

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



CONSTRUCTION PERMIT

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

Lora Anstine
Owner
Crow's Nest RV Park
604 E Ohio St
Clinton, MO 64735

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.

September 27, 2023
Effective Date

September 26, 2025
Expiration Date



John Hoke, Director, Water Protection Program

CONSTRUCTION PERMIT

I. CONSTRUCTION DESCRIPTION

The Crow's Nest RV Park is a new RV Park development being constructed on undeveloped land and planned for construction in three phases. This construction permit addresses the construction of a new onsite, subsurface Low Pressure Pipe (LPP) treatment system to provide wastewater treatment capacity for the first phase of development of the Crow's Nest RV Park. The first phase of development will consist of a retail building, a laundry building, a bar, and 50 RV spaces. 75 RV spaces are intended to be added for each of future phases two and three, thus a total of 200 RV spaces are planned for the development. As this construction permit will only address the construction of wastewater treatment components intended to serve phase 1 of the development, another construction permit will need to be attained to authorize the construction of wastewater treatment components to serve the future phases of development. The scope of construction for phase 1 includes septic tanks, pump tanks, force main and gravity sewer, and an LPP distribution field for subsurface dispersal. The facility will have a design flow of 6,960 gallons per day (gpd) for phase 1.

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.

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 Bowden Campbell, P.E. with BC Engineering, LLC 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 Kansas City Regional Office per 10 CSR 20-7.015(9)(G).
5. The completed project shall be field tested to verify actual pumped volume of each dose. The timer controls shall be set to ensure a dosing rate not to exceed the allowable rate of 0.15 gallons per square foot per day.
6. 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.
7. 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 <https://dnr.mo.gov/data-e-services/missouri-gateway-environmental-management-mogem>. See <https://dnr.mo.gov/data-e-services/water/electronic-permitting-epermitting> for more information.
8. A United States Army Corps of Engineers (USACE) Clean Water Act Section 404 Department of the Army permit and a Section 401 Water Quality Certification issued by the Department may be required for the activities described in this permit. This permit is not valid until these requirements are satisfied or notification is provided that no Section 404 permit is required by the USACE. You must contact your local USACE district since they determine what waters are jurisdictional and which permitting requirements may apply. You may call the Department's Water Protection Program, Operating Permits

Section at 573-522-4502 for more information. See <https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/section-401-water-quality> for more information.

9. All construction must adhere to applicable 10 CSR 20-8 (Chapter 8) requirements listed below.
 - 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.
 - 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).
 - Facilities shall be readily accessible by authorized personnel from a public right-of-way at all times. 10 CSR 20-8.140(2)(D).
 - Electrical equipment must comply with 10 CSR 20-8.140(7)(B)
 - There shall be no piping or other connection 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.
 - Where a potable water supply is to be used for any purpose in a wastewater treatment facility other than direct connections, a break tank, pressure pump, and pressure tank or a reduced pressure backflow preventer consistent with the department's Public Drinking Water Branch shall be provided. 10 CSR 20-8.140(7)(D)3.A.
 - For indirect connections, a sign shall be permanently posted at every hose bib, faucet, hydrant, or sill cock located on the water system beyond the break tank or backflow preventer to indicate that the water is not safe for drinking. 10 CSR 20-8.140(7)(D)3.B.
 - Where a separate non-potable water supply is to be provided, a break tank will not be necessary, but all system outlets shall be posted with a permanent sign indicating the water is not safe for drinking. 10 CSR 20-8.140(7)(D)4.
 - 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.
 - 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)
- 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)
 - Posted "No Smoking" signs in hazardous areas; 10 CSR 20-8.140(8)(D)
 - Appropriate personal protective equipment (PPE); 10 CSR 20-8.140(8)(E)
 - Portable blower and hose sufficient to ventilate accessed confined spaces; 10 CSR 20-8.140(8)(F)
 - 10 CSR 20-8.140(8)(G) Portable lighting equipment complying with NEC requirements. See subsection (7)(B) of this rule;
 - 10 CSR 20-8.140(8)(H) Gas detectors listed and labeled for use in NEC Class I, Division 1, Group D locations. See subsection (7)(B) of this rule;
 - 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)
 - Ventilation shall include the following:
 - Isolate all pumping stations and wastewater treatment components installed in a building where other equipment or offices are located from the rest of the building by an air-tight partition, provide separate outside entrances, and provide separate and independent fresh air supply; 10 CSR 20-8.140(8)(J)1.
 - Force fresh air into enclosed screening device areas or open pits more than four feet (4') deep. 10 CSR 20-8.140(8)(J)2.
 - Dampers are not to be used on exhaust or fresh air ducts. Avoid the use of fine screens or other obstructions on exhaust or fresh air ducts to prevent clogging; 10 CSR 20-8.140(8)(J)3.
 - Where continuous ventilation is needed (e.g., housed facilities), provide at least twelve (12) complete air changes per hour. Where continuous ventilation would cause excessive heat loss, provide intermittent ventilation of at least thirty (30) complete air changes per hour when facility personnel enter the area. Base air change demands on one hundred percent (100%) fresh air; 10 CSR 20-8.140(8)(J)4.
 - Electrical controls. Mark and conveniently locate switches for operation of ventilation equipment outside of the wet well or building. Interconnect all intermittently operated ventilation equipment with the respective wet well, dry well, or building lighting system. The manual lighting/ventilation

