



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

## DEPARTMENT OF NATURAL RESOURCES

[www.dnr.mo.gov](http://www.dnr.mo.gov)

February 26, 2015

Mr. Chris Crocker  
Director of Planning and Development  
Missouri Department of Natural Resources  
Division of State Parks  
1659 East Elm Street, P.O. Box 176  
Jefferson City, MO 65102-0176

RE: C295364-02 Current River State Park New Development Wastewater Treatment Facility  
No. 3, MO-0137901, AP20354, Construction Permit No. CP0001717

Dear Mr. Crocker:

The Department of Natural Resources' Water Protection Program has reviewed and approved the plans and specifications submitted by Farnsworth Group, Inc. for the Division of State Parks' Current River State Park New Development (ND) Wastewater Treatment Facility No. 3. Please find enclosed Construction Permit No. CP0001717 and one set of approved specifications. One set of approved plans has been sent under separate cover. You must maintain these with your official project file for a minimum of four years following completion of the project.

This permit will terminate on April 29, 2016. In accordance with 10 CSR 20-6.010(4)(G), the Department may grant an extension only one time. If you believe that an extension is necessary, you must submit a request and a justification in writing for the extension at least 30 days prior to the permit expiration date.

Nothing in this permit removes any obligations to comply with county or other local ordinances or restrictions.

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

Mr. Chris Crocker  
February 26, 2015  
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If you have any questions concerning this matter, please contact me at (573) 751-1402 or Missouri Department of Natural Resources, P.O. Box 176, Jefferson City, MO 65102-0176.

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

Sincerely,

WATER PROTECTION PROGRAM



Byron F. Shaw, Jr., P.E., Clean Water SRF Engineering Unit Chief  
Financial Assistance Center

BFS/cs

Enclosures

c: Mr. Steve Myers, P.E., Farnsworth Group, Inc.  
Mr. Michael Qutami, Office of Administration, Facilities Mgmt., Design & Construction  
Southeast Regional Office  
Ms. Kristina Watts, Water Protection Program, Financial Assistance Center

STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



CONSTRUCTION PERMIT

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

Missouri Department of Natural Resources  
Division of State Parks  
1659 East Elm Street, P.O. Box 176  
Jefferson City, MO 65102-0176

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.

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.

February 26, 2015  
Effective Date

April 29, 2016  
Expiration Date

*Sara Parker Pauley*  
Sara Parker Pauley, Director, Department of Natural Resources

*John Madros*  
Director, Water Protection Program

## CONSTRUCTION PERMIT

The proposed wastewater collection system will consist of a septic tank effluent pumping system, which will carry septic tank effluent to the proposed receiving wastewater treatment facility.

### COLLECTION SYSTEM:

The collection portion of this project consists of the installation and construction of the following:

- approximately 1,243 linear feet (lf) of eight-inch polyvinyl chloride (PVC) gravity sewer line.
- approximately 17 manholes.
- septic tanks with cleanouts and septic tank effluent pumps as follows:
  - one 4,000 gallon tank.
  - one 15,000 gallon tank.
- high density polyethylene (HDPE) force mains with air release valves as follows:
  - approximately 831 lf of one and one-quarter inch force main.
  - approximately 2,227 lf of three-inch force main.

These wastewater facilities will be within the vicinity of the Current River State Park ND along County Road 19-250 in Shannon County and will be treated at the Current River State Park ND Wastewater Treatment Facility No. 3, Missouri State Operating Permit No. MO-0137901.

### WASTEWATER TREATMENT FACILITY:

The proposed no-discharge wastewater treatment facility project will consist of the construction and installation of an intermittent recirculating sand filter and subsurface adsorption field, which will be designed for an estimated population equivalent of 90 and an estimated design average flow of 9,019 gallons per day and includes the following components:

- one recirculation tank, with a volume of 20,000 gallons and four recirculation pumps.
- recirculating sand filter which consists of two sand filters with dimensions of 40 feet by 50 feet each. Each filter has five zones with four laterals each 50 feet long.
- a 5,000 gallon dosing tank with five pumps.
- an absorption field with a total area of 67,642 square feet divided into five zones with each zone made up of five sub zones with laterals of varying lengths.

