STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION

CONSTRUCTION PERMIT

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

The Schae Group, Inc.
PO Box 105738
Jefferson City, MO 65110

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.

July 13, 2020
Effective Date

Edward B. Galbraith, Director, Division of Environmental Quality

July 12, 2022
Expiration Date

Chris Wieberg, Director, Water Protection Program

CONSTRUCTION PERMIT

I. CONSTRUCTION DESCRIPTION

The proposed extended aeration with tablet chlorination and dechlorination treatment facility and gravity collection system will serve a new subdivision with 40 residential units and a design flow of 16,000 gpd.

This project includes construction of approximately 4,389 lf of 8-inch PVC SDR-35 gravity sewer lines with approximately twenty-one (21) manholes and seven (7) lampholes.

A manual coarse bar screen with clear bar spacings of 3/8-inch and positioned at an angle of 45 degrees from the horizontal will be installed ahead of the other treatment units.

Aeration for the system is provided by three (3) blowers with a total capacity of 202 cfm.

An aerated flow equalization chamber with a volume of 6,400 gallon will be provided. An air lift pump from the constant head chamber within the flow equalization chamber transfers wastewater to the first aeration chamber.

Three aeration chambers will be provided with a total volume of approximately 17,561 gallons, operating in series by means of a transfer pipe. Aeration is provided through fine bubble diffusers to meet the necessary 49 cfm of air. A transfer pipe and elbow allows wastewater from the third aeration chamber to move by gravity to the clarifier.

The final clarifier will have a settling volume of approximately 3,870 gallons. An air lift surface skimmer is provided to remove grease and floatables and return them to the first/second aeration chamber. An adjustable v-notch weir provides 12 lf of skimming surface. The clarified effluent will flow by gravity to the disinfection system. An air lift pump will be provided to move settled sludge to the sludge holding chamber or return to the aeration chamber as return activated sludge.

The sludge holding chamber will have a volume of 3,590 gallons. The sludge holding chamber will be supplied with 14 cfm of air through fine bubble diffusers. Supernatant will be decanted by means of an adjustable surface skimming airlift to the flow equalization chamber. Sludge removal shall be by contract hauler.

Disinfection will be provided with a tablet chlorinator capable of treating flows between 2,000 and 100,000 gpd. A chlorine contact tank will be installed that allows for at least 15 minutes of contact time during peak flow. Effluent will then be dechlorinated with a tablet dechlorinator capable of treating flows between 2,000 and 100,000 gpd.

A v-notch weir will be installed for flow measurement prior to discharging.

This project will also include general site work appropriate to the scope and purpose of the project and all necessary appurtenances to make a complete and usable wastewater treatment facility.

II. COST ANALYSIS FOR COMPLIANCE

Pursuant to Section 644.145, RSMo, when issuing permits under this chapter that incorporate a new requirement for discharges from publicly owned combined or separate sanitary or storm sewer systems or publicly owned treatment works, or when enforcing provisions of this chapter or the Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq., pertaining to any portion of a publicly owned combined or separate sanitary or storm sewer system or [publicly owned] treatment works, the Department of Natural Resources shall make a "finding of affordability" on the costs to be incurred and the impact of any rate changes on ratepayers upon which to base such permits and decisions, to the extent allowable under this chapter and the Federal Water Pollution Control Act. This process is completed through a cost analysis for compliance. Permits that do not include new requirements may be deemed affordable.

The Department is not required to complete a cost analysis for compliance because the facility is not a combined or separate sanitary sewer system for a publically-owned treatment works.

Cost Analysis for Compliance - The Department has made a reasonable search for empirical data indicating the permit is affordable. The search consisted of a review of Department records that might contain economic data on the community, a review of information provided by the applicant as part of the application, and public comments received in response to public notices of this draft permit. If the empirical cost data was used by the permit writer, this data may consist of median household income, any other ongoing projects that the Department has knowledge, and other demographic financial information that the community provided as contemplated by Section 644. 145.3. See **APPENDIX – COST ANALYSIS FOR COMPLIANCE**.

