



Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

APR 11 2014

Mr. Ned Goss, President
Lake Area Waste Water Association, Inc.
515 Old South 5
Camdenton, MO 65020

RE: AP#17613 Title of Project – Three Seasons Condominiums Wastewater Treatment Facility, MO-0103047, Construction Permit No. CP0001626

Dear Mr. Goss:

The Missouri Department of Natural Resources' (Department) Water Protection Program has reviewed and approved the plans and specifications submitted by Total Environmental Services, Inc. for Lake Area Waste Water Association, Inc. Please find enclosed Construction Permit No. CP00001626.

This permit will terminate 12 months from the date of issuance. In accordance with 10 CSR 20-6.010(4)(G), the Department may grant an extension only one time. If you believe that an extension is necessary, you must submit a request and a justification in writing for the extension at least 30 days prior to the permit expiration date.

This construction permit does not supersede any requirements of the operating permit or enforcement actions. Nothing in this permit removes any obligations to comply with county or other local ordinances or restrictions.

If you were adversely affected by this decision, you may appeal to have the matter heard by the Administrative Hearing Commission. To appeal, you must file a petition with the Administrative Hearing Commission within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the Administrative Hearing Commission.

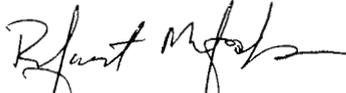


If you have any questions concerning this matter, please contact Cailie McKinney, of the Water Protection Program, at (573) 526-1289 or Missouri Department of Natural Resources, P.O. Box 176, Jefferson City, MO 65102-0176.

Thank you for your efforts to help ensure clean water in Missouri.

Sincerely,

WATER PROTECTION PROGRAM



Refaat H. Mefrakis, P.E.
Engineering Section Chief

RHM: cmi

Enclosures

c: Seth A. Coggin, P.E., Total Environmental Services
Southwest Regional Office
File Copy

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



CONSTRUCTION PERMIT

The Missouri Department of Natural Resources hereby issues a permit to:

Lake Area Waste Water Association, Inc.
515 Old South 5
Camdenton, MO 65020

for the construction of (described facilities):

See attached.

Permit Conditions:

See attached.

Construction of such proposed facilities shall be in accordance with the provisions of the Missouri Clean Water Law, Chapter 644, RSMo, and regulation promulgated thereunder, or this permit may be revoked by the Department of Natural Resources (Department).

As the Department does not examine structural features of design or the efficiency of mechanical equipment, the issuance of this permit does not include approval of these features.

A representative of the Department may inspect the work covered by this permit during construction. Issuance of a permit to operate by the Department will be contingent on the work substantially adhering to the approved plans and specifications.

This permit applies only to the construction of water pollution control components; it does not apply to other environmentally regulated areas.

April 11, 2014
Effective Date

April 10, 2015
Expiration Date

Sara Parker Pauley, Director, Department of Natural Resources

Director of Staff, Clean Water Commission or Designee

CONSTRUCTION PERMIT

I. CONSTRUCTION DESCRIPTION

This project is for the installation of a tablet dechlorination system, Norweco Bio-Dynamic Model IT2000S, or approved equal. This system will be capable of dechlorinating a minimum flow of 200 gallons per day (gpd) and a maximum flow of 100,000 gpd.

Flow measurement will be provided with a Large 60° Trapezoidal flume manufactured by Plasti-Fab and a non-contacting ultrasonic Level/Flow Monitor as manufactured by Greyline Instruments, Inc. The flume will be installed between the new dechlorinator and the sampling port.

II. FINDING OF AFFORDABILITY

The Finding of Affordability is not applicable. The permittee is not a combined or separate sanitary sewer system or a publicly owned treatment works.

III. CONSTRUCTION PERMIT CONDITIONS

The permittee is authorized to construct subject to the following conditions:

1. This construction permit does not authorize discharge.
2. All construction shall be in accordance with the plans and specifications submitted by Total Environmental Services, Inc. on February 4, 2014.
3. The Department must be contacted in writing prior to making any changes to the approved plans and specifications that would directly or indirectly have an impact on the capacity, flow, system layout, or reliability of the proposed wastewater treatment facilities or any design parameter that is addressed by 10 CSR 20-8, in accordance with 10 CSR 20-8.110(8).
4. State and Federal Law does not permit bypassing of raw wastewater, therefore steps must be taken to ensure that raw wastewater does not discharge during construction. If a sanitary sewer overflow or bypass occurs, report the appropriate information to the Department's Southwest Regional Office per 10 CSR 20-7.015(9)(E)2.
5. This Construction Permit is invalid for projects required to comply with the requirements contained in 10 CSR 20-4, "Grants and Loans"
6. Protection of drinking water supplies shall be in accordance with 10 CSR 20-8.120(10). "There shall be no physical connections between a public or private potable water supply system and a sewer, or appurtenance thereto which would permit the passage of any wastewater or polluted water into the potable supply. No water pipe shall pass through or come in contact with any part of a sewer manhole."
7. Sewers in relation to water works structures shall meet the requirements of 10 CSR 23-3.010 with respect to minimum distances from public water supply wells or other water supply sources and structures.

