Quarry- Gallatin Facility  
ATTN: Ms. Becky Weldon  
21008 Unity Avenue  
Gallatin, MO 64601



Re: Antidegradation Applicability Review for Trager Quarry-Gallatin Facility; Daviess Co.;  
*MO-0134091*

Dear Ms. Weldon:

In accordance with the *Missouri Antidegradation Rule and Implementation Procedure*, your proposed upgrades are not subject to an Antidegradation Review. The enclosed Antidegradation Applicability Review summarizes this determination based upon your review request received on February 10, 2011. You propose to remove two stormwater outfalls (Outfalls 002 and 003) and to add a sedimentation basin prior to discharge through Outfall 001.

For your convenience, the Water Protection Program has developed a new Internet web page (<http://www.dnr.mo.gov/env/wpp/permits/antideg-implementation.htm>) where you may access information related to implementation of the antidegradation rule. The Internet web site includes links to forms, data sources, publications, as well as links to related Internet web sites.

If you should have questions, please contact Leasue Meyers by telephone at (573) 751-7906, by e-mail at [leasue.meyers@dnr.mo.gov](mailto:leasue.meyers@dnr.mo.gov) or by mail at the Missouri Department of Natural Resources, Water Protection Program, PO Box 176, Jefferson City, Missouri 65102-0176.

Sincerely,

WATER PROTECTION PROGRAM

A handwritten signature in black ink, appearing to read "Refat Mefrakis".

Refat Mefrakis, Chief  
Permits and Engineering Section

RM:lmn

Enclosure

c: Scott Honig, Kansas City Regional Office



**Missouri Department of Natural Resources**  
**Water Protection Program**  
**Water Pollution Control Branch**  
**NPDES Permits and Engineering Section**

### Antidegradation Applicability Review

**FACILITY INFORMATION**

FACILITY NAME:	<u>Trager Quarry, Gallatin Facility</u>	PERMIT #:	<u>MO-0134091</u>
UTM	<u>x= 414375; y= 4410598</u>	LEGAL	<u>NW ¼ , NW ¼ , Sec. 13, T58N,</u>
COORDINATES†:		DESCRIPTION:	<u>R28W</u>
8-DIGIT HUC:	<u>10280101</u>	EDU*:	<u>Central Plains/Grand/Chariton</u>
COUNTY:	<u>Daviess</u>	ECOREGION:	<u>Plains/Grand River Hills</u>

†: Outfall 001 location, maybe different due to the addition of the sedimentation basin \* Ecological Drainage Unit

**OUTFALL CHARACTERISTICS**

OUTFALL	DESIGN FLOW (MGD)	TREATMENT TYPE	EFFLUENT TYPE
001	varies	BMPs, sedimentation basin	Stormwater

**RECEIVING WATERBODY INFORMATION**

WATERBODY NAME: Dog Creek WBID: 510 CLASS: C

**PROJECT INFORMATION**

DESCRIPTION: Trager Quarry is a limestone quarry. In the past, the facility has contributed to impairments on Dog Creek. Dog Creek was listed on the 2002 303(d) list for suspended solids. A permit in lieu of a TMDL was issued in 2007. The facility was required to relocate stockpiles of mined materials, submit a plan on the removal of mined material from the stream banks and remove that material, develop a stormwater prevention pollution plan (SWPPP) and have instream monitoring. The facility currently has three outfalls discharging stormwater runoff from the quarry.

PROPOSAL: The facility is proposing to eliminate Outfalls 002 and 003 from service. Along with the removal of two stormwater outfalls, the facility is planning on adding a sedimentation basin for flows to go through prior to discharge. The flows will discharge through Outfall 001, which may be relocated in the same section of Dog Creek. The relocation may occur to ensure that the outfall is in a stable location after the addition of the sedimentation basin.

DISCUSSION & DETERMINATION: The elimination of two outfalls into the third outfall will consolidate discharges and will reduce sampling requirements on the facility. The addition of the sedimentation basin should increase removal of solids from the stormwater and reduce the amount of stormwater entering Dog Creek.

The elimination of two outfalls, the addition of the sedimentation basin to further reduce solids in the discharge, and the potential decrease in flows to that section of Dog Creek does not require an antidegradation review according to Missouri Antidegradation Rule and Implementation Procedure.

