

MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Michael L. Parson
Governor

Dru Buntin
Director

January 12, 2023

Tyler Johnson
Owner
The Goat Ranch RV Park
2868 Bishop Road
Gillette, WY 82718

RE: East System Additions – The Goat Ranch RV Park, MO-G823165, Construction Permit
No. CP0002342, Henry County

Dear Tyler Johnson:

The Missouri Department of Natural Resources' Water Protection Program has reviewed the plans and specifications submitted by OCD Services, LLC for the Goat Ranch RV Park. Please find enclosed Construction Permit No. CP0002342. Upon completing construction covered under this permit, submit a Statement of Work Completed form (<https://dnr.mo.gov/document-search/wastewater-construction-statement-work-completed-mo-780-2155>) to the Department in accordance with 10 CSR 20-6.010(5)(N).

This permit will expire 24 months from the date of issuance. In accordance with 10 CSR 20-6.010(5)(J), the Department may grant an extension. 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. Expired construction permits require submittal of a new application and fee.

This construction permit does not supersede any requirements of the operating permit or enforcement actions. You must continue to submit any reports required in your existing operating permit to the Kansas City Regional Office. Nothing in this permit removes any obligations to comply with county or other local ordinances or restrictions.



Tyler Johnson
Page 2

If you have any questions concerning this matter, please contact Thomas Silkwood, of the Water Protection Program by phone at 573-751-7466 or by email at thomas.silkwood@dnr.mo.gov. You may also submit questions or comments in writing to the Department of Natural Resources, P.O. Box 176, Jefferson City, MO 65102.

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

Sincerely,

WATER PROTECTION PROGRAM

A handwritten signature in black ink that reads "Cindy LePage". The signature is written in a cursive, flowing style.

Cindy LePage, P.E., Chief
Engineering Section

CL:tsa

Enclosures

c: Martin Heins, P.E., OCD Services, LLC
Marta Hawkins

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



CONSTRUCTION PERMIT

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

| |
|--|
| Tyler Johnson Owner The Goat Ranch RV Park 2868 Bishop Road Gillette, WY 82718 |
|--|

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.

January 12, 2023
Effective Date

January 11, 2025
Expiration Date



Chris Wieberg, Director, Water Protection Program

CONSTRUCTION PERMIT

I. CONSTRUCTION DESCRIPTION

Construction of a new conventional subsurface disposal system to provide wastewater treatment capacity for seven new RV campsites at the Goat Ranch RV Park. Sewage will be conveyed by gravity to a two-compartment septic tank, after which the effluent will flow by gravity to a distribution box. The distribution box will distribute effluent between five lateral lines, each 105 feet long, for a total trench length of 525 feet.

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 Martin Heins, P.E. with OCD Services, 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 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.
6. 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.
7. 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.
8. All construction must adhere to applicable 10 CSR 20-8 (Chapter 8) requirements listed below.
 - Facilities shall be readily accessible by authorized personnel from a public right-of-way at all times. 10 CSR 20-8.140(2)(D). 10 CSR 20-8.130(2)(B)
 - Adequate provisions shall be made to effectively protect facility personnel and visitors from hazards according to 10 CSR 20-8.140(8)
 - Per the specifications, tank riser lids will be locked or bolted in place to prevent unauthorized access by persons or animals in accordance with 10 CSR 20-8.140(8)(A). Fencing will not be utilized since the facility is a subsurface disposal system with buried septic tanks.
 - There shall be no physical connection between any potable water supply and a wastewater pumping station, which under any conditions, might cause contamination of

the potable water supply. If a potable water supply is brought to the station, 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 20-8.130(3)(G)

- 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.
- 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). 10 CSR 20-8.130(2)(A)
- 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.
- All wastewater treatment facilities must have a screening device, communitor, 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. or
 - Twelve inches (12") for systems dispersing secondary or higher quality effluent; 10 CSR 20-8.200(7)(A)2.B. or
 - Forty-eight inches (48") where karst features are present unless the site can be reclassified. 10 CSR 20-8.200(7)(A)2.C.