- switch is expected to override the automatic controls. For a two (2) speed ventilation system with automatic switch over where gas detection equipment is installed, increase the ventilation rate automatically in response to the detection of hazardous concentrations of gases or vapors; 10 CSR 20-8.140(8)(J)5.
- Fabricate the fan wheel from non-sparking material. Provide automatic heating and dehumidification equipment in all dry wells and buildings. 10 CSR 20-8.140(8)(J)6.
 - Explosion-proof electrical equipment, non-sparking tools, gas detectors, and similar devices, in work areas where hazardous conditions may exist, such as digester vaults and other locations where potentially explosive atmospheres of flammable gas or vapor with air may accumulate. 10 CSR 20-8.140(8)(K)
 - 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)
- 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)
 - A septic tank must have a minimum capacity of at least one thousand (1,000) gallons. 10 CSR 20-8.180(2)(A)
 - The septic tank shall be baffled. 10 CSR 20-8.180(2)(B)
 - Subsurface systems shall—
 - Exclude unstabilized fill and soils that have been highly compacted and/or disturbed, such as old road beds, foundations, or similar things; 10 CSR 20-8.200(7)(A)1.A.
 - Provide adequate surface drainage where slopes are less than two percent (2%); 10 CSR 20-8.200(7)(A)1.B.
 - Provide surface and subsurface water diversion where necessary, such as a curtain or perimeter drain; 10 CSR 20-8.200(7)(A)1.C. and
 - Have a ten foot (10') buffer from the property line. 10 CSR 20-8.200(7)(A)1.D.
 - The vertical separation between the bottom of the drip lines and/or the trench and a limiting layer, including but not limited to, bedrock; restrictive horizon; or seasonal high water table, shall be no less than twenty-four inches (24"); 10 CSR 20-8.200(7)(A)2.A.
 - Subsurface systems shall be, at a minimum, preceded by preliminary treatment. 10 CSR 20-8.200(7)(B)
 - Loading rates shall not exceed the values assigned by the site and soil evaluation. 10 CSR 20-8.200(7)(C)
 - All network piping and low pressure distribution piping and fittings with polyvinyl chloride (PVC) shall meet ASTM Standard D 1785 *Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, or 120* as approved and published August 1, 2015, or equivalent rated to meet or exceed ASTM D2466 *Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and*

Fittings as approved and published August 1, 2017. These standards shall hereby be incorporated by reference into this rule, as published by ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. This rule does not incorporate any subsequent amendments or additions. 10 CSR 20-8.200(8)(A)2.

