

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-0136085

Owner: Eagle View Lots 3 and 4 Association, Inc.
Address: 1696 Camp Hohn Road, Gravois Mills, MO 65037

Continuing Authority: Same as Above
Address: Same as Above

Facility Name: Eagle View Lots 3 and 4 Association, Inc. WWTF
Facility Address: 1680 Camp Hohn Drive, Gravois Mills MO 65037

Legal Description: SE $\frac{1}{4}$, SW $\frac{1}{4}$, SW $\frac{1}{4}$, Sec. 35, T40N, R18W, Camden County
UTM (X,Y): 509171 / 4225844

Receiving Stream: Lake of the Ozarks (L2)
First Classified Stream and ID: Lake of the Ozarks (L2) (07205)
USGS Basin & Sub-watershed No.: (10290109-080001)

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 – Subdivision / Sewerage Works - SIC # 8641 / 4952

Septic tank / recirculating sand filter system / chlorination / dechlorination / post aeration / sludge disposal by a contract hauler.

Design organic population equivalent is 7.4.
Design average daily flow is 659 gallons per day.
Design sludge production is 0.126 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.

February 28, 2011 February 25, 2015
Effective Date Revised Date

Sara Parker Pauley, Director, Department of Natural Resources

February 27, 2016
Expiration Date

John Madras, Director, Water Protection Program

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 2 of 4	
					PERMIT NUMBER MO-0136085	
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 #001</u>						
Flow	GPD	*		*	once/quarter**	24 hr. estimate
Biochemical Oxygen Demand ₅	mg/L	15		10	once/quarter**	grab
Total Suspended Solids	mg/L	15		10	once/quarter**	grab
pH – Units	SU	***		***	once/quarter**	grab
Ammonia as N	mg/L	4.5		3.0	once/quarter**	grab
<i>E. coli</i> (Note 1)	#/100 ml	630		126	once/quarter**	grab
Total Residual Chlorine as Cl ₂	mg/L	0.017 (Note 2) (0.13 ML)		0.0082 (Note 2) (0.13ML)	once/quarter**	grab
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	DAILY MINIMUM	WEEKLY AVERAGE MINIMUM	MONTHLY AVERAGE MINIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001						
Dissolved Oxygen	mg/L	5.0		5.0	once/quarter**	grab
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY ; THE FIRST REPORT IS DUE July 28, 2011 . 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 <u>Parts I & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980</u> and <u>August 15, 1994</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.

** **Sampling shall occur once per quarter in the periods of January through March, April through June, July through September, and October through December, please note that monitoring reports shall be submitted no later than the 28th day of the month following the monitoring period (April 28th, July 28th, October 28th, and January 28th, respectively).** For tracking purposes samples taken anytime in the first quarter (January through March) will be recorded by the department as though they were taken in March, samples taken anytime in the second quarter (April through June) will be recorded by the department as though they were taken in June, samples taken anytime in the third quarter (July through September) will be recorded by the department as though they were taken in September, and samples taken in the fourth quarter (October through December) will be recorded by the department as though they were taken in December.

*** 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 6.5-9.0 pH units.

Note 1 - Final limitations and monitoring requirements for *E. coli* are applicable only during the recreational season from April 1 through October 31. The Monthly Average Limit for *E. coli* is expressed as a geometric mean. Geometric mean for n samples = $[a_1 \times a_2 \times a_3 \dots \times a_n]^{1/n}$.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

Note 2- This permit contains a Total Residual Chlorine (TRC) limit.

- (a) This effluent limit is below the minimum quantification level (ML) of the most common and practical EPA approved CLTRC methods. The department has determined the current acceptable ML for total residual chlorine to be 0.13 mg/L when using the DPD Colorimetric Method #4500 – CL G. from Standard Methods for the Examination of Waters and Wastewater. The permittee will conduct analyses in accordance with this method, or equivalent, and report actual analytical values. Measured values greater than or equal to the minimum quantification level of 0.13 mg/L will be considered violations of the permit and values less than the minimum quantification level of 0.13 mg/L will be considered to be in compliance with the permit limitation. The minimum quantification level does not authorize the discharge of chlorine in excess of the effluent limits stated in the permit.
- (b) Disinfection is required year-round unless the permit specifically states that “Final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31.” If your permit does not require disinfection during the non-recreational months, do not chlorinate in those months.
- (c) Do not chemically dechlorinate **if it is not needed to meet the limits in your permit.**
- (d) If no chlorine was used in a given sampling period, an actual analysis is not necessary. Simply report as “0 mg/L” TRC.

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 areawide 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;

C. SPECIAL CONDITIONS (continued)

- (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;
 - (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.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
STATEMENT OF BASIS
MO-0136085
EAGLE VIEW LOTS 3 AND 4 ASSOCIATION, INC.

This Statement of Basis (Statement) gives pertinent information regarding minor 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.

Part I – Facility Information

Facility Type: NON-POTW
Facility SIC Code(s): #6841

Facility Description:

Septic tank / recirculating sand/pea gravel filter system / disinfection by chlorination / dechlorination / post aeration / sludge disposal by a contract hauler.

Part II – Modification Rationale

This operating permit is hereby modified to reflect a change in ownership and facility name from Lots 3 & 4 Eagle View WWTF to Eagle View Lots 3 and 4 Association, Inc. WWTF.

No other changes were made 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. The proposed determinations are tentative pending public comment.

DATE OF STATEMENT OF BASIS: FEBRUARY 17, 2015

COMPLETED BY:

CAMERON EISTERHOLD, ENVIRONMENTAL SPECIALIST
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION - DOMESTIC WASTEWATER UNIT
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**Missouri Department of Natural Resources
Statement of Basis
Lots 3 & 4 Eagle View WWTF
MSOP #: MO-MO-0136085
Camden County**

A Statement of Basis (Statement) gives pertinent information regarding the applicable regulations and rationale for the development of the NPDES Missouri State Operating Permit (operating permit). This Statement includes Wasteload Allocations, Water Quality Based Effluent Limitations, and Reasonable Potential Analysis calculations as well as any other calculations that effect the effluent limitations of this operating permit. This Statement does not pertain to operating permits that include sewage sludge land application plans and variance procedures, and does not include the public comment process for this operating permit.

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

Part I – Facility Information

Facility Type: (NON-POTW)

Facility SIC Code(s): 6841

Facility Description: Septic tank / recirculating sand/pea gravel filter system / disinfection by chlorination / dechlorination / post aeration / sludge disposal by a contract hauler

OUTFALL(S) TABLE:

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
001	0.001	Secondary	Domestic, New	0

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

Comments: New facility, no inspections previously completed.

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 list 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 1st 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**
Lake of the Ozarks	L2	07205	LWW, AQL, WBC(A), SCR	10290109	Ozarks / Osage

* - 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).

** - Ecological Drainage Unit

RECEIVING STREAM(S) LOW-FLOW VALUES TABLE:

SEE WQAR APPENDIX A

MIXING CONSIDERATIONS TABLE:

SEE WQAR APPENDIX A

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

ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:

As per [10 CSR 20-7.015(4)(A)], discharges to losing streams shall be permitted only after other alternatives including land application, discharges to a gaining stream and connection to a regional wastewater treatment facility have been evaluated and determined to be unacceptable for environmental and/or economic reasons.

Not Applicable ;

The facility does not discharge to a Losing Stream as defined by [10 CSR 20-2.010(36)] & [10 CSR 20-7.031(1)(N)], or is an existing facility.

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.

- New facility.

AREA-WIDE WASTE TREATMENT MANAGEMENT & CONTINUING AUTHORITY:

As per [10 CSR 20-6.010(8)(A)10.], when a Continuing Authority under paragraph 10 CSR 20-6.010(3)(B)1. or 2. is expected to be available for connection within the next five (5) years, any operating permit issued to a permittee under this paragraph, located within the service area of the paragraph (3)(B)1. or 2. facility, shall contain the following special condition... This language is contained in Special Condition #3 of this operating permit.

ANTIDegradation:

Policies which ensure protection of water quality for a particular water body where the water quality exceeds levels necessary to protect fish and wildlife propagation and recreation on and in the water. This also includes special protection of waters designated as outstanding natural resource waters. Antidegradation requirements are consistent with 40 CFR 131.12 that outlines methods used to assess activities that may impact the integrity of a water and protect existing uses. This policy may compel the state to maintain a level of water quality above those mandated by criteria.

Applicable ;

Please see **APPENDIX B – ANTIDegradation ANALYSIS.**

APPLICABLE PERMIT PARAMETERS:

Effluent parameters for conventional, non-conventional, and toxic pollutants have been obtained from the technology based effluent limits, water quality based limits, and from appropriate sections of the application.

Bio-solids, 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.

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

COMPLIANCE AND ENFORCEMENT:

Action taken by the department to resolve violations of the Missouri Clean Water Law, its implementing regulations, and/or any terms and condition of an operating permit.

Not Applicable ;

The permittee/facility is not under enforcement action and is considered to be in compliance with the Missouri Clean Water Law, its implementing regulations, and/or any terms and condition of an operating permit.

PRETREATMENT PROGRAM:

The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a Publicly Owned Treatment Works [40 CFR Part 403.3(q)].

Not Applicable ;

At this time, the permittee is not required to implement and enforce a Pretreatment Program.

REASONABLE POTENTIAL ANALYSIS (RPA):

Limitations must control all pollutants or pollutant parameters that are or may be discharged at a level which will cause, have reasonable potential to cause, or contribute to an excursion above the Missouri Water Quality Standards.

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 (BOD₅) and Total Suspended Solids (TSS) for Publicly Owned Treatment Works (POTWs). 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

Not Applicable ;

This wastewater treatment facility is not a POTW. Influent monitoring is not being required to determine percent removal.

SANITARY SEWER OVERFLOWS (SSOs), BYPASSES, INFLOW & INFILTRATION (I&I) – PREVENTION/REDUCTION:

Sanitary Sewer Systems (SSSs) are municipal wastewater collection system that convey domestic, commercial, and industrial wastewater, and limited amounts of infiltrated groundwater and storm water (i.e. I&I), to a POTW. SSSs are not designed to collect large amounts of storm water runoff from precipitation events.

Untreated or partially treated discharges from SSSs are commonly referred to as SSOs. SSOs have a variety of causes including blockages, line breaks, sewer defects that allow excess storm water and ground water to overload the system, lapses in sewer system operation and maintenance, inadequate sewer design and construction, power failures, and vandalism. A SSOs is defined as an untreated or partially treated sewage release from a SSS. SSOs can occur at any point in an SSS, during dry weather or wet weather. SSOs include overflows that reach waters of the state. SSOs also include overflows out of manholes and onto city streets, sidewalks, and other terrestrial locations. SSSs can back up into buildings, including private residences. When sewage backups are caused by problems in the publicly-owned portion of an SSS, they are considered SSOs.

Not Applicable ;

This facility is not required to develop or implement a program for maintenance and repair of the collection system; however, it is a violation of Missouri State Environmental Laws and Regulations to allow untreated wastewater to discharge to waters of the state.

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.