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 consistent with plans and specifications signed and sealed by Cochran Engineering and Central Missouri Professional Services, Inc. and as described in this permit.

3. The Department must be contacted in writing prior to making any changes to the 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(11).

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 Central Field Office per 10 CSR 20-7.015(9)(G).

5. The wastewater treatment facility shall be located at least fifty feet (50') from any dwelling or establishment.

6. The wastewater treatment facility shall be located above the twenty-five (25)-year flood level.

7. The wastewater facility structures, electrical equipment, and mechanical equipment shall be protected from physical damage by not less than the one hundred- (100-) year flood elevation per 10 CSR 20-8.140(2)(B).The minimum distance between wastewater treatment facilities and all potable water sources shall be at least three hundred feet (300') per 10 CSR 20-8.140(2)(C)1.

8. In addition to the requirements for a construction permit, 10 CSR 20-6.200 requires land disturbance activities of 1 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 dnr.mo.gov/env/wpp/epermit/help.htm. See 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 dnr.mo.gov/env/wpp/401/ for more information.

10. All construction must adhere to applicable 10 CSR 20-8 (Chapter 8) requirements listed below.

10 CSR 20-8.120 Gravity Sewers.

- Rain water from roofs, streets, and other areas and groundwater from foundation drains shall be excluded from all new sewers. 10 CSR 20-8.120 (2)

- Service connections to the gravity sewer main shall be watertight and cannot protrude into the sewer. 10 CSR 20-8.120 (3) (C) 1.

- Location. Manholes shall be installed—10 CSR 20-8.120 (4) (A)
    - At the end of each line;
    - At all changes in grade, size, or alignment;
    - At all sewer pipe intersections; and

  - At distances appropriate to allow for sufficient cleaning and maintenance of sewer lines.

- Vacuum testing, if specified for concrete sewer manholes, shall conform to the test procedures in ASTM C1244 – 11(2017) *Standard Test Method for Concrete Sewer Manholes by the Negative Air Pressure (Vacuum) Test Prior to Backfill*, as approved and published April 1, 2017, or the manufacturer's recommendation.
10 CSR 20-8.120(4)(F)1.

- Exfiltration testing, if specified for concrete sewer manholes, shall conform to the test procedures in ASTM C969 – 17 *Standard Practice for Infiltration and Exfiltration Acceptance Testing of Installed Precast Concrete Pipe Sewer Lines*, as approved and published April 1, 2017. 10 CSR 20-8.120 (4) (F) 2.

- There shall be no physical connections between a public or private potable water supply system and a sewer or appurtenance that would permit the passage of any wastewater or polluted water into the potable supply. 10 CSR 20-8.120 (5) (A)

- Sewers shall be laid at least fifty feet (50') in a horizontal direction from any existing or proposed public water supply well or other water supply sources or structures. Sewers must also comply with 10 CSR 23-3.010. 10 CSR 20-8.120 (5) (B)

10 CSR 20-8.140 Wastewater Treatment Facilities

- Flood protection shall apply to new construction and to existing facilities undergoing major modification. The wastewater facility structures, electrical equipment, and mechanical equipment shall be protected from physical damage by not less than the one hundred- (100-) year flood elevation. 10 CSR 20-8.140 (2) (B)

- Unless another distance is determined by the Missouri Geological Survey or by the department's Public Drinking Water Branch, the minimum distance between wastewater treatment facilities and all potable water sources shall be at least three hundred feet (300'). 10 CSR 20-8.140 (2) (C) 1.