- 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)

Upon completion of construction:

- A. Marta Hawkins will become the continuing authority for the 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 enclosed form Statement of Work Completed to the Department in accordance with 10 CSR 20-6.010(5)(N)

IV. REVIEW SUMMARY

1. CONSTRUCTION PURPOSE

An expansion of the capacity of the Goat Ranch RV Park is planned through the construction of seven additional RV campsites, which will necessitate the provision of wastewater treatment. The project proposes to construct a conventional septic system with subsurface disposal to provide wastewater treatment to the new campsites.

2. FACILITY DESCRIPTION

The Goat Ranch RV Park has the capacity to serve 39 RV sites, and also has a residential house and clubhouse on the property. The property is currently served by two septic systems with subsurface disposal fields, one conventional and one low-pressure piping (LPP). No changes are planned for the existing systems, and the construction for this project would include a septic tank, gravity mains, a distribution box, and lateral lines. This new conventional gravity septic system will serve seven new RV campsites on the property.

The property is located at 5284 SE Highway U, Clinton, in Henry County, Missouri. The facility has a design average flow of 630 gpd and will serve a hydraulic population equivalent of approximately 21 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

Existing major components that will remain in use include the following:

- The Goat Ranch RV Park currently provides wastewater treatment for 39 RV spots as well as a residential house and clubhouse. The existing treatment system consists of two separate septic systems with subsurface disposal fields, one conventional and one LPP. These systems will remain in use, and no upgrades or changes are planned for this project.

Construction will cover the following items:

- Septic Tank – 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 1500-gallon two-compartment septic tank. When the water level reaches a certain height, the wastewater flows into the second compartment by a tee-drop pipe. The septic tank provides approximately 2.4 days of detention at design average flow. The wastewater shall discharge by gravity to a distribution box before flowing to the lateral field. Settled solids in the septic tank shall be removed by a contract hauler.
- Subsurface Soil Dispersal System – The facility will utilize a design loading rate of 0.40 gpd/sf for the entire system. Soil morphology review was conducted during the facility plan application review and on site soils were determined to be acceptable for this system. The soil investigation was completed by Timothy Knoernschild, Certified Soil Scientist, on August 31, 2022.
 - Soils Report. In the soils investigation, there were two pits dug over the proposed site. The subsurface system is designed based on the soil characteristics of soil test pit #2, which demonstrated more restrictive conditions. Smearing of the soil structure was considered a moderate limitation of the site.
 - Soil test pit #1 had a surface soil that was described as loam. The suitable application rate for this pit is 0.45 gallons per square foot per day. The soil depth is 48 inches.
 - Soil test pit #2 had a surface soil that was described as silt loam. The suitable application rate for this pit is 0.40 gallons per square foot per day. The soil depth is 39 inches.
 - Conventional – A distribution box will uniformly distribute flows to five-105 foot long trenches, which will be spaced 10 feet apart center-to-center. The laterals will utilize polyethylene wrapped pipes, consisting of 12-inch diameter bundles and a 4-inch diameter perforated plastic pipe within.

5. OPERATING PERMIT

After completion of construction project submit: statement of work completed and as-built if the project was not constructed in accordance with previously submitted plans and specifications. Missouri State Operating Permit, General Permit MO-G823165, will be issued after receipt of the above documents. The operating permit fee has been paid.

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:

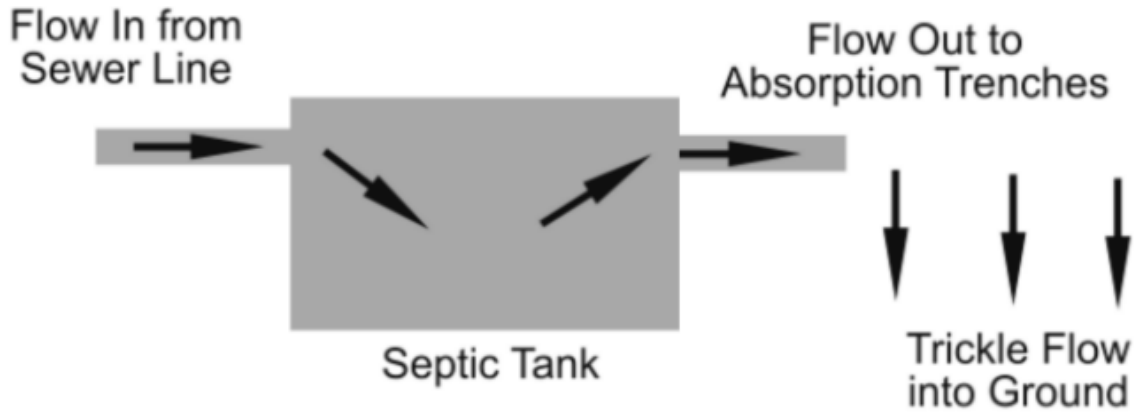
Administrative Hearing Commission
U.S. Post Office Building, Third Floor
131 West High Street, P.O. Box 1557
Jefferson City, MO 65102-1557
Phone: 573-751-2422
Fax: 573-751-5018
Website: <https://ahc.mo.gov>