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

#### **FINDING OF AFFORDABILITY:**

Pursuant to Section 644.145, RSMo, the department is required to determine whether a permit or decision is affordable and make a finding of affordability for each permit or decision.

An Affordability Determination and Finding was performed in accordance with RSMO §644.145 and is enclosed with this construction permit. The department finds the project is affordable with no economic burden to the community. See Appendix A.

#### **PERMIT CONDITIONS:**

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

1. All construction shall be in accordance with the plans and specifications submitted by Farnsworth Group, Inc. on February 17, 2015 and signed and sealed by Mr. Kevin N. Hannel, P.E. on December 18, 2014 and approved by the department on February 26, 2015.
2. Regulation 10 CSR 20-4.040(19)(B)1 requires that projects be publicly advertised, allowing sufficient time for bids to be prepared and submitted. Projects should be advertised at least 30 days prior to bid opening.
3. The department must be contacted in writing prior to making any changes to the approved plans and specifications that would directly or indirectly have an impact on the capacity, flow, system layout, or reliability of the proposed wastewater treatment facilities or any design parameter that is addressed by 10 CSR 20-8, in accordance with 10 CSR 20-8.110(8).
4. As per 10 CSR 20-4.040, all changes in contract price or time within the approved scope of work must be by change order in accordance with Section 20 of this rule.
5. This construction permit does not authorize discharge.
6. 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 Southeast Regional Office per 10 CSR 20-7.015(9)(E)2.
7. Protection of drinking water supplies shall be in accordance with 10 CSR 20-8.120(10). "There shall be no physical connections between a public or private potable water supply

system and a sewer, or appurtenance thereto which would permit the passage of any wastewater or polluted water into the potable supply. No water pipe shall pass through or come in contact with any part of a sewer manhole.”

- A. Sewers in relation to water works structures shall meet the requirements of 10 CSR 23-3.010 with respect to minimum distances from public water supply wells or other water supply sources and structures.
  - B. Sewer mains shall be laid at least ten feet horizontally from any existing or proposed water main. The distances shall be measured edge-to-edge. In cases where it is not practical to maintain a ten foot separation, the department may allow a deviation on a case-by-case basis, if supported by data from the design engineer. Such a deviation may allow installation of the sewer closer to a water main, provided that the water main is in a separate trench or on an undisturbed earth shelf located on either side of the sewer and at an elevation so the bottom of the water main is at least 18 inches above the top of the sewer. If it is impossible to obtain proper horizontal and vertical separation as described above for sewers, the sewer must be constructed of slip-on or mechanical joint pipe or continuously encased and be pressure tested to 150 pounds per square inch to assure water tightness.
  - C. Manholes should be located at least ten feet horizontally from any existing or proposed water main.
  - D. Sewers crossing water mains shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either above or below the sewer. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints. Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to maintain line and grade. When it is impossible to obtain proper vertical separation as stipulated above, one of the following methods must be specified:
    - 1) The sewer shall be designed and constructed equal to the water pipe and shall be pressure tested to assure water tightness prior to backfilling; or
    - 2) Either the water main or sewer line may be continuously encased or enclosed in a watertight carrier pipe which extends ten feet on both sides of the crossing, measured perpendicular to the water main. The carrier pipe shall be of materials approved by the department for use in water main construction.
8. In addition to the requirements for a construction permit, 10 CSR 20-6.200 requires land disturbance activities of one acre or more to obtain a Missouri State Operating Permit to discharge stormwater. The permit requires Best Management Practices sufficient to control runoff and sedimentation to protect waters of the state. Land disturbance permits

may only be obtained by means of the department's ePermitting system available online at [www.dnr.mo.gov/env/wpp/epermit/help.htm](http://www.dnr.mo.gov/env/wpp/epermit/help.htm).

