

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-0123277

Owner: Good Samaritan Boys Ranch  
Address: P O Box 617, Brighton, MO 65617

Continuing Authority: Same as Above  
Address: Same as Above

Facility Name: Good Samaritan Boys Ranch WWTF  
Facility Address: 5549 N. Highway 13, Brighton MO 65617

Legal Description: NW ¼, NE ¼, SE ¼, Sec. 04, T31N, R22W, Polk County  
Lat/Long: X= 469072, Y=4143944

Receiving Stream: Tributary to the North Dry Sac River (U)  
First Classified Stream and ID: North Dry Sac River (P) (1392)  
USGS Basin & Sub-watershed No.: (10290106-0403)

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

### FACILITY DESCRIPTION

Outfall #001 – Boys Camp / Sewerage Works - SIC #7032 / 4952  
Septic tank / aerated fixed film biological reactor / recirculating sand filter / ultraviolet disinfection / sludge disposal by contract hauler.  
Design organic population equivalent is 120.  
Design average daily flow is 12,000 gallons per day.  
Design sludge production is 2.16 dry tons/year.

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.

December 30, 2008  
Effective Date

March 26, 2013  
(Revised)

Sarah Parker Pauley, Director, Department of Natural Resources

December 29, 2013  
Expiration Date

John Madras, Director, Water Protection Program

| A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)   |          |                            |                |                          | PAGE NUMBER 2 of 4       |              |
|---|----------|----------------------------|----------------|--------------------------|--------------------------|--------------|
|   |          |                            |                |                          | PERMIT NUMBER MO-0123277 |              |
| 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 <b>upon issuance</b> 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 #001</u>   |          |                            |                |                          |                          |              |
| Flow  | GPD      | *                          |                | *                        | once/month**             | 24 hr. total |
| Biochemical Oxygen Demand <sub>5</sub>  | mg/L     | 24                         |                | 12                       | once/month**             | grab         |
| Total Suspended Solids  | mg/L     | 36                         |                | 18                       | once/month**             | grab         |
| pH – Units  | SU       | ***                        |                | ***                      | once/month**             | grab         |
| Fecal Coliform (Note 1)   | #/100 ml | 1,000                      |                | 400 (Note 2)             | once/month**             | grab         |
| Ammonia as N<br>(Mar 1 – May 31)<br>(Jun 1 – Aug 31)<br>(Sep 1 – Nov 30)<br>(Dec 1 – Feb 29)  | mg/L     | 6.8<br>3.2<br>6.8<br>7.5   |                | 2.6<br>1.2<br>2.6<br>2.9 | once/month**             | grab         |
| Dissolved Oxygen (Note 3)   | mg/L     | 5.0                        |                | 6.3                      | once/month**             | grab         |
| Oil and Grease  | mg/L     | 15                         |                | 10                       | once/month**             | grab         |
| Temperature   | °C       | *                          |                | *                        | once/month**             | grab         |
| MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u> ; THE FIRST REPORT IS DUE <u>April 28, 2009</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 &amp; III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.   |          |                            |                |                          |                          |              |

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- \* Monitoring requirement only.
- \*\* Sample once per month. Reports shall be submitted by the 28<sup>th</sup> day of the month following the reporting period, e.g. Reporting period is the month of March (sample collected in March), report due by April 28<sup>th</sup>.
- \*\*\* pH is measured in pH units and is not to be averaged. The pH for all facilities except lagoons is limited to the range of 6.0-9.0 pH units.

Note 1 - Final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31.

Note 2 - Monthly average limit for Fecal Coliform is expressed as a geometric mean. Geometric mean for n samples =  $[a_1 \times a_2 \times a_3 \dots \times a_n]^{1/n}$

Note 3 - The Dissolved Oxygen limits are the minimums. The facility shall not go below the set limits.

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. All outfalls must be clearly marked in the field.
3. Permittee will cease discharge by connection to area wide wastewater treatment system within 90 days of notice of its availability.
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.
5. Report as no-discharge when a discharge does not occur during the report period.

6. 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;

C. SPECIAL CONDITIONS (continued)

- (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.

7. Sludge and Biosolids Use for Domestic Wastewater Treatment Facilities

- (a) Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
- (b) If sludge is not removed by a contract hauler, permittee is authorized to land apply biosolids. Permit Standard Conditions, Part III shall apply to the land application of biosolids. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.

**Missouri Department of Natural Resources**  
**STATEMENT OF BASIS**  
**FOR THE PURPOSE OF MODIFICATION OF**  
**MISSOURI STATE OPERATING PERMIT #MO-0123277**

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 stormwater releases from certain point sources. All such discharges are unlawful without an operating permit (Section 301 of the "Clean Water Act"). After an operating permit is obtained, a discharge not in compliance with all operating 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 Statement of Basis shall be prepared to give pertinent information regarding the applicable regulations, development rationale of effluent limitations and conditions, and the public participation process for the Missouri State Operating Permit (operating permit) listed below.

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

### **Part I – Facility Information**

Outfall #001 – Boys Camp / Sewerage Works - SIC #7032 / 4952

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Design sludge production is 2.16 dry tons/year.

### **Part II – Modification Rationale**

The following changes are proposed:

- This operating permit is hereby modified to reflect change of facility description by the removal of “phosphorus removal by chemical addition”.
- The permittee has never had a Total Phosphorus monitoring capability. Therefore, this is no longer a requirement of the operating permit. The new effluent limits are listed on page 2 of the permit.

No other changes are proposed. For further explanation of the other permit conditions and effluent limits, please see the permit# MO-0111716 issued on September 26, 2008. Only the portions of this permit proposed for change as part of this public notice are subject to comment at this time.

### **Part III – 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.

Date of Statement of Basis: 02/26/2013

Submitted by:

**Johnny O’Dell, Environmental Specialist**

**Operating Permits Section**

**Water Protection Program**

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