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: Nov. 16 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

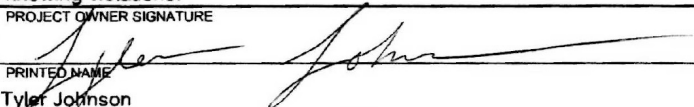
| | |
|--|--|
| 2.1 NAME OF PROJECT The Goat Ranch RV Park - East System Addition | 2.2 ESTIMATED PROJECT CONSTRUCTION COST \$ 10,000 |
|--|--|

2.3 PROJECT DESCRIPTION
 Expansion of an existing 40 site Recreational Vehicle Campground with 7 additional RV sites served by their own onsite wastewater treatment system.

2.4 SLUDGE HANDLING, USE AND DISPOSAL DESCRIPTION
 Sludge and scum not processed in the septic tank will be pumped at regular intervals (once every three years recommended) and disposed of by a pumping contractor, presumably in compliance with MoDNR land application regulations.

2.5 DESIGN INFORMATION
 A. Current population: 0; Design population: 21
 B. Actual Flow: _____ gpd; Design Average Flow: _____ gpd;
 Actual Peak Daily Flow: _____ gpd; Design Maximum Daily Flow: 630 gpd; Design Wet Weather Event: N.A.

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 The Goat Ranch RV Park - East System Addition | | TELEPHONE NUMBER WITH AREA CODE 660-351-5640 | | E-MAIL ADDRESS marta@storageconceptsco.com |
| ADDRESS (PHYSICAL) 5284 SE Highway U | CITY Clinton | STATE MO | ZIP CODE 64735 | COUNTY Henry |
| Wastewater Treatment Facility: Mo- (Outfall Of) | | | | |
| 3.1 Legal Description: NW <u>1/4</u> , NW <u>1/4</u> , <u> </u> <u>1/4</u> , Sec. 5 <u> </u> , T 40 <u> </u> , R 24 <u> </u> (Use additional pages if construction of more than one outfall is proposed.) | | | | |
| 3.2 UTM Coordinates Easting (X): <u>-93.6091</u> Northing (Y): <u>38.2858</u> For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83) | | | | |
| 3.3 Name of receiving streams: <u>None</u> | | | | |
| 4.0 PROJECT OWNER | | | | |
| NAME RV Space II, LLC (Tyler Johnson) | | TELEPHONE NUMBER WITH AREA CODE 307-660-4480 | | E-MAIL ADDRESS tyler@storageconceptsco.com |
| ADDRESS 2868 Bishop Road | CITY Gillette | STATE WY | ZIP CODE 82718 | |
| 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 Marta Hawkins | | TELEPHONE NUMBER WITH AREA CODE 660-351-5640 | | E-MAIL ADDRESS marta@storageconceptsco.com |
| ADDRESS 5761 SE Hwy U Suite 2 B | CITY Clinton | STATE MO | ZIP CODE 64735 | |
| 5.1 A letter from the continuing authority, if different than the owner, is included with this application. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input 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 Martin Heins | | TELEPHONE NUMBER WITH AREA CODE 913-202-3813 | | E-MAIL ADDRESS mheins1313@gmail.com |
| ADDRESS 32583 Hanna Ave. | CITY Warsaw | STATE MO | ZIP CODE 65355 | |
| 7.0 APPLICATION FEE | | | | |
| <input checked="" type="checkbox"/> CHECK NUMBER 1082 <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 Tyler Johnson | | | DATE 11/18/22 | |
| TITLE OR CORPORATE POSITION Owner/Partner | | TELEPHONE NUMBER WITH AREA CODE 307-660-4480 | | E-MAIL ADDRESS tyler@storageconceptsco.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. | | | | |