STORM WATER 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 storm water 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 *Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices* [EPA 832-R-92-006] (Storm Water Management), 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 Storm Water 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 storm water discharges.

Not Applicable ;

At this time, the permittee is not required to develop and implement a SWPPP.

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 to total amount of pollutant that may be discharged into that stream without endangering its water quality.

Applicable ;

Wasteload allocations were calculated where applicable using water quality criteria or water quality model results and the dilution equation below:

$$C = \frac{(C_s \times Q_s) + (C_e \times Q_e)}{(Q_e + Q_s)} \quad (\text{EPA/505/2-90-001, Section 4.5.5})$$

Where C = downstream concentration
 C_s = upstream concentration
 Q_s = upstream flow
 C_e = effluent concentration
 Q_e = effluent flow

Chronic wasteload allocations were determined using applicable chronic water quality criteria (CCC: criteria continuous concentration) and stream volume of flow at the edge of the mixing zone (MZ). Acute wasteload allocations were determined using applicable water quality criteria (CMC: criteria maximum concentration) and stream volume of flow at the edge of the zone of initial dilution (ZID).

Water quality based maximum daily and average monthly effluent limitations were calculated using methods and procedures outlined in USEPA's "Technical Support Document For Water Quality-based Toxics Control" (EPA/505/2-90-001).

WLA MODELING:

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

Not Applicable ;

This facility does not discharge to a 303(d) listed stream.

Adjusted Design Flow:

10 CSR 20-6.011(1)(B)1. provides for an Adjusted Design Flow when calculating permit fees on human sewage treatment facilities. If the average flow is sixty percent (60%) or less than the system’s design flow, the average flow may be substituted for the design flow when calculating the permit fee on human sewage treatment facilities. If the facility's actual average flow is consistently 60% or less than the permitted design flow, the facility may qualify for a reduction in your fee when:

Not Applicable ;

At this time, the permittee has not requested an Adjusted Design Flow modification.

Outfall #001 – Main Facility Outfall

EFFLUENT LIMITATIONS TABLE:

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	GPD	1	*		*	****	****
BOD ₅	MG/L	6	15		10	****	****
TSS	MG/L	6	15		10	****	****
PH (S.U.)	SU	1	6.5-9.0		6.5-9.0	****	****
AMMONIA AS N	MG/L	6	4.5		3.0	****	****
ESCHERICHIA COLI	***	1	630		126	****	****
CHLORINE, TOTAL RESIDUAL	MG/L	1, 6	0.017		0.0082	****	****
DISSOLVED OXYGEN	MG/L	6	5.0		5.0	****	****
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

*** - Monitoring requirement only**

*** - # of colonies/100mL; the Monthly Average for *e.coli* is a geometric mean.

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

N/A – Not applicable

S – Same as previous operating permit

Basis for Limitations Codes:

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

OUTFALL #001 – DERIVATION AND DISCUSSION OF LIMITS:

Flow. See Appendix A WQAR.

Biochemical Oxygen Demand (BOD₅).

– See Appendix A WQAR

Total Suspended Solids (TSS).

– See Appendix A WQAR

pH.

– pH is limited to the range of 6.5 – 9.0 pH units, as per [10 CSR 20-7.031(4)(E)]. pH is measured in pH units and is not to be averaged.

Total Ammonia Nitrogen. See Appendix A WQAR

Escherichia coli (E. coli). Monthly average of 126 per 100 ml as a geometric mean and Daily Maximum of 630 during the recreational season (April 1 – October 31), to protect Whole Body Contact Recreation (A) designated use of the receiving stream, as per 10 CSR 20-7.031(4)(C). Daily Maximum effluent variability will be evaluated in development of a future effluent limit. An effluent limit for both monthly average and daily maximum is required by 40 CFR 122.45(d).

Total Residual Chlorine (TRC). See Appendix A WQAR

Dissolved Oxygen. See Appendix A WQAR

Minimum Sampling and Reporting Frequency Requirements.

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
FLOW	QUARTERLY	QUARTERLY
BOD ₅	QUARTERLY	QUARTERLY
TSS	QUARTERLY	QUARTERLY
PH	QUARTERLY	QUARTERLY
AMMONIA AS N	QUARTERLY	QUARTERLY
E. COLI	QUARTERLY	QUARTERLY
TOTAL RESIDUAL CHLORINE	QUARTERLY	QUARTERLY
DISSOLVED OXYGEN	QUARTERLY	QUARTERLY

Administrative Requirements

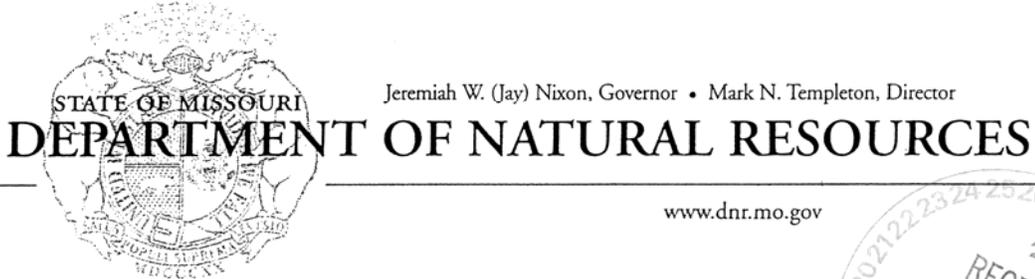
On the basis of preliminary staff review and the application of applicable standards and regulations, the Department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein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

Date of Factsheet: 08/20/2009

Megan L. Hart
WP Engineering Unit
(417) 891-4300
megan.hart@dnr.mo.gov

APPENDIX A – ANTIDegradation Analysis:

Lots 3 & 4 Eagle View
Camden County



Jeremiah W. (Jay) Nixon, Governor • Mark N. Templeton, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

JUN 26 2009

Von Puckett, Developer
513 N. Dill Street
Marshfield, MO 65706



RE: Water Quality and Antidegradation Review Preliminary Determination for Lots 3 and 4 Eagle View Wastewater Treatment Plant.

Dear Mr. Puckett:

In accordance with the *Missouri Antidegradation Rule and Implementation Procedure*, your proposed discharge is subject to an Antidegradation Review. Enclosed is the *Water Quality and Antidegradation Review (WQAR)*, which summarizes this preliminary determination based upon the *Evaluation of Alternatives to Proposed Discharge for Lots 3 & 4 Eagle View Estates WWTP* Report by Miller/Lindsay dated May 2009, which proposed an expansion of the existing treatment plant from 6 MGD to 10 MGD.

Based on the Department's initial review, the department's preliminary determination is that the applicant-supplied antidegradation review documentation satisfies the requirements of the AIP. This WQRS/preliminary determination may be appealed within 30 days of this letter in accordance with the AIP Section II.F.4.

You may proceed with submittal of an application for an operating permit and antidegradation review public notice, a facility plan, an engineering report, and/or a complete application for a construction permit. The department will not be conducting any further review of this project until a submittal is received. Any changes in facility description or capacity will potentially require another antidegradation review.

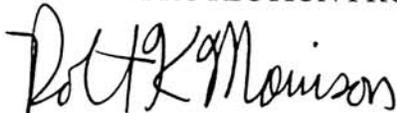
Following the department's public notice of draft Missouri State Operating Permit including the antidegradation review findings and preliminary determination, the department will review any public notice comments received. If significant comments are made, the project may require another public notice and potentially another antidegradation review. If no comments are received or comments are resolved without another public notice, these findings and determinations will be considered final. Following issuance of the construction permit and completion of the actual facility construction, the department will proceed with the issuance of the operating permit.

Von Puckett, Developer
Page Two

If you should have questions, please feel free to contact Keith Forck by telephone at (573) 526-4232, by e-mail at keith.forck@dnr.mo.gov, or by mail at the Missouri Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, Missouri 65102-0176.

Sincerely,

WATER PROTECTION PROGRAM

A handwritten signature in black ink that reads "Robert K. Morrison". The signature is written in a cursive style with a large initial "R" and "M".

Robert K. Morrison, P.E., Chief
Water Pollution Control Branch

RKM:kfs

Enclosure

c: Southwest Regional Office
Miller/Lindsay, PO Box 282, Osage Beach, MO 65065

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



Water Quality and Antidegradation Review

*For the Protection of Water Quality
and Determination of Effluent Limits for Discharge to the
Lake of the Ozarks*

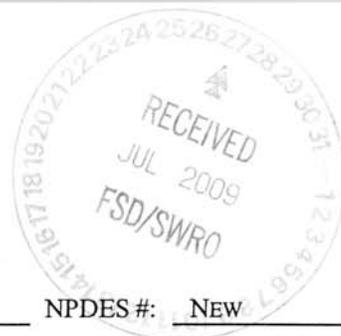


June 2009

Lots 3 & 4 Eagle View Wastewater Treatment Plant
1680 Camp Hohn Drive
Gravois Mills, MO 65037

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1. FACILITY INFORMATION

FACILITY NAME: Lots 3 & 4 Eagle View WWTP NPDES #: NEW

FACILITY TYPE/DESCRIPTION: Proposed facility will treat domestic wastewater from two single family residences. The preferred alternative of the submitted alternatives analysis (AA) was a recirculating rock filter with chlorine disinfection. The facility will discharge into the Lake of the Ozarks (Location – See Appendix A). The proposed design flow of the facility is 740 gpd.

EDU: Ozarks/Osage 8-DIGIT HUC: 10290109 COUNTY: Camden

LEGAL DESCRIPTION: SE, SW, SW, Sec. 35, T40N, R18W LATITUDE/LONGITUDE: +3810492/-09253415

2. WATER QUALITY INFORMATION

In accordance with Missouri’s Water Quality Standard [10 CSR 20-7.031(2)] and federal antidegradation policy at Title 40 Code of Federal Regulation (CFR) Section 131.12 (a), the Missouri Department of Natural Resources (MDNR) developed a statewide antidegradation policy and corresponding procedures to implement the policy. A proposed discharge to a water body will be required to undergo a level of Antidegradation Review which documents that the use of a water body’s available assimilative capacity is justified. Effective August 30, 2008, a facility is required to use *Missouri’s Antidegradation Rule and Implementation Procedure (AIP)* for new and expanded wastewater discharges.

2.1 WATER QUALITY HISTORY:

Since this is a new proposed discharging facility, there is no water quality history.