- No treatment unit with a capacity of twenty-two thousand five hundred gallons per day (22,500 gpd) or less shall be located closer than the minimum distance of 50' to a neighboring residence for all other discharging facilities. See 10 CSR 20-2.010(68) for the definition of a residence. 10 CSR 20-8.140 (2) (C) 2

- Facilities shall be readily accessible by authorized personnel from a public right–of-way at all times. 10 CSR 20-8.140 (2) (D)

- The outfall shall be so constructed and protected against the effects of flood water, ice, or other hazards as to reasonably ensure its structural stability and freedom from stoppage. 10 CSR 20-8.140 (6) (A)

- All sampling points shall be designed so that a representative and discrete twenty-four (24) hour automatic composite sample or grab sample of the effluent discharge can be

obtained at a point after the final treatment process and before discharge to or mixing with the receiving waters. 10 CSR 20-8.140 (6) (B)

- All outfalls shall be posted with a permanent sign indicating the outfall number (i.e., Outfall #001). 10 CSR 20-8.140 (6) (C)

- All wastewater treatment facilities shall be provided with an alternate source of electric power or pumping capability to allow continuity of operation during power failures. 10 CSR 20-8.140 (7) (A) 1.

- Disinfection and dechlorination, when used, shall be provided during all power outages. 10 CSR 20-8.140 (7) (A) 2.

- Electrical systems and components in raw wastewater or in enclosed or partially enclosed spaces where hazardous concentrations of flammable gases or vapors that are normally present, shall comply with the NFPA 70 *National Electric Code (NEC)* (2017 Edition), as approved and published August 24, 2016, requirements for Class I, Division 1, Group D locations. 10 CSR 20-8.140 (7) (B)

- An audiovisual alarm or a more advanced alert system, with a self-contained power supply, capable of monitoring the condition of equipment whose failure could result in a violation of the operating permit, shall be provided for all wastewater treatment facilities. 10 CSR 20-8.140 (7) (C)

- No piping or other connections shall exist in any part of the wastewater treatment facility that might cause the contamination of a potable water supply. 10 CSR 20-8.140 (7) (D) 1.

- A means of flow measurement shall be provided at all wastewater treatment facilities. 10 CSR 20-8.140 (7) (E)

- Adequate provisions shall be made to effectively protect facility personnel and visitors from hazards. The following shall be provided to fulfill the particular needs of each wastewater treatment facility:
    - Fencing. Enclose the facility site with a fence designed to discourage the entrance of unauthorized persons and animals; 10 CSR 20-8.140 (8) (A)
    - Gratings over appropriate areas of treatment units where access for maintenance is necessary; 10 CSR 20-8.140 (8) (B)
    - First aid equipment; 10 CSR 20-8.140 (8) (C)
    - Appropriate personal protective equipment (PPE); 10 CSR 20-8.140 (8) (E)
    - Appropriately-placed warning signs for slippery areas, non-potable water fixtures (see subparagraph (7)(D)3.B. of this rule), low head clearance areas, open service manholes, hazardous chemical storage areas, flammable fuel storage areas, high noise areas, etc.; 10 CSR 20-8.140 (8) (I)
    - Provisions for local lockout/tagout on stop motor controls and other devices; 10 CSR 20-8.140 (8) (L)
    - Provisions for an arc flash hazard analysis and determination of the flash protection boundary distance and type of PPE to reduce exposure to major

electrical hazards shall be in accordance with NFPA 70E *Standard for Electrical Safety in the Workplace* (2018 Edition), as approved and published August 21, 2017. 10 CSR 20-8.140 (8) (M)

10 CSR 20-8.150 Preliminary Treatment.

- All wastewater treatment facilities must have a screening device, comminutor, or septic tank for the purpose of removing debris and nuisance materials from the influent wastewater. 10 CSR 20-8.150 (2)

- All screening devices and screening storage areas shall be protected from freezing. 10 CSR 20-8.150 (4) (A) 1.

- Manually cleaned screen channels shall be protected by guard railings and deck gratings with adequate provisions for removal or opening to facilitate raking. 10 CSR 20-8.150 (4) (A) 3. A. (I)

10 CSR 20-8.160 Settling.

- Overflow weirs shall be readily adjustable over the life of the structure to correct for differential settlement of the tank. 10 CSR 20-8.160 (3) (C) 1.