Reviewer: Leasue J. Meyers  
 Date: 2/17/2011  
 Unit Chief: John Rustige, PE

HP 12711



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
WATER PROTECTION PROGRAM, WATER POLLUTION CONTROL BRANCH  
FORM A - APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT  
UNDER MISSOURI CLEAN WATER LAW

*No check*

FOR AGENCY USE ONLY	
CHECK NUMBER	<i>NO fee required</i>
DATE RECEIVED	8/21/12
FEE SUBMITTED	<i>0</i>

RECEIVED  
AUG 21 2012  
WATER PROTECTION PROGRAM

**Note** ▶ PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM.

1. This application is for:

- An operating permit and antidegradation review public notice
- A construction permit following an appropriate operating permit and antidegradation review public notice
- A construction permit and concurrent operating permit and antidegradation review public notice
- A construction permit (submitted before Aug. 30, 2008 or antidegradation review is not required)
- An operating permit for a new or unpermitted facility Construction Permit # \_\_\_\_\_
- An operating permit renewal: permit # *MO-0134091* Expiration Date *11-15-2012*
- An operating permit modification: permit # MO-\_\_\_\_\_ Reason: \_\_\_\_\_

1.1 Is the appropriate fee included with the application? (See instructions for appropriate fee)  YES  NO

**2. FACILITY**

NAME <i>Trager Limestone LLC</i>		TELEPHONE WITH AREA CODE <i>(660) 646-5831</i>	
ADDRESS (PHYSICAL) <i>2100 8 Unity Ave</i>		FAX <i>660-646-7537</i>	
CITY <i>Gallatin</i>	STATE <i>MO</i>	ZIP CODE <i>64640</i>	

**3. OWNER**

NAME <i>Mike Trager</i>		E-MAIL ADDRESS <i>trager@greenhills.net</i>	TELEPHONE WITH AREA CODE <i>(660) 646-5831</i>
ADDRESS (MAILING) <i>6468 St. Hwy 4</i>		FAX <i>(660) 646-7537</i>	STATE <i>MO</i>
CITY <i>Chillicothe</i>	ZIP CODE <i>64601</i>		

3.1 Request review of draft permit prior to public notice?  YES  NO

**4. CONTINUING AUTHORITY**

NAME <i>Mike Trager</i>		TELEPHONE WITH AREA CODE <i>660-646-5831</i>	
ADDRESS (MAILING) <i>6468 St. Hwy 4</i>		FAX <i>660-646-7537</i>	
CITY <i>Chillicothe</i>	STATE <i>MO</i>	ZIP CODE <i>64601</i>	

**5. OPERATOR**

NAME <i>Same above</i>		CERTIFICATE NUMBER	TELEPHONE WITH AREA CODE <i>660-646-5831</i>
ADDRESS (MAILING)		CITY	FAX <i>660-646-7537</i>
		STATE	ZIP CODE

**6. FACILITY CONTACT**

NAME <i>Mike Trager</i>		TITLE <i>owner</i>	TELEPHONE WITH AREA CODE <i>660-646-5831</i>
			FAX <i>660-646-7537</i>

**7. ADDITIONAL FACILITY INFORMATION**

7.1 Legal Description of Outfalls. (Attach additional sheets if necessary.)

001	_____ 1/4 _____ 1/4	Sec _____	T _____	R _____	_____ County
UTM Coordinates Easting (X): _____ Northing (Y): _____					
<i>For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)</i>					
002	_____ 1/4 _____ 1/4	Sec _____	T _____	R _____	_____ County
UTM Coordinates Easting (X): _____ Northing (Y): _____					
003	_____ 1/4 _____ 1/4	Sec _____	T _____	R _____	_____ County
UTM Coordinates Easting (X): _____ Northing (Y): _____					
004	_____ 1/4 _____ 1/4	Sec _____	T _____	R _____	_____ County
UTM Coordinates Easting (X): _____ Northing (Y): _____					

All outfalls eliminated @ quarry

7.2 Primary Standard Industrial Classification (SIC) and Facility North American Industrial Classification System (NAICS) Codes.

001 - SIC <i>1422</i> and NAICS <i>212312</i>	002 - SIC _____ and NAICS _____
003 - SIC _____ and NAICS _____	004 - SIC _____ and NAICS _____

**8. ADDITIONAL FORMS AND MAPS NECESSARY TO COMPLETE THIS APPLICATION**  
 (Complete all forms that are applicable.)

- A. Is your facility a manufacturing, commercial, mining or silviculture waste treatment facility? YES  NO   
 If yes, complete Form C (unless storm water only, then complete U.S. Environmental Protection Agency Form 2F per Item C below).
- B. Is your facility considered a "Primary Industry" under EPA guidelines: YES  NO   
 If yes, complete Forms C and D.
- C. Is application for storm water discharges only? YES  NO   
 If yes, complete EPA Form 2F.
- D. Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale. *All outfalls eliminated*
- E. Is wastewater land applied? If yes, complete Form I. YES  NO
- F. Is sludge, biosolids, ash or residuals generated, treated, stored or land applied? YES  NO   
 If yes, complete Form R.