3. OUTFALL CHARACTERISTICS

OUTFALL	DESIGN FLOW (CFS)	TREATMENT TYPE	RECEIVING WATERBODY	DISTANCE TO CLASSIFIED SEGMENT
001	0.001	Secondary	Lake of the Ozarks	0.0

4. RECEIVING WATERBODY INFORMATION

WATERBODY	CLASS	WBID	1Q10 (CFS)	7Q10 (CFS)	30Q10 (CFS)	*DESIGNATED USES
Lake of the Ozarks	L2	7205	-	-	-	LWW, AQL, WBC(A), SCR

*Cool Water Fishery (CLF), Cold Water Fishery (CDF), Irrigation (IRR), Industrial (IND), Boating & Canoeing (BTG), Drinking Water Supply (DWS), Whole Body Contact Recreation (WBC), Protection of Warm water Aquatic Life and Human Health (AQL), Livestock & Wildlife Watering (LWW)

RECEIVING WATER BODY SEGMENT #1: Lake of the Ozarks

Upper end segment* UTM or Lat/Long coordinates: 38.10492/ - 92.535415(Outfall)

Lower end segment* UTM or Lat/Long coordinates: 38.10411/ - 92.53522 (Main Channel)

RECEIVING WATER BODY SEGMENT #2: N/A

Upper end segment* UTM or Lat/Long coordinates: _____

Lower end segment* UTM or Lat/Long coordinates: _____

*Segment is the portion of the stream where discharge occurs. Segment is used to track changes in assimilative capacity and is bound at a minimum by existing sources and confluences with other significant water bodies.

5. GENERAL COMMENTS

Miller/Lindsay prepared, on behalf of Lots 3 & 4 Eagle View Estates WWTP, the *Evaluation of Alternatives to Proposed Discharge (Eagle View Estates)* Report dated May 2009. The Geohydrological Evaluation submitted with the report stated this is a gaining stream setting. A Tier Analysis was submitted by the applicant. No dissolved oxygen modeling analysis was submitted or required due to this facility discharging directly to the Lake of the Ozarks and the lack of an appropriate model. This proposed discharge is proposed to serve two single-family residences and assumed to result in significant degradation for all pollutants of concern (POCs) in the segment noted of the Lake of the Ozarks. The Lake of the Ozarks is on the EPA 2006 303(d) List. The Lake of the Ozarks is on the EPA 2006 303(d) List because of fish trauma caused by the Truman Dam. This discharge will not contribute to this impairment.

The effluent limits in this review were developed to be protective of beneficial uses and to retain the remaining assimilative capacity. MDNR has determined that the submitted report is sufficient and meets the requirement of the AIP. Information found in the submitted report and in the summary forms provided by the applicant in Appendix B was used to develop this review document. A Missouri Department of Conservation Natural Heritage Review was obtained by the applicant; and no endangered species were found to be impacted by the discharge.

6. ANTIDegradation REVIEW INFORMATION

In accordance with Missouri's Water Quality Standard [10 CSR 20-7.031(2)] and federal antidegradation policy at Title 40 Code of Federal Regulation (CFR) Section 131.12 (a), the department was to develop a statewide antidegradation policy and corresponding procedures to implement the policy. A proposed discharge to a water body will be required to undergo a level of Antidegradation Review which documents that the use of a water body's available assimilative capacity is justified. Effective August 30, 2008, a facility is required to use *Missouri's Antidegradation Rule and Implementation Procedure (AIP)*. This procedure is applicable to new and expanded wastewater facilities. The following is a review of the *Eagle View Estates* Report.

6.1 TIER DETERMINATION

Below is a list of pollutants of concern reasonably expected to be in the discharge (see Appendix B: Tier Determination and Effluent Limit Summary). Pollutants of concern are defined as those pollutants "proposed for discharge that affect beneficial use(s) in waters of the state. POCs include pollutants that create conditions unfavorable to beneficial uses in the water body receiving the discharge or proposed to receive the discharge." (AIP, Page 7).

Table 1. Pollutants of Concern and Tier Determination

POLLUTANTS OF CONCERN	TIER	DEGRADATION	COMMENT
Ammonia as Nitrogen	2	Significant	
Biochemical Oxygen Demand	2	Significant	*
Dissolved Oxygen	2	Significant	
Bacteria (E. Coli & Fecal Coliform)	2	Significant	
pH	2	Significant	**
Total Suspended Solids	2	Significant	*

* No in-stream standards for these parameters, therefore tier determination was not possible.

** Standards for these parameters are ranges and therefore tier determination was not possible.

The following Antidegradation Review Summary attachments in Appendix B were used by the applicant:

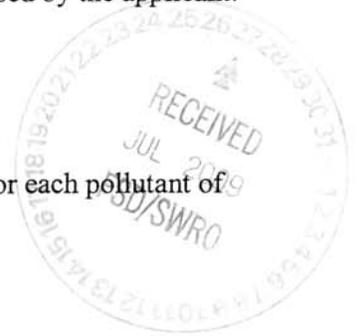
Tier Determination and Effluent Summary

For pollutants of concern, the attachments are:

Attachment A, Tier 2 with significant degradation.

Attachment B, Tier 2 with minimal degradation.

Attachment D, Tier 1 Review. Additionally, a Tier 2 review must be conducted for each pollutant of concern on the appropriate water body segment



6.2 EXISTING WATER QUALITY

No existing water quality data was submitted.

6.3 ASSIMILATIVE CAPACITY CALCULATIONS

This antidegradation review assumed significant degradation for all Pollutants of Concern, so there is no need to calculate the assimilative capacity for this review.

6.4 ALTERNATIVE ANALYSIS

This antidegradation review assumed significant degradation for all Pollutants of Concern, so there is a demonstration of necessity (i.e., alternatives analysis) and a determination of social and economic importance included in the report. The report included an analysis of nine alternatives ranging from non-degrading to less degrading to the degrading alternative (base case alternative). The non-degrading alternatives of land application, subsurface irrigation, discharge to regional system, and alternative discharge location were each determined to be not practicable. The less degrading alternatives of Intermittent Sand Filter, Extended Aeration, Extended Aeration with Filter, and Membrane Bioreactor were considered practicable, but not economically efficient as shown in Table 2 (Please see the full *Eagle View Estates* Report for a more detailed discussion of the proposed alternatives). All meet Water Quality Standards with the exception of the ammonia for the extended aeration alternative. The preferred alternative is the recirculating rock filter.

TABLE 2. TECHNOLOGY-BASED EFFLUENT LIMITS AND ECONOMIC EFFICIENCY ANALYSIS

DISCHARGING ALTERNATIVES	BOD ₅ (MG/L)	TSS (MG/L)	FECAL COLI (#/100 ML)	DO (MG/L)	NH ₄ (MG/L)	PRESENT WORTH COST*	RATIO TO BASE
RECIRCULATING SAND FILTER	10	10	400	5	3.0	\$48,307	BASE
INTERMITTENT SAND FILTER	3	6	400	5	3.0	\$106,020	2.1
EXTENDED AERATION	20	20	400	5	2.0	\$87,564	1.8
EXTENDED AERATION/FILTER	10	15	400	5	2.0	\$157,564	3.2
MEMBRANE BIOREACTOR	5	1	400	5	1.0	\$763,564	15.8

* Present Worth Cost: 20 year design life and 7% interest

6.5 DEMONSTRATION OF NECESSITY AND SOCIAL AND ECONOMIC IMPORTANCE

This antidegradation review assumed significant degradation for all Pollutants of Concern, so there is a demonstration of necessity (i.e., alternatives analysis) and a determination of social and economic importance that was included in the report. This facility will provide the wastewater service to allow

lower income level families to enjoy the recreational attributes of the Lake of the Ozarks. It will increase the tax base for the community and provide highly efficient and monitored sewage treatment system in a community that is predominately served by substandard onsite treatment systems.

6.6 PRELIMINARY DETERMINATION

The proposed facility is assumed to result in significant degradation for all POCs in the noted Lake of the Ozarks segment. Miller/Lindsey assumed significant degradation for the segments mentioned above and provided an alternatives analysis which showed that a recirculating rock filtration plant would be the most economically efficient and practicable option for treatment. The Social and Economic Importance of the proposed facility will support homes, which will allow lower income level families to enjoy the recreational attributes of the Lake of the Ozarks and provide a tax base increase for the area. The effluent limits in this review were developed to be protective of beneficial uses and to retain the remaining assimilative capacity. MDNR has determined that the submitted report is sufficient and meets the requirement of the AIP. No further analysis is needed for this discharge.

7. GENERAL ASSUMPTIONS OF THE WATER QUALITY AND ANTIDegradation REVIEW

1. A Water Quality and Antidegradation Review (WQAR) assumes that [10 CSR 20-6.010(3) Continuing Authorities and 10 CSR 20-6.010(4) (D), consideration for no discharge] has been or will be addressed in a Missouri State Operating Permit or Construction Permit Application.
2. A WQAR does not indicate approval or disapproval of alternative analysis as per [10 CSR 20-7.015(4) Losing Streams], and/or any section of the effluent regulations.
3. Changes to Federal and State Regulations made after the drafting of this WQAR may alter Water Quality Based Effluent Limits (WQBEL).
4. Effluent limitations derived from Federal or Missouri State Regulations (FSR) may be WQBEL or Effluent Limit Guidelines (ELG).
5. WQBEL supercede ELG only when they are more stringent. Mass limits derived from technology based limits are still appropriate.
6. A WQAR does not allow discharges to waters of the state, and shall not be construed as a National Pollution Discharge Elimination System or Missouri State Operating Permit to discharge or a permit to construct, modify, or upgrade.
7. Limitations and other requirements in a WQAR may change as Water Quality Standards, Methodology, and Implementation procedures change.
8. Nothing in this WQAR removes any obligations to comply with county or other local ordinances or restrictions.

8. MIXING CONSIDERATIONS

Mixing Zone (MZ). One-quarter (1/4) of the lake width at the discharge point or one hundred feet (100') from the discharge point, whichever is less [10 CSR 20-7.031(4)(A)5.B.(IV)(a)].

Using the USGS Quadrangle map, the Triangular Prism Method was used to calculate the volume in the triangular prism. Using the dimensions of length = 100 feet, width = 100 feet, and depth = 20 feet, the volume of the triangular prism (.5*L*W*H) is 100,000 cubic feet. This volume is the daily mixing zone. This is divided down to the MZ Volume of Flow = 1.16 cfs.

Zone of Initial Dilution (ZID). Not allowed [10 CSR 20-7.031(4)(A)5.B.(IV)(b)].

$$A.E.C.\% = \left(\frac{DesignFlow + ZIDFlow}{DesignFlow} \right)^{-1} \times 100$$

9. PERMIT LIMITS AND INFORMATION

TMDL WATERSHED: N (Y OR N) W.L.A. STUDY CONDUCTED: N (Y OR N) DISINFECTION REQUIRED: Y (Y OR N) USE ATTAINABILITY ANALYSIS: N (Y OR N)



9.1 OUTFALL #001– Main Facility Outfall

WET TEST (Y OR N): N FREQUENCY: N/A A.E.C. 100 % METHOD: N/A

PARAMETER	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	WQBEL (NOTE 1)	MONITORING FREQUENCY
FLOW	MGD	*		*	FSR	Once/Quarter
BIOCHEMICAL OXYGEN DEMAND (BOD ₅)**	MG/L	15		10	TBEL	Once/Quarter
TOTAL SUSPENDED SOLIDS**	MG/L	15		10	TBEL	Once/Quarter
DISSOLVED OXYGEN	MG/L	5.0 (MINIMUM)		5.0 (MINIMUM)	WQBEL	Once/Quarter
PH	SU	6 – 9		6 – 9	FSR	Once/Quarter
FECAL COLIFORM	***	1000		400	FSR	
ESHERICHIA COLIFORM (E. COLI)	PLEASE SEE THE E. COLI DISCUSSION IN THE DERIVATION & DISCUSSION OF LIMITS SECTION OF THIS WQRS BELOW.					
CHLORINE, TOTAL RESIDUAL	MG/L	0.017		0.008	FSR	Once/Quarter
TOTAL AMMONIA N	MG/L	4.5		3.0	TBEL	Once/Quarter

Note 1– Water Quality-based Effluent Limitation --WQBEL; or Minimally Degrading Effluent Limit--MDEL; or Technology-based Effluent Limit-TBEL; or No Degradation Limit--NDL; or FSR --Federal/State Regulation; or N/A--Not Applicable. Also, please see the **General Assumptions of the WQAR #4 & #5.**

- * – Monitoring Requirement Only
- ** – This facility is required to meet a removal efficiency of 85% or more for BOD₅ and TSS. Influent BOD₅ and TSS data shall be reported to ensure removal efficiency requirements are met.
- *** – colonies/100 mL

10. RECEIVING WATER MONITORING REQUIREMENTS

No receiving water monitoring requirements recommended at this time.