- Walls of settling tanks shall extend at least six inches (6") above the surrounding ground surface and shall provide not less than twelve inches (12") of freeboard. 10 CSR 20-8.160 (3) (E)

- Safety features shall appropriately include machinery covers, life lines, handrails on all stairways and walkways, and slip resistant surfaces. For additional safety follow the provisions listed in 10 CSR 20-8.140(8). 10 CSR 20-8.160 (5) (A)

- The design shall provide for convenient and safe access to routine maintenance items such as gear boxes, scum removal mechanism, baffles, weirs, inlet stilling baffle areas, and effluent channels. 10 CSR 20-8.160 (5) (B)

10 CSR 20-8.190 Disinfection.

- Contact period for Chlorine Disinfection. A minimum contact period of fifteen (15) minutes at design peak hourly flow or maximum rate of pumpage shall be provided after thorough mixing. 10 CSR 20-8.190 (3) (A)

- Contact time. A minimum of thirty (30) seconds for mixing and contact time of dechlorination systems shall be provided at the design peak hourly flow or maximum rate of pumpage. 10 CSR 20-8.190 (4) (B) 2.

11. Upon completion of construction:

    A. Missouri American Water will become the continuing authority for operation and maintenance of these facilities;

B. Submit an electronic copy of the as builts if the project was not constructed in accordance with previously submitted plans and specifications;

C. Submit the eDMR permit Holder and Certifier Registration, Form--MO 780-2204 to comply with your operating permit; and

D. Submit the enclosed form Statement of Work Completed to the Department in accordance with 10 CSR 20-6.010(5)(N) and request that the general operating permit MOGD00514 be issued.

IV. REVIEW SUMMARY

1. CONSTRUCTION PURPOSE

The facility plan identified the need to provide housing units in the area. This proposed treatment facility and collection system will serve a new subdivision with 40 residential units.

2. FACILITY DESCRIPTION

The proposed facility will be an extended aeration facility with tablet chlorination and dechlorination to serve a design flow of 16,000 gpd. This project will also include a new gravity sewer system.

The Hill at Wilbers Farm WWTF is located at Bald Hill Road and Missouri Route M, Wardsville, in Cole County, Missouri. The facility has a design average flow of 16,000 gpd and serves a hydraulic population equivalent of approximately 160 people.

3. COMPLIANCE PARAMETERS

The proposed project is required to meet final effluent limits as established in the Antidegradation review dated April 2, 2020.

The proposed project is required to meet the requirements of MOGD00514 Table F with an expiration date of June 30, 2024.

The limits following the completion of construction will be applicable to the facility:

PARAMETER	UNITS	MONTHLY AVERAGE LIMIT
Biochemical Oxygen Demand$_5$	mg/L	10
Total Suspended Solids	mg/L	10
Ammonia as N-summer	mg/L	0.6
Ammonia as N-winter	mg/L	2.1

pH	SU	6.5-9.0
Total Residual Chlorine	µg/L	8 (130 ML)
E. Coli	#/100mL	126

4. ANTIDEGRADATION

The Department has reviewed the antidegradation report for this facility and issued the Water Quality and Antidegradation Review dated April 2, 2020, due to a proposed new discharging treatment system.

5. REVIEW of MAJOR TREATMENT DESIGN CRITERIA

Construction will cover the following items:

- Components are designed for a Population Equivalent of 160 and design flow of 16,000 gpd based on hydraulic loading to the system and a safety factor over the expected population of 148.

- Gravity Sewer - Construction of approximately 4,389 lf of 8-inch PVC SDR-35 gravity sewer lines with approximately twenty-one (21) manholes and seven (7) lampholes to serve a 160 PE and a design average flow of 16,000 gpd from 40 residential lots and a peak flow of 47 gpm.

- Screening – Installation of screening devices removes nuisance inorganic materials from raw wastewater.
    - Manual Coarse Bar Screen – The manual coarse bar screen will have clear bar spacings of 3/8-inch and be positioned at an angle of 45 degrees from the horizontal to allow for manual raking of the screen onto a drain pan. The coarse bar screen effluent will flow by gravity to the extended aeration treatment.