- Manifold design for LPP systems shall address freeze protection while assuring uniform distribution and to minimize drain down of laterals into other laterals at a lower elevation between dosing events. 10 CSR 20-8.200(8)(A)3.

10. Upon completion of construction:

- A. Lora Anstine 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 Statement of Work Completed form to the Department in accordance with 10 CSR 20-6.010(5)(N) (<https://dnr.mo.gov/document-search/wastewater-construction-statement-work-completed-mo-780-2155>) and a [Form B - Application for an Operating Permit for Domestic or Municipal Wastewater](#) (≤100,000 gallons per day) and operating permit application fee of \$300 to the Engineering Section of the Water Protection Program 60 days prior to operation. Identify that the application is for a General permit for land application of domestic wastewater, MO-G823.

IV. REVIEW SUMMARY

1. CONSTRUCTION PURPOSE

The purpose of the proposed construction is to receive and treat domestic wastewater from phase 1 of the development of the Crow's Nest RV Park.

2. FACILITY DESCRIPTION

The new subsurface wastewater treatment system is being constructed to serve a retail building, a laundry building, a bar, and 50 RV spaces as part of phase 1 of the development of the Crow's Nest RV Park.

The Crow's Nest RV Park WWTF is located at 232 E Highway 7, Clinton, in Henry County, Missouri. The facility has a design average flow of 6,960 gpd and serves a hydraulic population equivalent of approximately 70 people.

3. COMPLIANCE PARAMETERS

The proposed project must meet the requirements of MOG823 with an expiration date of August 24, 2027. The facility will be required to meet the Subsurface Absorption Operational Requirements that start on page 8 of the MOG823 Operating Permit.

4. REVIEW of MAJOR TREATMENT DESIGN CRITERIA

Construction will cover the following items:

- Components are designed for a Population Equivalent of 69.6 based on hydraulic loading to the system.
- Gravity Main – Approximately 2,119 linear feet of 4-inch and 240 linear feet of 6-inch schedule 40 PVC gravity main to convey sewage to the treatment system. Includes approximately 10 manholes.
- Septic Tanks – A septic tank provides passive primary treatment as the settleable solids in raw wastewater settle onto the bottom of the tank. Raw wastewater will flow by gravity to the septic tanks. Three precast septic tanks are utilized in series, and when the water level reaches a certain height, the wastewater flows into the second and then the third septic tank by two tee-drop pipes. The third septic tank is equipped with an effluent filter. Each septic tank is approximately 188 in x 82 in x 98 in, providing a combined volume of approximately 11,000 gallons between the three tanks. In total, the septic tanks provide approximately 1.6 days of detention at design average flow for phase 1. Following the three septic tanks, the effluent flows by gravity through the effluent filter in the final septic tank to the pump tanks. Settled solids in the septic tank shall be removed by a contract hauler.
- Pump Tank – Two hydraulically connected septic tanks in series (plumbed together at the top and bottom) serve as the pump tank. The second tank is equipped with a 15-inch diameter screened pump vault containing a Liberty Pumps FL100 Series 1 HP Submersible pump capable of approximately 57 gpm at 64 TDH or equivalent. The pump is controlled via float switches and sends flows to the absorption field for final dispersal and treatment in the soil.
- Subsurface Soil Dispersal System – The soils at this site are rated for 0.2 to 0.5 gpd/sf. Soil morphology review was conducted during the facility plan review and on site soils were determined to be acceptable for this system. The soil investigation was completed by Timothy O. Knoernschild, Certified Soil Scientist with The Soilman on August 2, 2022.
 - Soils Report. In the soils investigation, there were 3 pits dug over the proposed site.
 - The East Pit had a surface soil that was described as silt loam with an application rating of 0.5 gallons per square foot per day (gpd/sf). At depths of greater than 25 inches, the soil is described as silty clay loam with an application rate of 0.35 gpd/sf.
 - The Middle Pit had a surface soil that was described as silt loam with an application rating of 0.5 gallons per square foot per day (gpd/sf). At depths of greater than 25 inches, the soil is described as silty clay loam with an application rate of 0.35 gpd/sf.
 - The West Pit had a surface soil that was described as silt loam with an application rating of 0.5 gallons per square foot per

day. At depths of greater than 35 inches, the soil is described as silty clay loam with an application rate of 0.4 gpd/sf.