11. DERIVATION AND DISCUSSION OF LIMITS

Wasteload allocations were calculated using water quality criteria or water quality model results and the dilution equation below:

$$C = \frac{(C_s \times Q_s) + (C_e \times Q_e)}{(Q_e + Q_s)} \quad (\text{EPA/505/2-90-001, Section 4.5.5})$$

Where C = downstream concentration
 Cs = upstream concentration
 Qs = upstream flow
 Ce = effluent concentration
 Qe = effluent flow

Chronic wasteload allocations were determined using applicable chronic water quality criteria (CCC: criteria continuous concentration) and stream volume of flow at the edge of the mixing zone (MZ). Acute wasteload allocations were determined using applicable water quality criteria (CMC: criteria maximum concentration) and stream volume of flow at the edge of the zone of initial dilution (ZID).

Water quality based maximum daily and average monthly effluent limitations were calculated using methods and procedures outlined in USEPA's "Technical Support Document For Water Quality-based Toxics Control" (EPA/505/2-90-001).

11.1 OUTFALL #001 – Main Facility Outfall – Limit Derivation

- **Biochemical Oxygen Demand (BOD₅).** Technology based effluent limit proposed of 10 mg/L monthly average, 15 mg/L maximum daily limit.
- **Total Suspended Solids (TSS).** According to EPA, because TSS and BOD are closely correlated, we apply the same limits for TSS as BOD. Influent monitoring may be required for this facility in its Missouri State Operating Permit.
- **Dissolved Oxygen.** Dissolved oxygen in the stream is dependent upon the wastewater treatment plant effluent concentration of dissolved oxygen. There are currently no appropriate models available for discharges in a lake; therefore a D.O. level of 5.0 mg/L will be required, per 10 CSR 20-7.031(4)(J), for the effluent. Water Quality Standards for dissolved oxygen is 5.0 mg/L [10 CSR 20-7.031, Table A].
- **pH.** pH shall be maintained in the range from six to nine (6 – 9) standard units [10 CSR 20-7.015 (8)(B)2.]
- **Fecal Coliform.** Discharge shall not contain more than a monthly geometric mean of 400 colonies/100 mL and a daily maximum of 1000 colonies/100 mL during the recreational season (April 1 – October 31) [10 CSR 20-7.015(8)(B)4.A.] Future renewals of the facility operating permit will contain effluent limitations for E. coli which will replace fecal coliform as the applicable bacteria criteria in Missouri's water quality standards.
- **E. coli (E. Coli).** In the near future, the operating permit for this facility will contain effluent limitations for E. coli. E. coli will replace fecal coliform as the applicable bacteria criteria in Missouri's water quality standards when Missouri adopts the implementation of the E. coli standards. Also, please see **GENERAL ASSUMPTIONS OF THE WQRS #7.**
- **Total Residual Chlorine (TRC).** Warm-water Protection of Aquatic Life CCC = 10 µg/L, CMC = 19 µg/L [10 CSR 20-7.031, Table A]. Background TRC = 0.0 µg/L.

$$C_e = (((Q_e + Q_s) * C) - (Q_s * C_s)) / Q_e$$

$$\text{Chronic WLA: } C_e = ((0.001 + 1.16)10 - (1.16 * 0.00)) / 0.001$$

$$C_e = 11,610 \text{ mg/L}$$

$$\text{Acute WLA: } C_e = ((0.001 + 0.0)19 - (0.0 * 0.00)) / 0.001$$

$$C_e = 19 \text{ µg/L}$$

$$LTA_c = 11,610 \text{ µg/L (0.527)} = 6120 \text{ µg/L} \quad [\text{CV} = 0.6, 99^{\text{th}} \text{ Percentile}]$$

$$LTA_a = 19 \text{ µg/L (0.321)} = 6.1 \text{ µg/L} \quad [\text{CV} = 0.6, 99^{\text{th}} \text{ Percentile}]$$

$$\text{MDL} = 0.0061(3.114) = 19 \text{ µg/L} \quad [\text{CV} = 0.6, 99^{\text{th}} \text{ Percentile}]$$

$$\text{AML} = 0.0061(1.55) = 9.5 \text{ µg/L} \quad [\text{CV} = 0.6, 95^{\text{th}} \text{ Percentile, } n = 4]$$

Total Residual Chlorine effluent limits of 0.017 mg/L daily maximum, 0.008 mg/L monthly average are recommended if chlorine is used as a disinfectant. Standard compliance language for TRC, including the minimum level (ML), should be included in the permit.

- **Total Ammonia Nitrogen.** Water Quality Based Effluent Limits (WQBEL) were calculated using the **Triangular Prism Method** for determining the Regulatory Mixing Zone. The WQBEL for this discharge for both summer and winter MDL and AML at 12.1 mg/L and 4.6 mg/L, respectively. The Technology Based Effluent Limits (TBEL) provided in the application (Appendix B) set the AML for summer and winter to 3.0. The maximum daily TBEL was calculated to be 4.5 mg/L for both summer and winter. Due to the TBEL being more stringent, they are the limits recommended by the Department. No ammonia decay due to the discharge being directly to Lake of the Ozarks.

Triangular Prism Method

Mixing Zone (MZ) Parameters: According to the USGS 1:24,000K Quadrangle, the mainstem lake width near the *assumed* new facility outfall location is approximately 2250 feet (ft). One-quarter of this width equals 562 ft. Therefore, because 100 feet is less than 562 ft, MZ Width = 100 feet [10 CSR 20-7.031(4)(A)5.B.(IV)(a)].

Mixing Zone Volume: The flow volume approximates a triangular prism because of the slope of the lake bottom, where the formula is Volume = L*W*(D*0.5). Assuming that the width will be either side of the discharge (MZ) length (100 feet) to form the plume effect, the box dimensions are length (L) = 100 ft, width (W) = 100 ft, and depth (D) = 20 ft. Depth was obtained using mixing zone length projected 100 ft from shoreline to the intersecting contour on 7.5' USGS topographic map.

Volume = L*W*(D*(0.5)) = (100')*(100')*(20'*0.5) = 100,000 ft³. The flow volume of 100,000 ft³ is assumed as the daily mixing zone.

Therefore; (100,000 ft³/day)*(1 day/86,400 sec) = 1.16 ft³/sec.

Summer

$$C_e = (((Q_e + Q_s) * C) - (Q_s * C_s)) / Q_e$$

Chronic WLA: $C_e = ((0.001 + 1.16)1.5 - (1.16 * 0.01)) / 0.001$

$$C_e = 1730 \text{ mg/L}$$

Acute WLA: $C_e = ((0.001 + 0.0)12.1 - (0.0 * 0.01)) / 0.001$

$$C_e = 12.1 \text{ mg/L}$$

$$LTA_c = 1730 \text{ mg/L} (0.780) = 1350 \text{ mg/L}$$

$$LTA_a = 12.1 \text{ mg/L} (0.321) = 3.9 \text{ mg/L}$$

[CV = 0.6, 99th Percentile, 30 day avg.]

[CV = 0.6, 99th Percentile]

$$\text{MDL} = 3.9 \text{ mg/L} (3.11) = 12.1 \text{ mg/L}$$

$$\text{AML} = 3.9 \text{ mg/L} (1.19) = 4.6 \text{ mg/L}$$

[CV = 0.6, 99th Percentile]

[CV = 0.6, 95th Percentile, n = 30]

Winter – Not calculated due to acute value being more protective than the chronic value. Winter chronic value is higher than the summer value used above.

Technology-based wasteload allocation (average monthly limit) for the recirculating gravel filter is proposed at 3.0 mg/L. The Maximum Daily Limitation (MDL) = 1.5 x AML = 4.5 mg/L. These technology-based effluent limits are applicable as they are more protective than the water quality based effluent limits. Therefore, the technology-based limits are used for this proposed facility as noted in the table below:

Season	Maximum Daily Limit (mg/l)	Average Monthly Limit (mg/l)
Summer & Winter	4.5	3.0



KBF

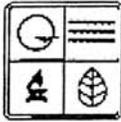
Reviewer: Keith Forck
Date: June 19, 2009
Unit Chief: John Rustige
Section Chief: Refaat Mefrakis

Monitoring and effluent limits contained within this document have been developed in accordance with EPA guidelines using the best available data and are believed to be consistent with Missouri's Water Quality Standards and Effluent Regulations. If additional water quality data or anecdotal information are available that may affect the recommended monitoring and effluent limits, please forward these data and information to the author.

APPENDIX B: ANTIDegradation Review Summary Attachments

The attachments that follow contain summary information provided by the applicant

- 1) Tier Determination and Effluent Limit Summary Sheet: Water Body Segment coordinates, tier determination and effluent limits for BOD₅, TSS, Dissolved Oxygen, Ammonia as N, Bacteria (Fecal Coliform and E.coli), Oil and Grease, and pH.
- 2) Attachment A: Summary of the alternatives analysis.