- Extended Aeration Package Plant – The following components are integrated into the pre-cast concrete package plant:
    - Aeration for the system is provided by three (3) blowers. Blower #1 has a 1 HP motor capable of supplying 66 cfm at 5 psi. Blowers #2 and #3 are 5 HP and capable of supplying 68 cfm each at 5 psi. The total air requirement for the extended aeration plant is 96 cfm, with 202 cfm provided.
    - Flow Equalization – A flow equalization chamber with a volume of 6,400 gallon will be provided. Eight (8) cfm of aeration will be required for the flow equalization chamber and will be provided through the six Jet AirSeal fine bubble diffusers. An air lift pump (5 cfm) from the constant head chamber within the flow equalization chamber transfers wastewater to the first aeration chamber. The flow equalization chamber also has a 6-inch gravity emergency overflow pipe to the aeration chamber.

- Aeration Chambers – Three chambers, each 12 ft 10 in. by 6 ft 10 in., operating in series by means of a transfer pipe with sidewater depths of 11 ft 5 in., 10 ft 5 in., and 8 ft 1 in. for a total volume of approximately 17,561 gallons provided. Aeration provided through the six Jet AirSeal fine bubble diffusers per tank, meeting the necessary 49 cfm of air for the aeration chambers. The aeration chambers are designed for an average daily loading of 35 lbs BOD_5. A transfer pipe and elbow allows wastewater from the third aeration chamber to move by gravity to the clarifier.

- Final Clarifier – The final clarifier will have a settling volume of approximately 3,870 gallons and a detention time of approximately 5.8 hours with a surface overflow rate at design peak hourly flow of approximately 900 gpd/ft^2. An air lift surface skimmer is provided to remove grease and floatables and return to the first/second aeration chamber. An adjustable v-notch weir provides 12 lf of skimming surface for a weir loading rate at peak flow of approximately 5,640 gpd/lf. The clarified effluent will flow by gravity to the disinfection system. An air lift pump (10 cfm) will be provided to move settled sludge from the dual square hopper bottoms to the sludge holding chamber or return to the aeration chamber as return activated sludge.

- Sludge Holding Chamber – The sludge holding chamber will have a volume of 3,590 gallons. The sludge holding chamber will be supplied with 14 cfm of air through six Jet AirSeal fine bubble diffusers. Supernatant will be decanted by means of an adjustable surface skimming airlift to the flow equalization chamber. Sludge removal shall be by contract hauler.

- Disinfection – Disinfection is the process of removal, deactivation, or killing of pathogenic microorganisms.

  - Tablet Chlorinator – Installation of a Norweco Model XT-2000-S tablet feeder chlorination chamber receiving clarified effluent and prior to the chlorine contact tank. The tablet chlorinator is capable of treating flows between 2,000 and 100,000 gpd. The system will dispense hypochlorite as the wastewater comes into contact with the tablets.

  - Chlorine Contact Tank – Installation of a pre-cast concrete tank approximately 7.5 ft x 5 ft x 6.25 ft sidewater depth with alternating top and bottom and left and right transfer openings to allow for a greater than 40:1 length to width ratio. This tank will allow for at least 15 minute contact time during a peak flow of 66,880 gpd (11.11 gpm).

  - Tablet Dechlorinator – Installation of a Norweco Model XT-2000-S tablet feeder dechlorination chamber receiving the chlorinated effluent and prior to Outfall No. 001. The tablet dechlorinator is capable of treating flows between 2,000 and 100,000 gpd. The system will dispense sodium sulfite as the wastewater comes into contact with the tablets.

- Flow Measurement – Installation of accurate flow measurement devices will give the treatment facility a means of improved data analysis.
    - V-notch Weir –A v-notch weir with a 30 degree notch; appropriate for flows between approximately 8,000 gpd and 75,000 gpd. This measurement device does not include flow totalizing or recording.