See [www.dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm](http://www.dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm) for more information.

9. A United States (U.S.) Army Corps of Engineers (COE) permit (404) and a Water Quality Certification (401) issued by the department or permit waiver may be required for the activities described in this permit. This permit is not valid until these requirements are satisfied. If construction activity will disturb any land below the ordinary high water mark of Jurisdictional Waters of the U.S. then a 404/401 will be required. Since the COE makes determinations on what is jurisdictional, you must contact the COE to determine permitting requirements. You may call the department's Water Protection Program at (573) 751-1300 for more information.

See [www.dnr.mo.gov/env/wpp/401/](http://www.dnr.mo.gov/env/wpp/401/) for more information.

10. Upon completion of construction:

- A. The Department of Natural Resources' Division of State Parks will become the continuing authority for operation, maintenance, and modernization of these facilities;
- B. Submit the enclosed form Statement of Work Completed to the department in accordance with 10 CSR 20-6.010(5)(D); and
- C. Submit an electronic copy of the as builds.

## APPENDIX A

### APPENDIX – AFFORDABILITY ANALYSIS:

#### Missouri Department of Natural Resources

#### Water Protection Program

#### Affordability Determination and Finding

(In accordance with RSMo 644.145)

#### Missouri Department of Natural Resources' Division of State Parks Current River State Park ND Wastewater Treatment Facility No. 3, New Permit Missouri State Operating Permit No. MO-0137901

*Section 644.145 RSMo requires the Department of Natural Resources to make a "finding of affordability" when "issuing permits under" or "enforcing provisions of" state or federal clean water laws "pertaining to any portion of a combined or separate sanitary sewer system or publicly-owned treatment works."*

#### **Description:**

The Department of Natural Resources' Division of State Parks' Current River State Park ND, is located in Shannon County, MO. Facility No. 3 serves the service building and caretaker's residence located in the northwest corner of the property and the full service RV camping facilities and the walk-in camping facilities located along the north side of the property, all on the west side of Sinking Creek. Facility No. 3 will also service the group camping area located in the southwest corner of the property, also on the west side of Sinking Creek. The treatment system consists of an onsite primary septic tank with septic tank effluent pumping, a recirculating sand filter, and a pressurized seepage disposal field. Flow from the group camping area will be collected in pit privies that will be pumped out and trucked over to the treatment facility. Facility No. 3 has a design average flow of 9,019 gpd. The average flow includes disposal of the group camping pit privies.

Total Connections:

Permitted Features      126 total  
#001:                      connections

#### **New Permit Requirements or Requirements Now Being Enforced:**

This is a new operating permit for a no-discharge wastewater treatment facility (WWTF); however, the State government has allotted funds for operation, maintenance, repair and potential replacement of infrastructure including the WWTF. State agencies accomplish capital improvements through an appropriation process that does not affect individuals or their communities. Due to the Division of State Parks having already acquired funding for purposes such as necessary improvements to the WWTF, the conditions of the operating permit have been determined to cause a low cost burden on the Division of State Parks. In addition, the Financial Assistance Center, located within the Department of Natural Resources' Water Protection Program, is providing a grant of up to \$1,260,000 to help fund the construction of this WWTF and two others within Current River State Park ND.

#### **Range of Anticipated Costs Associated with Complying with Requirements:**

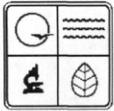
This is a new operating permit with new conditions. Therefore, it is anticipated that the permittee should incur additional costs for this facility.