STATE OF MISSOURI
 MISSOURI DEPARTMENT OF NATURAL RESOURCES
 WATER POLLUTION CONTROL PROGRAM
ANTIDEGRADEATION REVIEW SUMMARY
TIER DETERMINATION AND EFFLUENT LIMIT SUMMARY
 UNDER MISSOURI CLEAN WATER LAW



1.00 FACILITY			
NAME Lots 3&4 Eagle View WWTP		PHONE 417.839.6603	
ADDRESS (PHYSICAL) 1680 Camp Hohn Dr.		CITY Gravois Mills	STATE ZIP MO 65037

2.00 RECEIVING WATER BODY SEGMENT #1			
NAME Lake of the Ozarks			
2.0	UPPER END OF SEGMENT (Location of discharge) UTM _____ OR Lat N38D10M49.2S, Long W92D53M41.5S		
2.1	LOWER END OF SEGMENT UTM _____ OR Lat N38D10M41.1S, Long W92D53M52.2S		

3.00 WATER BODY SEGMENT #2 (IF APPLICABLE)			
NAME			
3.0	UPPER END OF SEGMENT UTM _____ OR Lat _____, Long _____		
3.1	LOWER END OF SEGMENT UTM _____ OR Lat _____, Long _____		

4.00 WATER BODY SEGMENT #3 (IF APPLICABLE)			
NAME			
4.0	UPPER END OF SEGMENT UTM _____ OR Lat _____, Long _____		
4.1	LOWER END OF SEGMENT UTM _____ OR Lat _____, Long _____		

5.00 PROJECT INFORMATION	
Is the receiving water body an Outstanding National Resource Water (ONRW), an Outstanding State Resource Water (OSRW), or drainage thereto? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <small>In Tables D and E of 10 CSR 20-7.031, ONRWs and OSRWs are listed. For the Missouri Antidegradation Rule and Implementation Procedure (AIP) Section 1.B.3., "any degradation of water quality is prohibited in these waters unless the discharge only results in temporary degradation." Therefore, if degradation is significant or minimal, the Antidegradation Review will be denied.</small>	
Will the proposed discharge of all pollutants of concern (POCs) result in no net increase in the ambient water quality concentration of the receiving water after mixing? <input type="checkbox"/> YES <input type="checkbox"/> NO <small>If yes, submit a summary table showing the levels of each POC before and after the proposed discharge in the receiving water and then complete Attachment B for the first downstream classified Water Body Segment.</small>	
Will the discharge result in temporary degradation? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <small>If yes complete Attachment C.</small>	
Has the project been determined as non-degrading? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <small>If yes complete No Degradation Evaluation - Conclusion of Antidegradation Review Form. Submit with the appropriate Construction Permit Application as no antidegradation review is required.</small>	
Is Tier 2 with significant degradation assumed for all Pollutants of Concern? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <small>If yes, complete Attachment A. If AIP Section II.A. states that an applicant may avoid having to determine the assimilative capacity of receiving water and, consequently, may proceed directly into performing the alternatives analysis and the social and economic importance of the discharge.</small>	

6.00 WET WEATHER ANTICIPATIONS	
<small>If an applicant anticipates excessive inflow and/or infiltration and pursues approval from the department to bypass secondary treatment, a feasibility analysis is required. The feasibility analysis must comply with the criteria of all applicable state and federal regulations including 40 CFR 122.41(m)(4). Please attach the feasibility analysis to this report.</small>	
What is the Wet Weather Flow Peaking Factor in relation to Design Flow? <u>1</u>	
Wet Weather Design Summary: No infiltration	

If yes to one of the above questions, skip the Existing Water Quality Data (EWQ) or Model Summary Section and the Pollutants of Concern (POCs) and the Tier Determination(s) Section (Page 2). Continue on Page 3.

7.00 EXISTING WATER QUALITY (EWQ) DATA OR MODEL SUMMARY

Obtaining EWQ is possible by three methods according to the AIP Section II.A.1.: (1) using previously collected data with an appropriate Quality Assurance Project Plan (QAPP) (2) collecting water quality data by approved the Missouri Department of Natural Resources (department) methodology or (3) using an appropriate water quality model. QAPPs must be submitted to the department for approval well in advance (six months) of the proposed activity. Please provide all the appropriate corresponding data and reports which were approved by the department Water Quality Monitoring and Assessment Section (WQMA).

Date EWQ data was provided by the department WQMA:

Approval date of the QAPP by the department WQMA:

Approval date of the project sampling plan by the department WQMA:

Approval date of the data collected for all appropriate pollutants of concern (POC) by the department WQMA:

Comments/Discussion:

8.00 POLLUTANTS OF CONCERN (POCs) AND TIER DETERMINATION(S)

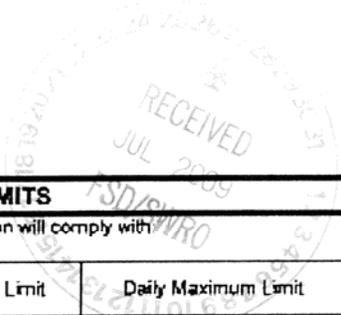
POCs to be considered include those pollutants reasonably expected to be present in the discharge per the AIP Section II.S. The tier protection levels are specified and defined in rule at 10 CSR 20-7.031 (2).

Water Body Segment One Pollutants of Concern and Tier Determination (s)		
Tier 1	Tier 2 with Minimal Degradation	Tier 2 with Significant Degradation
		BOD-5
		TSS
		Ammonia
		fecal
		DO

* Assumed Tier 2 with Significant Degradation.

Water Body Segment Two Pollutants of Concern and Tier Determination (s)		
Tier 1	Tier 2 with Minimal Degradation	Tier 2 with Significant Degradation

- For pollutants of concern that are Tier 2 with significant degradation, complete Attachment A.
- For pollutants of concern that are Tier 2 with minimal degradation, complete Attachment B.
- For pollutants of concern that are Tier 1, complete Attachment D. Additionally, a Tier 2 review must be conducted for each pollutant of concern on the appropriate water body segment.



8.00 SUMMARY OF THE PROPOSED ANTIDEGRADATION REVIEW EFFLUENT LIMITS

What are the proposed pollutants of concern and their respective effluent limits that the selected treatment option will comply with:

Pollutant of Concern	Units	Wasteload Allocation	Average Monthly Limit	Daily Maximum Limit
BOD5	mg/l		10	
TSS	mg/l		10	
Dissolved Oxygen	mg/l		5	
Ammonia	mg/l		3.0	
Bacteria (fecal)	/100 ml		400	

These proposed limits will not violate water quality standards, be protective of beneficial uses, and achieve the highest statutory and regulatory requirements.

Please attach the Antidegradation Review report and all supporting documentation.

CONSULTANT: I have prepared/reviewed this form and all attached reports and documentation. The conclusion proposed is consistent with the AIP and current state and federal regulation.

SIGNATURE			DATE 5-20-09		
NAME AND OFFICIAL TITLES Rockne C. Miller, PE					
COMPANY NAME Miller/Lindsay Inc.					
ADDRESS P.O. Box 282		CITY Osage Beach	STATE MO	ZIP CODE 65065	
TELEPHONE NUMBER 573.348.9799			PHONE NUMBERS		

OWNER: I have read and reviewed the prepared documents and agree with this submittal.

SIGNATURE			DATE 5-26-09		
NAME AND OFFICIAL TITLES Von Puckett, Developer					
ADDRESS 513 N. Dill St.		CITY Marshfield	STATE MO	ZIP CODE 65706	
TELEPHONE NUMBER 573.839.6603			PHONE NUMBERS		

CONTINUING AUTHORITY: Continuing Authority is the permanent organization which will be responsible for the operation, maintenance and modernization of the facility. The regulatory requirement regarding continuing authority is available at <http://www.sos.mo.gov/adrules/csr/current/10csr/10c20-6a.pdf>.

I have read and reviewed the prepared documents and agree with this submittal.

SIGNATURE			DATE		
NAME AND OFFICIAL TITLES					
ADDRESS		CITY	STATE	ZIP CODE	
TELEPHONE NUMBER			PHONE NUMBERS		



STATE OF MISSOURI
 MISSOURI DEPARTMENT OF NATURAL RESOURCES
 WATER POLLUTION CONTROL PROGRAM
ANTIDegradation REVIEW SUMMARY
ATTACHMENT A: TIER 2 – SIGNIFICANT DEGRADATION
 UNDER MISSOURI CLEAN WATER LAW

1.00 FACILITY

NAME Lots 3&4 Eagle View WWTP		PHONE 417.839.6606	
ADDRESS (PHYSICAL) 1680 Camp Hohn Dr.	CITY Gravois Mills	STATE MO	ZIP 65037

2.00 RECEIVING WATER BODY SEGMENT (WBS) #1

NAME
Lake of the Ozarks

3.00 WATER BODY SEGMENT (WBS) #2 (IF APPLICABLE)

NAME

4.00 IDENTIFYING ALTERNATIVES:

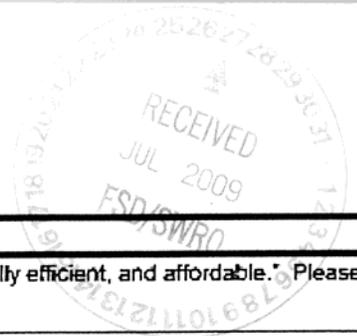
Please supply a summary of the alternatives considered and the level of treatment attainable with regards to the alternative. "For Discharges likely to cause significant degradation, an analysis of non-degrading and less-degrading alternatives must be provided," as stated in the AIP Section II.B.1. Per 10 CSR 20-6.010(4)(D)1., the feasibility of a no-discharge system must be considered. Please attach all supportive documentation in the Antidegradation Review report.

Non-degrading alternatives: Land Application, Subsurface irrigation, discharge to regional system, alternative discharge location

Alternatives ranging from less-degrading to degrading including Preferred Alternative (All must meet Water Quality Standards):

Alternatives	Level of treatment attainable for each POC				
	BOD (mg/L)	TSS (mg/L)	Ammonia as N (mg/L)	Bacteria (fecal) (#/100mL)	Dissolved Oxygen
Membrane Biological Reactor	5	1	1	400	5
Intermittent Sand Filter	3	6	3.0	400	5
Recirculating Rock Filter	10	10	3.0	400	5
Extended Aeration with filtration	10	15	3.0	400	5
Extended Aeration	20	20	3.0	400	5

Identifying Alternatives Summary: The base technology for protection of beneficial use is the extended aeration treatment plant. The attached report discusses all non-degrading through degrading options considered. The report details why non-degrading and less degrading options were not chosen to be proposed based on practicality, economic and other issues.



5.00 DETERMINATION FO THE REASONABLE ALTERNATIVE:

Per the AIP Section II.B.2, "a reasonable alternative is one that is practicable, economically efficient, and affordable." Please provide basis and supporting documentation in the Antidegradation Review report.

Practicability Summary:

"The practicability of an alternative is considered by evaluating the effectiveness, reliability, and potential environmental impacts," according to the AIP Section II.B.2.a. Examples of factors to consider, including secondary environmental impacts, are given in the AIP Section II.B.2.a.

Land application was found to be not technically feasible. Subsurface application and onsite treatment was found to be not technically feasible. Connecting the project site to an existing regional treatment facility was found to be not technically feasible. Alternative discharge location was found to be not practical. Extended aeration. Recirculating rock filter. Extended aeration with effluent filtration and Membrane biological reactor was found to meet effective and reliability issues based on technical and reliability issues as well as environmental factors.

Economic Efficiency Summary:

Alternatives that are deemed practicable must undergo a direct cost comparison in order to determine economic efficiency. Means to determine economic efficiency are provided in the AIP Section II.B.2.b.

Present worth economic analysis showed the cost effective alternative to be Recirculating rock filter. Extended aerations did not provide better discharge quality and cost more. Extended aeration with filtration provided no improvement in discharge quality at 340 percent of base cost. Intermittent sand filter at 219 percent of base cost and Membrane biological reactor at 1,580 percent of base cost were deemed not cost effective.