- Emergency Power – The facility will be equipped to allow for connection of an emergency generator to allow continuity of operation during power failures. The tablet disinfection process does not require power, and the flow equalization tank provides approximately 9.6 hours of detention time at average flow and 2.3 hours at peak flow.

6. OPERATING PERMIT

After completion of the construction project, submit: statement of work completed and as-builts if the project was not constructed in accordance with previously submitted plans and specifications, General Permit MOGD00514, will be issued after receipt of the above documents.

V. NOTICE OF RIGHT TO APPEAL

If you were adversely affected by this decision, you may be entitled to an appeal before the Administrative Hearing Commission (AHC) pursuant to Section 621.250 RSMo. To appeal, you must file a petition with the AHC 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 AHC. Any appeal should be directed to:

Administrative Hearing Commission
U.S. Post Office Building, Third Floor
131 West High Street, P.O. Box 1557
Jefferson City, MO 65102-1557
Phone: 573-751-2422
Fax: 573-751-5018
Website: https://ahc.mo.gov

Cailie Carlile, P.E.
Engineering Section
cailie.carlile@dnr.mo.gov

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM

APPLICATION FOR CONSTRUCTION PERMIT – WASTEWATER TREATMENT FACILITY

RECEIVED
MAY 13 2020
Water Protection Program

FOR DEPARTMENT USE ONLY	
APP NO.	CP NO.
FEE RECEIVED $1000.00	CHECK NO. 1372-8
DATE RECEIVED 5-13-20	

APPLICATION OVERVIEW

The Application for Construction Permit – Wastewater Treatment Facility form has been developed in a modular format and consists of Part A and B. **All applicants must complete Part A.** Part B should be completed for applicants who currently land-apply wastewater or propose land application for wastewater treatment. **Please read the accompanying instructions before completing this form. Submittal of an incomplete application may result in the application being returned.**

PART A – BASIC INFORMATION

1.0 APPLICATION INFORMATION (Note – If any of the questions in this section are answered NO, this application may be considered incomplete and returned.)

1.1 Is this a Federal/State funded project? ☐ YES ☑ N/A Funding Agency: _____ Project #: _____

1.2 Has the Missouri Department of Natural Resources approved the proposed project's antidegradation review?
☑ YES Date of Approval: 4/2/20 ☐ N/A

1.3 Has the department approved the proposed project's facility plan*?
☑ YES Date of Approval: 5/6/20 ☐ NO (If No, complete No. 1.4.)

1.4 [Complete only if answered No on No. 1.3.] Is a copy of the facility plan* for wastewater treatment facilities included with this application?
☐ YES ☐ NO ☐ Exempt because _____

1.5 Is a copy of the appropriate plans* and specifications* included with this application?
☑ YES Denote which form is submitted: ☑ Hard copy ☑ Electronic copy (See instructions.) ☐ NO

1.6 Is a summary of design* included with this application? ☑ YES ☐ NO

1.7 Has the appropriate operating permit application (A, B, or B2) been submitted to the department?
☐ YES Date of submittal: _____
☑ Enclosed is the appropriate operating permit application and fee submittal. Denote which form: ☐ A ☑ B ☐ B2
☐ N/A: However, In the event the department believes that my operating permit requires revision to permit limitation such as changing equivalent to secondary limits to secondary limits or adding total residual chlorine limits, please share a draft copy prior to public notice? ☐ YES ☐ NO

1.8 Is the facility currently under enforcement with the department or the Environmental Protection Agency? ☐ YES ☑ NO

1.9 Is the appropriate fee or JetPay confirmation included with this application? ☑ YES ☐ NO
See Section 7.0

* Must be affixed with a Missouri registered professional engineer's seal, signature and date.

2.0 PROJECT INFORMATION

2.1 NAME OF PROJECT	2.2 ESTIMATED PROJECT CONSTRUCTION COST
The Hill at Wilbers Farm Subdivision WWTP	$ 389,000

2.3 PROJECT DESCRIPTION
Construction of a new 16,000 gpd mechanical extended aeration treatment plant with chlorination/dechlorination.