- A. Sewer mains shall be laid at least ten feet horizontally from any existing or proposed water main. The distances shall be measured edge-to-edge. In cases where it is not practical to maintain a ten foot separation, the Department may allow a deviation on a case-by-case basis, if supported by data from the design engineer. Such a deviation may allow installation of the sewer closer to a water main, provided that the water main is in a separate trench or on an undisturbed earth shelf located on either side of the sewer and at an elevation so the bottom of the water main is at least 18 inches above the top of the sewer. If it is impossible to obtain proper horizontal and vertical separation as described above for sewers, the sewer must be constructed of slip-on or mechanical joint pipe or continuously encased and be pressure tested to 150 pounds per square inch to assure water tightness.
 - B. Manholes should be located at least ten feet horizontally from any existing or proposed water main.
 - C. Sewers crossing water mains shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either above or below the sewer. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints. Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to maintain line and grade. When it is impossible to obtain proper vertical separation as stipulated above, one of the following methods must be specified:
 - a. The sewer shall be designed and constructed equal to the water pipe and shall be pressure tested to assure water tightness prior to backfilling; or
 - b. Either the water main or sewer line may be continuously encased or enclosed in a watertight carrier pipe which extends ten feet on both sides of the crossing, measured perpendicular to the water main. The carrier pipe shall be of materials approved by the Department for use in water main construction.
8. In addition to the requirements for a construction permit, 10 CSR 20-6.200 requires land disturbance activities of one acre or more to obtain a Missouri State Operating Permit to discharge stormwater. The permit requires Best Management Practices sufficient to control runoff and sedimentation to protect waters of the state. Land disturbance permits will only be obtained by means of the Department's ePermitting system available online at www.dnr.mo.gov/env/wpp/epermit/help.htm. See www.dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm for more information.
9. A United States (U.S.) Army Corps of Engineers (COE) permit (404) and a Water Quality Certification (401) issued by the Department or permit waiver may be required for the activities described in this permit. This permit is not valid until these requirements are satisfied. If construction activity will disturb any land below the ordinary high water mark of Jurisdictional Waters of the U.S. then a 404/401 will be required. Since the COE makes determinations on what is jurisdictional, you must contact the COE to determine permitting requirements. You may call the Department's Water Protection Program at 573-751-1300 for more information. See www.dnr.mo.gov/env/wpp/401/ for more information.

10. Upon completion of construction;

- A. Submit the enclosed form Statement of Work Completed to the Department in accordance with 10 CSR 20-6.010(5)(D); and
- B. Submit an electronic copy of the as built if the project was not constructed in accordance with previously submitted plans and specifications.
- C. When the facility applies for their next operating permit renewal, they will be expected to include an updated facility description on their application.

IV. REVIEW SUMMARY

1. AMMONIA

The Water Protection Program is providing this notice to inform permittees that EPA's published ammonia criteria for aquatic life protection is lower than the current Missouri criteria. The department has initiated stakeholder discussions on this topic and at this time, there is no firm target date for starting the rulemaking to adopt new standards. More information can be found at <http://www.dnr.mo.gov/pubs/pub2481.htm>.

At a compliance inspection of the facility on December 16, 2013, department staff discussed with the facility owner potential future changes to the water quality standard for ammonia and advised him to attend the March 19, 2014 Wastewater Engineering Workshop in Springfield, Missouri provided by the department for more information about this issue. The department also sent a letter dated December 20, 2013 explaining potential future ammonia limits. The facility plan, approved October 26, 2012, mentioned that ammonia would be addressed at a later date.

Discharge monitoring report data indicate that this facility has consistently discharged ammonia levels less than the expected future ammonia limits under the new EPA criteria for a facility with lake mixing criteria.