Affordability Summary:

Alternatives identified as most practicable and economically efficient are considered affordable if the applicant does not supply an affordability analysis. An affordability analysis per the AIP Section II.B.2.c, "may be used to determine if the alternative is too expensive to reasonably implement."

Affordability analysis was not performed

Preferred Chosen Alternative:

Recirculating Rock Filter

Reasons for Rejecting the other Evaluated Alternatives:

Cost to construct extended aeration treatment plant with effluent filtration were not economically efficient. This project requires the treatment plant to be located where the intermittent sand filter may allow vector contact directly to those served. The multiple times the media will be required to be replaced is also a major concern for those served as service would be interrupted.

Comments/Discussion:

All alternatives were capable of meeting water quality standards and able to protect existing uses.

SOCIAL AND ECONOMIC IMPORTANCE (SEI) OF THE PREFERRED ALTERNATIVE:

If the preferred alternative will result in significant degradation, then it must be demonstrated that it will allow important economic and social development in accordance to the AIP Section II.E. SEI is defined as the social and economic benefits to the community that will occur from any activity involving a new or expanding discharge.

Identify the affected community:

The affected community is defined in 10 CSR 20-7.031(2)(B) as the community "in the geographical area in which the waters are located.; Per the AIP Section II.E.1, "the affected community should include those living near the site of the proposed project as well as those in the community that are expected to directly or indirectly benefit from the project."

Land owners in the Lake of the Ozarks area

Identify relevant factors that characterize the social and economic conditions of the affected community:

Examples of social and economic factors are provided in the AIP Section II.E.1., but specific community examples are encouraged.

This project provides lower cost homes and increases tax revenues for taxing entities.

Describe the important social and economic development associated with the project:

Determining benefits for the community and the environment should be site specific and in accordance with the AIP Section II.E.1.

Relocation option to people on failing unmonitored onsite septic systems.

PROPOSED PROJECT SUMMARY:

Provide housing in the Lake of the Ozarks area at a location that will have a monitored sewage treatment facility at acceptable discharge levels.

Please attach the Antidegradation Review report and all supporting documentation. This is a technical document, which must be signed, sealed, and dated by a registered professional engineer of Missouri.

CONSULTANT: I have prepared/reviewed this from and all attached reports and documentation. The conclusion proposed in consistent with the AIP and current state and federal regulations.

SIGNATURE



DATE

5/20/09

PRINT NAME

Rockne C. Miller, PE

LICENSE #:

E-26097

TELEPHONE NUMBER

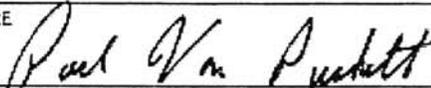
573.349.9799

E-MAIL ADDRESS.

OWNER:

I have read and reviewed the prepared documents and agree with this submittal.

SIGNATURE



DATE

5-26-09

CONTINUING AUTHORITY: I have read and reviewed the prepared documents and agree with this submittal.

SIGNATURE

DATE

**STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION**

**Revised
October 1, 1980**

**PART I - GENERAL CONDITIONS
SECTION A - MONITORING AND REPORTING**

1. **Representative Sampling**
 - a. Samples and measurements taken as required herein shall be representative of the nature and volume, respectively, of the monitored discharge. All samples shall be taken at the outfall(s), and unless specified, before the effluent joins or is diluted by any other body of water or substance.
 - b. Monitoring results shall be recorded and reported on forms provided by the Department, postmarked no later than the 28th day of the month following the completed reporting period. Signed copies of these, and all other reports required herein, shall be submitted to the respective Department Regional Office, the Regional Office address is indicated in the cover letter transmitting the permit.
2. **Schedule of Compliance**

No later than fourteen (14) calendar days following each date identified in the "Schedule of Compliance", the permittee shall submit to the respective Department Regional Office as required therein, either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements, or if there are no more scheduled requirements, when such noncompliance will be corrected. The Regional Office address is indicated in the cover letter transmitting the permit.
3. **Definitions**

Definitions as set forth in the Missouri Clean Water Law and Missouri Clean Water Commission Definition Regulation 10 CSR 20-2.010 shall apply to terms used herein.
4. **Test Procedures**

Test procedures for the analysis of pollutant shall be in accordance with the Missouri Clean Water Commission Effluent Regulation 10 CSR 20-7015.
5. **Recording of Results**
 - a. For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:
 - (i) the date, exact place, and time of sampling or measurements;
 - (ii) the individual(s) who performed the sampling or measurements;
 - (iii) the date(s) analyses were performed;
 - (iv) the individual(s) who performed the analyses;
 - (v) the analytical techniques or methods used; and
 - (vi) the results of such analyses.
 - b. The Federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six (6) months per violation, or both.
 - c. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.
6. **Additional Monitoring by Permittee**

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Monitoring Report Form. Such increased frequency shall also be indicated.

7. **Records Retention**

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recording for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

SECTION B - MANAGEMENT REQUIREMENTS

1. **Change in Discharge**
 - a. All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant not authorized by this permit or any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit.
 - b. Any facility expansions, production increases, or process modifications which will result in new, different, or increased discharges of pollutants shall be reported by submission of a new NPDES application at least sixty (60) days before each such change, or, if they will not violate the effluent limitations specified in the permit, by notice to the Department at least thirty (30) days before such changes.
2. **Noncompliance Notification**
 - a. If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum effluent limitation specified in this permit, the permittee shall provide the Department with the following information, in writing within five (5) days of becoming aware of such conditions:
 - (i) a description of the discharge and cause of noncompliance, and
 - (ii) the period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.
 - b. Twenty-four hour reporting. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally with 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided with five (5) days of the time the permittee becomes aware of the circumstances. The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
3. **Facilities Operation**

Permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions. Operators or supervisors of operations at publicly owned or publicly regulated wastewater treatment facilities shall be certified in accordance with 10 CSR 209.020(2) and any other applicable law or regulation. Operators of other wastewater treatment facilities, water contaminant source or point sources, shall, upon request by the Department, demonstrate that wastewater treatment equipment and facilities are effectively operated and maintained by competent personnel.
4. **Adverse Impact**

The permittee shall take all necessary steps to minimize any adverse impact to waters of the state resulting from noncompliance with any effluent limitations specified in this permit or set forth in the Missouri Clean Water Law and Regulations (hereinafter the Law and Regulations), including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

- a. Any bypass or shut down of a wastewater treatment facility and tributary sewer system or any part of such a facility and sewer system that results in a violation of permit limits or conditions is prohibited except:
 - (i) where unavoidable to prevent loss of life, personal injury, or severe property damages; and
 - (ii) where unavoidable excessive storm drainage or runoff would catastrophically damage any facilities or processes necessary for compliance with the effluent limitations and conditions of this permit;
 - (iii) where maintenance is necessary to ensure efficient operation and alternative measures have been taken to maintain effluent quality during the period of maintenance.
 - b. The permittee shall notify the Department in writing of all bypasses or shut down that result in a violation of permit limits or conditions. This section does not excuse any person from liability, unless such relief is otherwise provided by the statute.
6. **Removed Substances**
Solids, sludges, filter backwash, or any other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutants from entering waters of the state unless permitted by the Law, and a permanent record of the date and time, volume and methods of removal and disposal of such substances shall be maintained by the permittee.
 7. **Power Failures**
In order to maintain compliance with the effluent limitations and other provisions of this permit, the permittee shall either:
 - a. in accordance with the "Schedule of Compliance", provide an alternative power source sufficient to operate the wastewater control facilities; or,
 - b. if such alternative power source is not in existence, and no date for its implementation appears in the Compliance Schedule, halt or otherwise control production and all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.
 8. **Right of Entry**
For the purpose of inspecting, monitoring, or sampling the point source, water contaminant source, or wastewater treatment facility for compliance with the Clean Water Law and these regulations, authorized representatives of the Department, shall be allowed by the permittee, upon presentation of credentials and at reasonable times;
 - a. to enter upon permittee's premises in which a point source, water contaminant source, or wastewater treatment facility is located or in which any records are required to be kept under terms and conditions of the permit;
 - b. to have access to, or copy, any records required to be kept under terms and conditions of the permit;
 - c. to inspect any monitoring equipment or method required in the permit;
 - d. to inspect any collection, treatment, or discharge facility covered under the permit; and
 - e. to sample any wastewater at any point in the collection system or treatment process.
 9. **Permits Transferable**
 - a. Subject to Section (3) of 10 CSR 20-6.010 an operating permit may be transferred upon submission to the Department of an application to transfer signed by a new owner. Until such time as the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
 - b. The Department, within thirty (30) days of receipt of the application shall notify the new permittee of its intent to revoke and reissue or transfer the permit.
 10. **Availability of Reports**
Except for data determined to be confidential under Section 308 of the Act, and the Law and Missouri Clean Water Commission Regulation for Public Participation, Hearings and Notice to Governmental Agencies 10 CSR 20-6.020, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by statute, effluent data shall not be considered confidential. Knowingly making any false statement on any such report shall be subject to the imposition of criminal penalties as provided in Section 204.076 of the Law.
 - a. Subject to compliance with statutory requirements of the Law and Regulations and applicable Court Order, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
 - (i) violation of any terms or conditions of this permit or the Law;
 - (ii) having obtained this permit by misrepresentation or failure to disclose fully any relevant facts;
 - (iii) a change in any circumstances or conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge, or
 - (iv) any reason set forth in the Law and Regulations.
 - b. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
12. **Permit Modification - Less Stringent Requirements**
If any permit provisions are based on legal requirements which are lessened or removed, and should no other basis exist for such permit provisions, the permit shall be modified after notice and opportunity for a hearing.
 13. **Civil and Criminal Liability**
Except as authorized by statute and provided in permit conditions on "Bypassing" (Standard Condition B-5) and "Power Failures" (Standard Condition B-7) nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.
 14. **Oil and Hazardous Substance Liability**
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act, and the Law and Regulations. Oil and hazardous materials discharges must be reported in compliance with the requirements of the Federal Clean Water Act.
 15. **State Laws**
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state statute or regulations.
 16. **Property Rights**
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of or violation of federal, state or local laws or regulations.
 17. **Duty to Reapply**
If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit 180 days prior to expiration of this permit.
 18. **Toxic Pollutants**
If a toxic effluent standard, prohibition, or schedule of compliance is established, under Section 307(a) of the Federal Clean Water Act for a toxic pollutant in the discharge of permittee's facility and such standard is more stringent than the limitations in the permit, then the more stringent standard, prohibition, or schedule shall be incorporated into the permit as one of its conditions, upon notice to the permittee.
 19. **Signatory Requirement**
All reports, or information submitted to the Director shall be signed (see 40 CFR-122.6).
 20. **Rights Not Affected**
Nothing in this permit shall affect the permittee's right to appeal or seek a variance from applicable laws or regulations as allowed by law.
 21. **Severability**
The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

**STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
AUGUST 15, 1994**

PART III – SLUDGE & BIOSOLIDS FROM DOMESTIC WASTEWATER TREATMENT FACILITIES

SECTION A – GENERAL REQUIREMENTS

1. This permit pertains to sludge requirements under the Missouri Clean Water Law and regulation and incorporates applicable federal sludge disposal requirements under 40 CFR 503. The Environmental Protection Agency (EPA) has principal authority for permitting and enforcement of the federal sludge regulations under 40 CFS 503 until such time as Missouri is delegated the new EPA sludge program. EPA has reviewed and accepted these standard sludge conditions. EPA may choose to issue a separate sludge addendum to this permit or a separate federal sludge permit at their discretion to further address federal requirements.
2. These PART III Standard Conditions apply only to sludge and biosolids generated at domestic wastewater treatment facilities, including public owned treatment works (POTW) and privately owned facilities.
3. Sludge and Biosolids Use and Disposal Practices.
 - a. Permittee is authorized to operate the sludge and biosolids treatment, storage, use, and disposal facilities listed in the facility description of this permit.
 - b. Permittee shall not exceed the design sludge volume listed in the facility description and shall not use sludge disposal methods that are not listed in the facility description, without prior approval of the permitting authority.
 - c. Permittee is authorized to operate the storage, treatment or generating sites listed in the Facility Description section of this permit.
 - d. A separate operating permit is required for each operating location where sludge or biosolids are generated, stored, treated, or disposed, unless specifically exempted in this permit or in 10 CSR 20, Chapter 6 regulations. For land application, see section H, subsection 3 of these standard conditions.
4. Sludge Received From Other Facilities
 - a. Permittees may accept domestic wastewater sludge from other facilities including septic tank pumpings from residential sources as long as the design sludge volume is not exceeded and the treatment facility performance is not impaired.
 - b. The permittee shall obtain a signed statement from the sludge generator or hauler that certifies the type and source of the sludge.
 - c. Sludge received from out-of-state generators shall receive prior approval of the permitting authority and shall be listed in the facility description or special conditions section of the permit.
5. These permit requirements do not supersede nor remove liability for compliance with county and other local ordinances.
6. These permit requirements do not supersede nor remove liability for compliance with other environmental regulations such as odor emissions under the Missouri Air Pollution Control Law and regulations.
7. This permit may (after du process) be modified, or alternatively revoked and reissued, to comply with any applicable sludge disposal standard or limitation issued or approved under Section 405(d) of the Clean Water Act or under Chapter 644 RsMo.
8. In addition to the STANDARD CONDITIONS, the department may include sludge limitations in the special conditions portion or other sections of this permit.
9. Alternate Limits in Site Specific Permit.

Where deemed appropriate, the department may require an individual site specific permit in order to authorize alternate limitations:

 - a. An individual permit must be obtained for each operating location, including application sites.
 - b. To request a site specific permit, an individual permit application, permit fees, and supporting documents shall be submitted for each operating location. This shall include a detailed sludge/biosolids management plan or engineering report.
10. Exceptions to these Standard Conditions may be authorized on a case-by-case basis by the department, as follows:
 - a. The department will prepare a permit modification and follow permit public notice provisions as applicable under 10 CSR 20-6.020, 40 CFR 124.10, and 40 CFR 501.15(a)(2)(ix)(E). This includes notification of the owners of property located adjacent to each land application site, where appropriate.
 - b. Exceptions cannot be granted where prohibited by the federal sludge regulations under 40 CFR 503.
11. Compliance Period
Compliance shall be achieved as expeditiously as possible but no later than the compliance dates under 40 CFR 503.2.

SECTION B – DEFINITIONS

1. Biosolids means an organic fertilizer or soil amendment produced by the treatment of domestic wastewater sludge. Untreated sludge or sludge that does not conform to the pollutants and pathogen treatment requirements in this permit is not considered biosolids.
2. Biosolids land application facility is a facility where biosolids are spread onto the land at agronomic rates for production of food or fiber. The facility includes any structures necessary to store the biosolids until soil, weather, and crop conditions are favorable for land application.
3. Class A biosolids means a material that has met the Class A pathogen reduction requirements or equivalent treatment by a Process to Further Reduce Pathogens (PFRP) in accordance with 40 CFR 503.
4. Class B biosolids means a material that has met the Class B pathogen reduction requirements or equivalent treatment by a Process to Significantly Reduce Pathogens (PFRP) in accordance with 40 CFR 503.
5. Domestic wastewater means wastewater originating from the sanitary conveniences of residences, commercial buildings, factories and institutions; or co-mingled sanitary and industrial wastewater processed by a public owned treatment works (POTW) or privately owned facility.
6. Mechanical treatment plants are wastewater treatment facilities that use mechanical devices to treat wastewater, including septic tanks, extended aeration, activated sludge, contact stabilization, trickling filters, rotating biological discs, and other similar facilities. It does not include un aerated wastewater treatment lagoons and constructed wetlands for wastewater treatment.
7. Operating location as defined in 10 CSR 20-2.010 is all contiguous lands owned, operated or controlled by one (1) person or by two (2) or more persons jointly or as tenants in common.
8. Plant Available Nitrogen (PAN) is the nitrogen that will be available to plants during the next growing season after biosolids application.
9. Sinkhole is a depression in the land surface into which surface water flows to join an underground drainage system.
10. Site Specific Permit is a permit that has alternate limits developed to address specific site conditions for each land application site or storage site.
11. Sludge is the solid, semisolid, or liquid residue removed during the treatment of wastewater. Sludge includes septage removed from septic tanks.
12. Sludge lagoon is an earthen basin that receives sludge that has been removed from a wastewater treatment facility. It does not include a wastewater treatment lagoon or sludge treatment units that are not a part of a mechanical wastewater treatment facility.
13. Wetlands are those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamp, marshes, bogs, and similar areas. Wetlands do not include constructed wetlands used for wastewater treatment.

SECTION C – MECHANICAL WASTEWATER TREATMENT FACILITIES

1. Sludge shall be routinely removed from the wastewater treatment facilities and handled according to the permit facility description and sludge conditions in this permit.
2. The permittee shall operate the facility so that there is no sludge loss into the discharged effluent in excess of permit limits, no sludge bypassing, and no discharge of sludge to waters of the state.
3. Mechanical treatment plants shall have separate sludge storage compartments in accordance with 10 CSR 20, Chapter 8. Failure to remove sludge from these storage compartments on the required design schedule is a violation of this permit.

SECTION D – SLUDGE DISPOSED AT OTHER TREATMENT FACILITY OR CONTRACT HAULER

1. This section applies to permittees that haul sludge to another treatment facility for disposal or use contract haulers to remove and dispose of sludge.
2. Permittees that use contract haulers are responsible for compliance with all the terms of this permit including final disposal, unless the hauler has a separate permit for sludge or biosolids disposal issued by the department; or the hauler transports the sludge to another permitted treatment facility.
3. The permittee shall require documentation from the contractor of the disposal methods used and permits obtained by the contractor.
4. Testing of sludge, other than total solids content, is not required if sludge is hauled to a municipal wastewater treatment facility or other permitted wastewater treatment facility.

SECTION E – WASTEWATER TREATMENT LAGOONS AND STORMWATER RETENTION BASINS

1. Sludge that is retained within a wastewater treatment lagoon is subject to sludge disposal requirements when the sludge is removed from the lagoon or when the lagoon ceases to receive and treat wastewater.
2. If sludge is removed during the year, an annual sludge report must be submitted.
3. Storm water retention basins or other earthen basins, which have been used as sludge storage for a mechanical treatment system is considered a sludge lagoon and must comply with Section G of this permit.

SECTION F – INCINERATION OF SLUDGE

1. Sludge incineration facilities shall comply with the requirements of 40 CFR 503 Subpart E; air pollution control regulations under 10 CSR 10; and solid waste management regulations under 10 CSR 80.
2. Permittee may be authorized under the facility description of this permit to store incineration ash in lagoons or ash ponds. This permit does not authorize the disposal of incineration ash. Incineration ash shall be disposed in accordance with 10 CSR 80; or if the ash is determined to be hazardous waste, shall be disposed in accordance with 10 CSR 25.
3. In addition to normal sludge monitoring, incineration facilities shall report the following as part of the annual report, quantity of sludge incinerated, quantity of ash generated, quantity of ash stored; and ash use or disposal method, quantity, and location. Permittee shall also provide the name of the disposal facility and the applicable permit number.
4. Additional limitations, monitoring, and reporting requirements may be addressed in the Special Conditions sections of this permit.

SECTION G – SURFACE DISPOSAL SITES AND SLUDGE LAGOONS

1. Surface disposal sites shall comply with the requirements in 40 CFR 503 Subpart C, and solid waste disposal regulations under 10 CSR 80.
2. Additional limitations, monitoring, and reporting requirements may be addressed in the Special Conditions section of this permit.
3. Effective February 19, 1995, a sludge lagoon that has been in use for more than two years without removal of accumulated sludge, or that has not been properly closed shall comply with one of the following options:
 - a. Permittee shall obtain a site specific permit to address surface disposal requirements under 40 CFR 503, ground water quality regulations under 10 CSR 20, Chapter 7 and 8, and solid waste management regulations under 10 CSR 80;
 - b. Permittee shall clean out the sludge lagoon to remove any sludge over two years old and shall continue to remove accumulated sludge at least every two years or an alternate schedule approved under 40 CFR 503.20(b). In order to avoid damage to the lagoon seal during cleaning, the permittee may leave a layer of sludge on the bottom of the lagoon, upon prior approval of the department; or
 - c. Permittee shall close the lagoon in accordance with Section 1.

SECTION H – LAND APPLICATION

1. The permittee shall not land apply sludge or biosolids unless land application is authorized in the Facility Description or special conditions section of the permit.
2. This permit replaces and terminates all previous sludge management plan approvals by the department for land application of sludge or biosolids.
3. Land application sites within a 20 mile radius of the wastewater treatment facility are authorized under this permit when biosolids are applied for beneficial use in accordance with these standard conditions unless a site specific permit is required under Section A, Subsection 9.
4. Biosolids shall not be applied unless authorized in this permit or exempted under 10 CSR 20, Chapter 6.
 - a. This permit does not authorize the land application of sludge except when sludge meets the definition of biosolids.
 - b. This permit authorizes “Class A or B” biosolids derived from domestic wastewater sludges to be land applied onto grass land, crop land, timber land or other similar agricultural or silviculture lands at rates suitable for beneficial use as organic fertilizer and soil conditioner.
5. Public Contact Sites.

Permittees who wish to apply Class A biosolids to public contact sites must obtain approval from the department. Applications for approval shall be in the form of an engineering report and shall address priority pollutants and dioxin concentrations. Authorization for land applications must be provided in the special conditions section of this permit or in a separate site-specific permit.