- For LPP systems, the soils report states that the assigned loading rate should be halved for purposes of design. In accordance with 10 CSR 20-8.200(8)(A)1., the long term acceptance rate (LTAR) should be assigned based on the lowest reported LPP soil loading rate between the soil surface and at least 12 inches below the trench bottom. Given a trench depth of 30 inches, the design considered LTAR values based on a depth of 42 inches or greater. For all three soil test pits, the assigned application rate was at least 0.35 gpd/sf at depths of 42 inches or greater. Thus, the design utilized a loading rate of $\frac{1}{2} * 0.35 \text{ gpd/sf} = 0.175 \text{ gpd/sf}$.
- Low-Pressure Piping (LPP) – The low-pressure piping is divided into twelve zones with four lines per zone and 7,728 linear feet of distribution laterals.
 - The end of each line contains a 4-inch clean out
 - The lateral spacing is 5-foot on center with the orifices spaced 6-feet apart, for 27 orifices per lateral line.
 - The total area needed for loading is approximately 0.91 acres and there are 5 acres available

5. OPERATING PERMIT

After completion of construction project submit: statement of work completed, as-builts if the project was not constructed in accordance with previously submitted plans and specifications, and ensure that Application Form B, and the operating permit fee of \$300 has been submitted. Missouri State Operating Permit, General Permit MO-G823, 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:

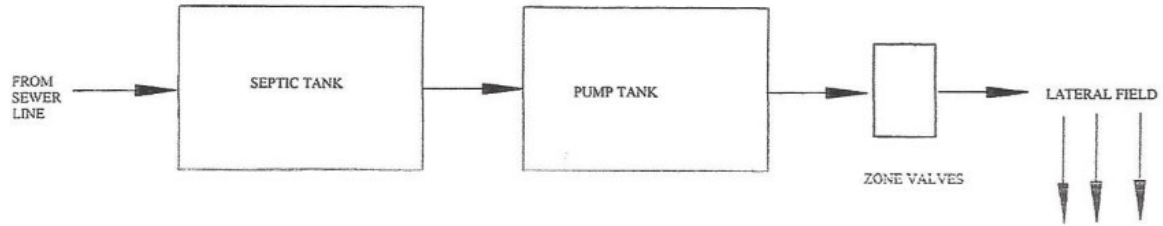
Administrative Hearing Commission
U.S. Post Office Building, Third Floor
131 West High Street, P.O. Box 1557
Jefferson City, MO 65102-1557
Phone: 573-751-2422
Fax: 573-751-5018
Website: <https://ahc.mo.gov>

Thomas Silkwood
Engineering Section
thomas.silkwood@dnr.mo.gov

Chia-Wei Young, P.E.
Engineering Section
chia-wei.young@dnr.mo.gov

APPENDIX

- **Process Flow Diagram**





MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
**APPLICATION FOR CONSTRUCTION PERMIT –
WASTEWATER TREATMENT FACILITY**

FOR DEPARTMENT USE ONLY

APP NO.	CP NO.
FEE RECEIVED	CHECK NO.
DATE RECEIVED	

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

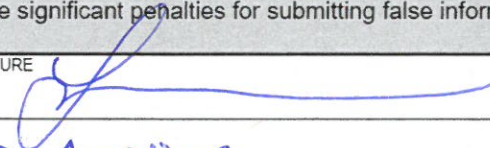
1.0 APPLICATION INFORMATION (Note – If any of the questions in this section are answered NO, this application may be considered incomplete and returned.)