2. CONSTRUCTION PURPOSE

The existing operating permit (MO-0103047 issued April 4, 2011) includes a schedule of compliance to meet final effluent limits for total residual chlorine (TRC), effective November 1, 2012, of 0.019 mg/L daily maximum and 0.0095 mg/L monthly average. This construction project will enable the facility to meet these limits.

3. FACILITY DESCRIPTION

This is an extended aeration wastewater treatment facility with disinfection through tablet chlorination. The current design flow is 25,000 gpd with an adjusted design flow of 4,999 gpd. The facility discharges directly to the Lake of the Ozarks.

This construction permit is to add a tablet dechlorinator to the system and install a trapezoidal flume for flow measurement.

4. COMPLIANCE PARAMETERS

The existing operating permit contains final effluent limitations for total residual chlorine of 0.019 mg/L daily maximum and 0.0095 mg/L monthly average effective November 1, 2012. The operating permit also contains final effluent limits for ammonia, effective April 1, 2014, of 12.1 mg/L daily maximum and 4.6 mg/L monthly average. The owner expects that the facility will be capable of meeting the future ammonia limits.

5. REVIEW of MAJOR TREATMENT DESIGN CRITERIA

The calculated peak flow rate for this facility is 71.53 gpm. The maximum flow rate allowed for the IT2000S dechlorinator is 69.44 gpm. This is considered reasonably close, and the capability of this tablet feeder to handle the expected much lower flows from this facility makes it advantageous. Should actual flow measurements indicate that the flows would necessitate the larger dechlorination model, written approval will be required to install the larger model. This approval can be obtained by submitting a revision to the approved plans and specifications under an active construction permit or a complete new application packet for a new construction permit.

The facility will be installing a Large 60° Trapezoidal flume and an ultrasonic Level/Flow Monitor for flow measurement. The ultrasonic flow monitor will provide for indicating, transmitting, and totalizing of the flow rate through the flume.

6. OPERATING PERMIT MODIFICATION

It is expected that the facility owner will include a new facility description in their next operating permit renewal application to reflect the installation of a dechlorination system.

Review Engineer: Cailie McKinney, E.I.
Unit Chief Approval: Cindy LePage, P.E.
Date: 04/02/2014

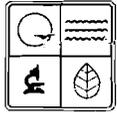
MO0103047

CP0001626

AP17613

C12819

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



**FORM B — APPLICATION FOR CONSTRUCTION OR
OPERATING PERMIT FOR FACILITIES WHICH
RECEIVE PRIMARILY DOMESTIC WASTE
UNDER MISSOURI CLEAN WATER LAW**

FOR AGENCY USE ONLY	
CHECK NUMBER	
DATE RECEIVED	FEE SUBMITTED
2/4/14	088

NOTE PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM

1.00 This application is for: Federal/State an operating permit renewal: permit # _____
 a construction permit Funded Project Expiration date: _____
 an operating permit for a new or unpermitted facility an operating permit modification
(See instructions for appropriate fee to be submitted with application) Reason: ADDITION OF DECONTAMINATION & SAMPLE PORT

2.00 FACILITY

NAME Three Seasons Condominiums WWTF PHONE 573-346-3810
ADDRESS (PHYSICAL) 5499 3 Season Road CITY Osage Beach STATE MO ZIP 65065

2.10 LEGAL DESCRIPTION: 1/4, SE 1/4, SW 1/4, Sec. 04, T 39N R 16W Camden County

2.20 Is this a new facility constructed under a Missouri Construction Permit? YES NO
If yes, please provide Missouri Construction Permit Number: _____

2.30 Name of receiving stream(s) Lake of the Ozarks (L2)

3.00 OWNER

NAME Lake Area Waste Water Association, Inc. EMAIL ADDRESS n/a PHONE 573-346-3810
ADDRESS 515 Old South 5 CITY Camdenton STATE MO ZIP 65020

3.10 Request review of draft permit prior to Public Notice? YES NO

4.00 CONTINUING AUTHORITY: permanent organization which will serve as the continuing authority for the operation, maintenance and modernization of the facility.

NAME Same as Owner PHONE _____
ADDRESS _____ CITY _____ STATE _____ ZIP _____

5.00 OPERATOR

NAME Multiple CERTIFICATE NUMBER _____ PHONE 573-346-3810

6.00 FACILITY CONTACT

NAME Ned Goss TITLE President PHONE 573-346-3810

7.00 ADDITIONAL FACILITY INFORMATION

7.10 Description of facilities (attach additional sheet if required). Attach a 1" = 2000' scale USGS topographic map showing location of all outfalls.