**9. DOWNSTREAM LANDOWNER(S)** Attach additional sheets as necessary. See Instructions.  
 (PLEASE SHOW LOCATION ON MAP. SEE 8.D ABOVE).

NAME			
ADDRESS		CITY	STATE
			ZIP CODE

10. I certify that I am familiar with the information contained in the application, that to the best of my knowledge and belief such information is true, complete and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders and decisions, subject to any legitimate appeal available to applicant under the Missouri Clean Water Law to the Missouri Clean Water Commission.

NAME AND OFFICIAL TITLE (TYPE OR PRINT) <i>Rebecca L. Weldon</i>	TELEPHONE WITH AREA CODE <i>(660) 646-5831</i>
SIGNATURE <i>Rebecca L. Weldon</i>	DATE SIGNED <i>6/01/2012</i>

MO 780-1479 (01-09)

**BEFORE MAILING, PLEASE ENSURE ALL SECTIONS ARE COMPLETED AND ADDITIONAL FORMS, IF APPLICABLE, ARE INCLUDED.**

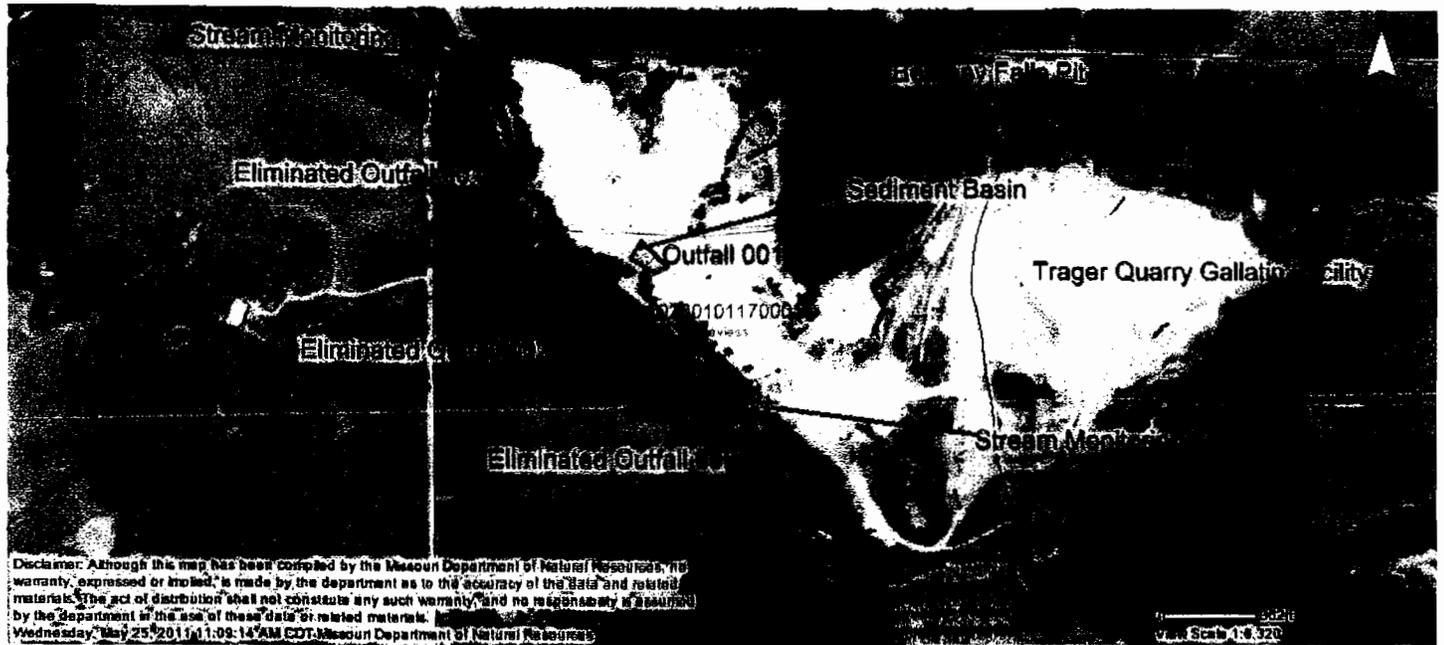
Submittal of an incomplete application may result in the application being returned.

HAVE YOU INCLUDED:

- Appropriate Fees?
- Map at 1" = 2000' scale?
- Signature?
- Form C, if applicable?
- Form D, if applicable?
- Form 2F, if applicable?
- Form I (Irrigation), if applicable?
- Form R (Sludge), if applicable?

**Part VII – Appendices**

**APPENDIX A – FACILITY MAP**



- \* Mike Trager owner of land
- \* Eliminated Outfalls (ie) NO Stream Monitor.