6. Agricultural and Silvicultural Sites.

In addition to specified conditions herein, this permit is subject to the attached Water Quality Guides numbers WQ 422 through 426 published by the University of Missouri, and hereby incorporated as though fully set forth herein. The guide topics are as follows:

WQ 422	Land Application of Septage
WQ 423	Monitoring Requirements for Biosolids Land Application
WQ 424	Biosolids Standards for Pathogens and Vectors
WQ 425	Biosolids Standards for Metals and Other Trace Substances
WQ 426	Best Management Practices for Biosolids Land Applications

SECTION I – CLOSURE REQUIREMENTS

1. This section applies to all wastewater treatment facilities (mechanical and lagoons) and sludge or biosolids storage and treatment facilities and incineration ash ponds. It does not apply to land application sites.
2. Permittees who plan to cease operation must obtain department approval of a closure plan which addresses proper removal and disposal of all residues, including sludge, biosolids, and ash. Permittee must maintain this permit until the facility is properly closed per 10 CSR 20-6.010 and 10 CSR 20-6.015.
3. Residuals that are left in place during closure of a lagoon or earthen structure shall not exceed the agricultural loading rates as follows:
 - a. Residuals shall meet the monitoring and land application limits for agricultural rates as referenced in Section H of these standard conditions.
 - b. If a wastewater treatment lagoon has been in operation for 15 years or more, the sludge in the lagoon qualifies for Class B with respect to pathogens (see WQ 424, Table 3), and testing for fecal coliform is not required. For other lagoons, testing for fecal coliform is required to show compliance with Class B limitations. See WQ 423 and 424.
 - c. The allowable nitrogen loading that may be left in the lagoon shall be based on the plant available nitrogen (PAN) loading. See WQ 426 for calculation procedures. For a grass cover crop, the allowable PAN is 300 pounds/acre.
4. When closing a wastewater treatment lagoon with a design treatment capacity equal or less than 150 persons, the residuals are considered “septage” under the similar treatment works” definition. See WQ 422. Under the septage category, residuals may be left in place as follows:
 - a. Testing for metals or fecal coliform is not required.
 - b. If the wastewater treatment lagoon has been in use for less than 15 years, mix lime with the sludge at the rate of 50 pounds of hydrated lime per 1000 gallons (134 cubic feet) of sludge.
 - c. The amount of sludge that may be left in the lagoon shall be based on the plant available nitrogen (PAN) loading. 100 dry tons/acre of sludge may be left in the basin without testing for nitrogen. If more than 100 dry tons/acre will be left in the lagoon, test for nitrogen and determine the PAN in accordance with WQ 426. Allowable PAN loading is 300 pounds/acre.
5. Residuals left within the lagoon shall be mixed with soil on at least a 1 to 1 ratio, the lagoon berms shall be demolished, and the site shall be graded and vegetated so as to avoid ponding of storm water and provide adequate surface water drainage without creating erosion.
6. Lagoon closure activities shall obtain a storm water permit for land disturbance activities that equal or exceed five acres in accordance with 10 CSR 20-6.200.
7. If sludge exceeds agricultural loading rates under Section H or I, a landfill permit or solid waste disposal permit shall be obtained to authorize on-site sludge disposal under the Missouri Solid Waste Management Law and regulations per 10 CSR 80, and the permittee must comply with the surface disposal requirements under 40 CFR 503, Subpart C.

SECTION J – MONITORING FREQUENCY

1. At a minimum, sludge or biosolids shall be tested for volume and percent total solids on a frequency that will accurately represent sludge quantities produced and disposed.
2. Testing for land application is listed under Section H, Subsection 6 of these standard conditions (see WQ 423). Once per year is the minimum test frequency. Additional testing shall be performed for each 100 dry tons of sludge generated or stored during the year.
3. Additional testing may be required in the special conditions or other sections of the permit. Permittees receiving industrial wastewater may be required to conduct additional testing upon request from the department.
4. Monitoring requirements shall be performed in accordance with, “POTW Sludge Sampling and Analysis Guidance Document”, United States Environmental Protection Agency, August 1989, and subsequent revisions.

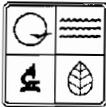
SECTION K – RECORD KEEPING AND REPORTING REQUIREMENTS

1. The permittee shall maintain records on file at the facility for at least five years for the items listed in these Standard Conditions and any additional items in the Special Conditions section of this permit. This shall include dates when the sludge facility is checked for proper operation, records of maintenance and repairs and other relevant information.
2. Reporting Period
 - a. By January 28th of each year, an annual report shall be submitted for the previous calendar year period for all mechanical wastewater treatment facilities, sludge lagoons, and sludge or biosolids disposal facilities.
 - b. Permittees with wastewater treatment lagoons shall submit the above annual report only when sludge or biosolids are removed from the lagoon during the report period or when the lagoon is closed.
3. Report Forms. The annual report shall be submitted on report forms provided by the department or equivalent forms approved by the department.
4. Report shall be submitted as follows:
Major facilities (those serving 10,000 persons or 1 million gallons per day) shall report to both the department and EPA. Other facilities need to report only to the department. Reports shall be submitted to the addresses listed as follows:

DNR regional office listed in your permit
(See cover letter of permit)

EPA Region VII
Water Compliance Branch (WACM)
Sludge Coordinator
901 N 5th Street
Kansas City, KS 66101

5. Annual Report Contents. The annual report shall include the following:
 - a. Sludge/biosolids testing performed. Include a copy or summary of all test results, even if not required by this permit.
 - b. Sludge or Biosolids quantity shall be reported as dry tons for quantity generated by the wastewater treatment facility, the quantity stored on site at end of year, and the quantity used or disposed.
 - c. Gallons and % solids data used to calculate the dry ton amounts.
 - d. Description of any unusual operating conditions.
 - e. Final disposal method, dates, and location, and person responsible for hauling and disposal.
 - (1) This must include the name, address and permit number for the hauler and the sludge facility. If hauled to a municipal wastewater treatment facility, sanitary landfill, or other approved treatment facility, give the name and permit number of that facility.
 - (2) Include a description of the type of hauling equipment used and the capacity in tons, gallons, or cubic feet.
 - f. Contract Hauler Activities.
If contract hauler, provide a copy of a signed contract or billing receipts from the contractor. Permittee shall require the contractor to supply information required under this permit for which the contractor is responsible. The permittee shall submit a signed statement from the contractor that he has complied with the standards contained in this permit, unless the contract hauler has a separate sludge disposal or biosolids use permit.
 - g. Land Application Sites.
 - (1) Report the location of each application site, the annual and cumulative dry tons/acre for each site, and the landowners name and address. The location for each spreading site shall be given as legal description for nearest ¼, ¼, Section, Township, Range, and County, or as latitude and longitude.
 - (2) If biosolids application exceeds 2 dry tons/acre/year, report biosolids nitrogen results. Plant Available Nitrogen (PAN) in pounds/acre, crop nitrogen requirement, available nitrogen in the soil prior to biosolids application, and PAN calculations for each site.
 - (3) If the “Low Metals” criteria is exceeded, report the annual and cumulative pollutant loading rates in pounds per acre for each applicable pollutant, and report the percent of cumulative loading which has been reached at each site.
 - (4) Report the method used for compliance with pathogen and vector attraction requirements.
 - (5) Report soil test results for pH, CEC, and phosphorus. If none was tested during the year, report the last date when tested and results.



MISSOURI DEPARTMENT OF NATURAL RESOURCES
 WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
 (SEE MAP FOR APPROPRIATE REGIONAL OFFICE)

APPLICATION FOR TRANSFER OF OPERATING PERMIT

AP17724

FOR AGENCY USE ONLY	
CHECK NO.	1050
DATE RECEIVED	2/10/14
FEE SUBMITTED	100.00

ref
50

1 - 4 TO BE COMPLETED BY CURRENT PERMITTEE (PRESENT OWNER/SELLER). THE FOLLOWING ITEMS PRESENTLY APPLY TO THIS FACILITY: (SEE INSTRUCTIONS FOR APPROPRIATE FEE TO BE SUBMITTED WITH APPLICATION.)

1 FACILITY

NAME Eagle View Lots 3 & 4 Association, Inc. WWTF		TELEPHONE NUMBER WITH AREA CODE (913) 424-5916	
ADDRESS 1696 Camp Hohn Rd	CITY Gravois Mills	STATE MO	ZIP 65037

2 CURRENT OWNER

NAME Eagle View Lots 3 & 4 Association, Inc.		PHONE	E-MAIL
ADDRESS 513 N. Dill St.	CITY Marshfield	STATE MO	ZIP 65706

3 CONTINUING AUTHORITY: (if same as owner, write same.)

NAME SAME		TELEPHONE NUMBER WITH AREA CODE	
ADDRESS	CITY	STATE	ZIP

4 SIGNATURE

I certify I am familiar with the information given above, that to the best of my knowledge and belief such information is true, complete and accurate, and until transfer approval, I agree to continue to abide by the Missouri Clean Water Law and its implementing regulations, orders and decisions, subject to any legitimate appeal available under the Missouri Clean Water Law.

NAME AND OFFICIAL TITLE (TYPE OR PRINT) (see attached documentation showing ownership)	TELEPHONE NUMBER WITH AREA CODE
SIGNATURE	DATE SIGNED

THE FOLLOWING ITEMS (5 -10) WILL APPLY AFTER COMPLETION OF TRANSFER (SALE) AND ARE TO BE COMPLETED BY THE APPLICANT FOR TRANSFER OF OPERATING PERMIT (BUYER) OR AUTHORIZED AGENT.

5 FACILITY

NAME Eagle View Lots 3 & 4 Association, Inc. WWTF		NPDES NUMBER MO- 0136085	TELEPHONE NUMBER WITH AREA CODE (913) 424-5916
ADDRESS 1696 Camp Hohn Rd.	CITY Gravois Mills	STATE MO	ZIP 65037

6 FUTURE OWNER

NAME Eagle View Lots 3 & 4 Association, Inc.		TELEPHONE NUMBER WITH AREA CODE (913) 424-5916	
ADDRESS 1696 Camp Hohn Rd.	CITY Gravois Mills	STATE MO	ZIP 65037

7 CONTINUING AUTHORITY: (if same as owner, write same)

NAME Same		TELEPHONE NUMBER WITH AREA CODE	
ADDRESS	CITY	STATE	ZIP

8 FACILITY CONTACT

NAME Daniel J. Reiter		TELEPHONE NUMBER WITH AREA CODE (913) 424-5916
TITLE Vice President		

9 ADDITIONAL INFORMATION

ANTICIPATED EFFECTIVE DATE OF TRANSFER IN OWNERSHIP
2/3/14

ARE ANY CHANGES IN PRODUCTION, RAW MATERIALS OR IN THE QUANTITY OR QUALITY OF THE DISCHARGES FROM THIS FACILITY PLANNED OR ANTICIPATED?
 YES NO If yes, explain (if additional space is required, attach sheet)

CRL

10.00 SIGNATURE

I certify I am familiar with the information given above, that to the best of my knowledge and belief such information is true, complete and accurate, and upon transfer approval, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders and decisions, subject to any legitimate appeal available under the Missouri Clean Water Law. Further, I certify I have read the existing permit and agree to abide by the terms and conditions once the transfer is complete.

NAME AND OFFICIAL TITLE (TYPE OR PRINT) Daniel J. Reiter, Vice President		TELEPHONE NUMBER WITH AREA CODE (913) 424-5916
SIGNATURE x <i>Daniel J. Reiter</i>		DATE SIGNED x FEB 7, 2014