7.15 Facility SIC code: 8641; Discharge SIC code: 4952

7.20 Number of separate discharge points 1

7.30 Number of persons presently connected or population equivalent _____ Design P.E. 234

Number of units presently connected: Homes _____ Trailers _____
Apartments _____ Other _____

Design flow: 25,000 Actual flow: _____

7.40 Does any bypassing occur anywhere in the collection system or at the treatment facility?

Yes No (If yes, attach explanation)

7.50 Is industrial waste discharged to the facility identified in item 2? Yes No (If yes, see instructions.)

7.60 Will the discharge be continuous through the year? Yes No

a. Discharge will occur during the following months: January - December

b. How many days of the week will the discharge occur? Seven

7.65 Is wastewater land applied? Yes No (If yes, attach Form I)

7.70 Will chlorine be added to the effluent? Yes No

a. If chlorine is added, what is the resulting residual? <0.19 mg/l

7.80 Does this facility discharge to a losing stream or sinkhole? Yes No

7.85 Attach a flow chart showing all influents, treatment facilities and outfalls.

7.90 Has a waste load allocation study been completed for this facility? Yes No

7.95 List all permit violations, including effluent limit exceedances in the last 5 years. Attach a separate sheet if necessary.
If none, write none. None-Known

8.00 SLUDGE HANDLING, USE AND DISPOSAL

- 8.10** Is the sludge a hazardous waste as defined by 10 CSR 25? Yes No
- 8.20** Sludge Production, including sludge received from others: 5.1 Design Dry Tons/Year _____ Actual Dry Tons/Year
- 8.30** Capacity of sludge holding structures:
- 7.31 Sludge storage provided: _____ cubic feet; _____ days of storage
 _____ average percent solids of sludge. No sludge storage is provided.
- 7.32 Type of storage: Holding tank Building
 Basin Other (describe) _____
 Concrete Pad _____
- 8.40** Sludge Treatment:
- Anaerobic Digester Lagoon Composting
 Storage Tank Aerobic Digester Other (attach description)
 Lime Stabilization Air or Heat Drying
- 8.50** Sludge Use or Disposal:
- Land Application Surface Disposal (Sludge Disposal Lagoon, Sludge held for more than 2 years)
 Contract Hauler Incineration
 Hauled to Another Treatment Facility Sludge Retained in Wastewater treatment lagoon
 Other _____
 Solid Waste Landfill _____ Attach explanation sheet.
- 8.60 PERSON RESPONSIBLE FOR HAULING SLUDGE TO DISPOSAL FACILITY**
- By Applicant By Others (complete below)

NAME By Owner/Operators Discretion

ADDRESS	CITY	STATE	ZIP
CONTACT PERSON	PHONE	PERMIT NO. MO-	

8.70 SLUDGE USE OR DISPOSAL FACILITY

By Applicant By Others (complete below)

NAME By Hauler's Discretion

ADDRESS	CITY	STATE	ZIP
CONTACT PERSON	PHONE	PERMIT NO. MO-	

8.80 Does the sludge or biosolids disposal comply with federal sludge regulations under 40 CFR 503?
 Yes No (attach explanation)

9.00 DOWNSTREAM LANDOWNER(S). ATTACH ADDITIONAL SHEETS AS NECESSARY. SEE INSTRUCTIONS.

NAME Ameren Union Electric - Shoreline Management Plan - Attn Jeff Green

ADDRESS <u>PO Box 933</u>	CITY <u>Lake Ozark</u>	STATE <u>MO</u>	ZIP <u>65049</u>
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10.00 DRINKING WATER SUPPLY INFORMATION

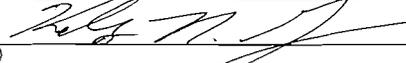
- 10.10** WHAT IS THE SOURCE OF YOUR DRINKING WATER SUPPLY:
- A. Public supply (municipal or water district water)
 If public, please give name of the public supply MO-3190750, Three Seasons Condominiums
- B. Private well _____
- C. Surface water (lake, pond, or stream) _____

10.20 Does your drinking water source serve at least 25 people at least 60 days per year (not necessarily consecutive days)?
 Yes No

10.30 Does your supply serve housing which is occupied year round by the same people? This does not include housing which is occupied seasonally. Yes No

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

NAME AND OFFICIAL TITLE (TYPE OR PRINT) <u>Kelly Goss, Manager</u>	PHONE NO. (AREA CODE & NO.) <u>573-346-3810</u>
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SIGNATURE 	DATE SIGNED <u>1/23/14</u>
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