- 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: _____ ☒ N/A
- 1.3 Has the department approved the proposed project's facility plan*?
☐ YES Date of Approval: _____ ☒ 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 Crow's Nest RV Park	2.2 ESTIMATED PROJECT CONSTRUCTION COST \$ 300,000
2.3 PROJECT DESCRIPTION LPP Lateral System	
2.4 SLUDGE HANDLING, USE AND DISPOSAL DESCRIPTION	
2.5 DESIGN INFORMATION A. Current population: 0 ; Design population: 50 B. Actual Flow: 0 gpd; Design Average Flow: 1900 gpd; Actual Peak Daily Flow: 0 gpd; Design Maximum Daily Flow: 1900 gpd; Design Wet Weather Event: _____	
2.6 ADDITIONAL INFORMATION A. Is a topographic map attached? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO B. Is a process flow diagram attached? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	

3.0 WASTEWATER TREATMENT FACILITY				
NAME <u>Crow's Nest RV Park</u>		TELEPHONE NUMBER WITH AREA CODE <u>660-525-9914</u>		E-MAIL ADDRESS <u>anstinerealty@yahoo.com</u>
ADDRESS (PHYSICAL) <u>232 E Hwy 7</u>	CITY <u>Clinton</u>	STATE <u>MO</u>	ZIP CODE <u>64735</u>	COUNTY <u>Henry</u>
Wastewater Treatment Facility: Mo- (Outfall Of)				
3.1 Legal Description: _____ 1/4, _____ 1/4, _____ 1/4, Sec. <u>8</u> , T <u>41</u> , R <u>25</u> (Use additional pages if construction of more than one outfall is proposed.)				
3.2 UTM Coordinates Easting (X): <u>-93.71329</u> Northing (Y): <u>38.342915</u> For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)				
3.3 Name of receiving streams: <u>N/A</u>				
4.0 PROJECT OWNER				
NAME <u>Lora Anstine</u>		TELEPHONE NUMBER WITH AREA CODE <u>660-525-9914</u>		E-MAIL ADDRESS <u>anstinerealty@yahoo.com</u>
ADDRESS <u>251 SE Hwy AA</u>	CITY <u>Clinton</u>	STATE <u>MO</u>	ZIP CODE <u>64735</u>	
5.0 CONTINUING AUTHORITY: A continuing authority is a company, business, entity or person(s) that will be operating the facility and/or ensuring compliance with the permit requirements.				
NAME <u>Lora Anstine</u>		TELEPHONE NUMBER WITH AREA CODE <u>660-525-9914</u>		E-MAIL ADDRESS <u>anstinerealty@yahoo.com</u>
ADDRESS <u>251 SE Hwy AA</u>	CITY <u>Clinton</u>	STATE <u>MO</u>	ZIP CODE <u>64735</u>	
5.1 A letter from the continuing authority, if different than the owner, is included with this application. <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> 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? <input type="checkbox"/> YES <input type="checkbox"/> 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? <input type="checkbox"/> YES <input type="checkbox"/> 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? <input type="checkbox"/> YES <input type="checkbox"/> 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? <input type="checkbox"/> YES <input type="checkbox"/> NO				
D. Is a copy of the Missouri Secretary of State's nonprofit corporation certificate included with this application? <input type="checkbox"/> YES <input type="checkbox"/> NO				
6.0 ENGINEER				
ENGINEER NAME / COMPANY NAME <u>BC Engineering, LLC</u>		TELEPHONE NUMBER WITH AREA CODE <u>660-438-0288</u>		E-MAIL ADDRESS <u>bondencampbell</u>
ADDRESS <u>23332 Hwy 7</u>	CITY <u>Warsaw</u>	STATE <u>MO</u>	ZIP CODE <u>65355</u>	
7.0 APPLICATION FEE				
<input type="checkbox"/> CHECK NUMBER <input type="checkbox"/> JETPAY CONFIRMATION NUMBER				
8.0 PROJECT OWNER: I certify under penalty of law 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 				
PRINTED NAME <u>Lora D Anstine</u>		DATE <u>9/14/03</u>		
TITLE OR CORPORATE POSITION <u>Owner</u>		TELEPHONE NUMBER WITH AREA CODE <u>660-525-9914</u>		E-MAIL ADDRESS <u>anstinerealty@yahoo.com</u>
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.				