2.4 SLUDGE HANDLING, USE AND DISPOSAL DESCRIPTION
Sludge stored in holding tank on site and disposed of off site by hauler

2.5 DESIGN INFORMATION
A. Current population: 0 ; Design population: 160
B. Actual Flow: TBD gpd; Design Average Flow: _____ gpd;
Actual Peak Daily Flow: TBD gpd; Design Maximum Daily Flow: _____ gpd; Design Wet Weather Event: _____

2.6 ADDITIONAL INFORMATION
A. Is a topographic map attached? ☑ YES ☐ NO
B. Is a process flow diagram attached? ☑ YES ☐ NO

3.0 WASTEWATER TREATMENT FACILITY

NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
The Hill at Wilbers Farm Subdivision WWTP	(314) 996-2308	robert.goeltz@amwater.com

ADDRESS (PHYSICAL)	CITY	STATE	ZIP CODE	COUNTY
Bald Hill Road and MO Route M	Wardsville	MO	65101	Cole

Wastewater Treatment Facility: Mo- (Outfall Of)

3.1 Legal Description: SW ¼, SW ¼, SW ¼, Sec. 2, T 43N, R 11W
(Use additional pages if construction of more than one outfall is proposed.)

3.2 UTM Coordinates Easting (X): 577259 Northing (Y): 4261554
For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

3.3 Name of receiving streams: Unnamed Tributary of Coon Creek

4.0 PROJECT OWNER

NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
The Schae Group, Inc	(573) 659-4663	scott@signaturehomesjc.com

ADDRESS	CITY	STATE	ZIP CODE
PO Box 105738	Jefferson City	MO	65110

5.0 CONTINUING AUTHORITY: A [illegible] is a company, business, entity or person(s) that will be operating the facility and/or ensuring compliance with the permit.

NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
TBD		

ADDRESS	CITY	STATE	ZIP CODE

5.1 A letter from the continuing authority, if different than the owner, is included with this application. ☐ YES ☐ NO ☑ N/A

5.2 COMPLETE THE FOLLOWING IF THE CONTINUING AUTHORITY IS A MISSOURI PUBLIC SERVICE COMMISSION REGULATED ENTITY.

A. Is a copy of the certificate of convenience and necessity included with this application? ☐ YES ☑ NO

5.3 COMPLETE THE FOLLOWING IF THE CONTINUING AUTHORITY IS A PROPERTY OWNERS ASSOCIATION.

A. Is a copy of the as-filed restrictions and covenants included with this application? ☐ YES ☐ NO

B. Is a copy of the as-filed warranty deed, quitclaim deed or other legal instrument which transfers ownership of the land for the wastewater treatment facility to the association included with this application? ☐ YES ☐ NO

C. Is a copy of the as-filed legal instrument (typically the plat) that provides the association with valid easements for all sewers included with this application? ☐ YES ☐ NO

D. Is a copy of the Missouri Secretary of State's nonprofit corporation certificate included with this application? ☐ YES ☐ NO

6.0 ENGINEER

ENGINEER NAME / COMPANY NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
Dave Van Leer/Cochran Engineering	(636)584-0540	dvanleer@cochraneng.com

ADDRESS	CITY	STATE	ZIP CODE
530A East Independence Drive	Union	MO	63084

7.0 APPLICATION FEE

☑ CHECK NUMBER 13728 CMPS, INC. ☐ JETPAY CONFIRMATION NUMBER

8.1 I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

PROJECT OWNER SIGNATURE: Scott Schaeperkoetter

PRINTED NAME	DATE
Scott Schaeperkoetter	5/6/2020

TITLE OR CORPORATE POSITION	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
President	(314) 996-2308 573-690-4377	scott@signaturehomesjc.com

Mail completed copy to:
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
P.O. BOX 176
JEFFERSON CITY, MO 65102-0176

END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHETHER PART B NEEDS TO BE COMPLETE.