PART B – LAND APPLICATION ONLY

(Submit only if the proposed construction project includes land application of wastewater.)

8.0 FACILITY INFORMATION

8.1 Type of wastewater to be irrigated: ☐ Domestic ☐ State/National Park ☐ Seasonal business
☐ Municipal ☐ Municipal with a pretreatment program or significant industrial users
☐ Other (explain) _____

8.2 Months when the business or enterprise will operate or generate wastewater:
☐ 12 months per year ☐ Part of the year (list months): _____

8.3 This system is designed for:
☐ No-discharge.
☐ Partial irrigation when feasible and discharge rest of time.
☐ Irrigation during recreational season, April – October, and discharge during November – March.
☐ Other (explain) _____.

9.0 STORAGE BASINS

9.1 Number of storage basins: _____ (Use additional pages if greater than three basins.)

9.2 Type of basins: ☐ Steel ☐ Concrete ☐ Fiberglass ☐ Earthen ☐ Earthen with membrane liner

9.3 Storage basin dimensions at inside top of berm (feet). Report freeboard as feet from top of berm to emergency spillway or overflow pipe.

Basin #1:	Length _____	Width _____	Depth _____	Freeboard _____	Depth _____	Safety _____	% Slope _____
Basin #2:	Length _____	Width _____	Depth _____	Freeboard _____	Depth _____	Safety _____	% Slope _____
Basin #3:	Length _____	Width _____	Depth _____	Freeboard _____	Depth _____	Safety _____	% Slope _____

9.4 Storage Basin operating levels (report as feet below emergency overflow level).

Basin #1:	Maximum operating water level _____ ft	Minimum operating water level _____ ft
Basin #2:	Maximum operating water level _____ ft	Minimum operating water level _____ ft
Basin #3:	Maximum operating water level _____ ft	Minimum operating water level _____ ft

9.5 Design depth of sludge in storage basins.

Basin #1: _____ ft Basin #2: _____ ft Basin #3: _____ ft

9.6 Existing sludge depth, if the basins are currently in operation.

Basin #1: _____ ft Basin #2: _____ ft Basin #3: _____ ft

9.7 Total design sludge storage: _____ dry tons and _____ cubic feet

10.0 LAND APPLICATION SYSTEM

10.1 Number of irrigation sites _____ Total Acres _____ Maximum % field slopes _____
Location: _____ 1/4, _____ 1/4, _____ 1/4, _____ Sec. _____ T _____ R _____ County _____ Acres
Location: _____ 1/4, _____ 1/4, _____ 1/4, _____ Sec. _____ T _____ R _____ County _____ Acres
Location: _____ 1/4, _____ 1/4, _____ 1/4, _____ Sec. _____ T _____ R _____ County _____ Acres
(Use additional pages if greater than three irrigation sites.)

10.2 Type of vegetation: ☐ Grass hay ☐ Pasture ☐ Timber ☐ Row crops
☐ Other (describe) _____

10.3 Wastewater flow (dry weather) gallons per day: Average annual _____ Seasonal _____ Off-season _____

10.4 Land application rate (design flow including 1-in-10 year storm water flows):

Design:	_____ inches/year	_____ inches/hour	_____ inches/day	_____ inches/week
Actual:	_____ inches/year	_____ inches/hour	_____ inches/day	_____ inches/week

10.5 Total irrigation per year (gallons): Design: _____ gal Actual: _____ gal

10.6 Actual months used for irrigation (check all that apply):

☐ Jan ☐ Feb ☐ Mar ☐ Apr ☐ May ☐ Jun ☐ Jul ☐ Aug ☐ Sep ☐ Oct ☐ Nov ☐ Dec

10.7 Land application rate is based on:

☐ Hydraulic Loading ☐ Other (describe) _____
☐ Nutrient Management Plan (N&P) If N&P is selected, is the plan included? ☐ YES ☐ NO