- (1) *A community's financial capability and ability to raise or secure necessary funding;***  
This is a new operating permit with new conditions; therefore, there are new anticipated costs for the permittee to comply with this permit. The budgetary process does not depend on a community's financial capability to secure funding; rather existing Capital Improvement project funds delegated to the Agency are reallocated. Therefore, as a State Agency, the procurement process does not require changes to rate structures, and no communities incur additional financial burden.
- (2) *Affordability of pollution control options for the individuals or households of the community;***  
This is a new operating permit with new conditions; therefore, there are new anticipated costs for the permittee to comply with this permit. State agencies accomplish capital improvements through an appropriation process that does not affect individuals or their communities.
- (3) *An evaluation of the overall costs and environmental benefits of the control technologies;***  
This is a new operating permit with new conditions. The proposed system is appropriate for the situation at hand. Systems utilizing a septic tank, a recirculating sand filter, and low pressure pipe sub surface irrigation are cost-effective and provide protection to the environment through a no-discharge system.
- (4) *An assessment of other community investments relating to environmental improvements;***  
This is for a new facility and the operating permit will require operating conditions; therefore new financial burdens are anticipated. State Agencies accomplish capital improvements through an appropriation process that does not affect individuals or their communities.
- (5) *An assessment of factors set forth in the United States Environmental Protection Agency's guidance, including but not limited to the "Combined Sewer Overflow Guidance for Financial Capability Assessment and Schedule Development" that may ease the cost burdens of implementing wet weather control plans, including but not limited to small system considerations, the attainability of water quality standards, and the development of wet weather standards; and,***  
This is for a new facility and the operating permit will require operating conditions; therefore new financial burdens are anticipated. State Agencies accomplish capital improvements through an appropriation process that does not affect individuals or their communities.
- (6) *An assessment of any other relevant local community economic condition.***  
This is for a new facility and the operating permit will require operating conditions; therefore new financial burdens are anticipated. State Agencies accomplish capital improvements through an appropriation process that does not affect individuals or their communities.
- (7) *An assessment of any other relevant local community economic condition.***  
The Division of State Parks did not report any other relevant local economic conditions.

### **Conclusion and Finding**

As a result of reviewing the above affordability criteria, the department hereby finds that the action described above will result in a low cost burden for the Division of State Parks, but no burden with regard to the community's or State agency's overall financial capability. This is for a new facility and the operating permit will require operating conditions; therefore new financial burdens are anticipated. State Agencies accomplish capital improvements through an appropriation process that does not affect individuals or their communities.

Revised



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
WATER PROTECTION PROGRAM  
**FORM B: APPLICATION FOR OPERATING PERMIT FOR FACILITIES THAT RECEIVE  
PRIMARILY DOMESTIC WASTE AND HAVE A DESIGN FLOW LESS THAN OR  
EQUAL TO 100,000 GALLONS PER DAY**

FOR AGENCY USE ONLY	
CHECK NUMBER	
DATE RECEIVED	FEE SUBMITTED
1/14/2015	

**PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM**

**1. THIS APPLICATION IS FOR:**

- An operating permit for a new or unpermitted facility. Construction Permit # \_\_\_\_\_  
(Please include completed antidegradation review or request for antidegradation review, see instructions)
- An operating permit renewal: Permit #MO- \_\_\_\_\_ Expiration Date \_\_\_\_\_
- An operating permit modification: Permit #MO- \_\_\_\_\_ Reason: \_\_\_\_\_

**1.1** Is the appropriate fee included with the application (see instructions for appropriate fee)?  YES  NO

**2. FACILITY**

NAME		TELEPHONE NUMBER WITH AREA CODE	
Current River SP, New Development - Facility 3 WWTP			

ADDRESS (PHYSICAL)	CITY	STATE	ZIP CODE
County Road 19-250	Salem	MO	65560

**2.1** Legal description: 1/4, 1/4, 1/4, Sec. 8, T 30, R 4W County Shanno

**2.2** UTM Coordinates Easting (X): 641270 Northing (Y): 4131091  
For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

**2.3** Name of receiving stream: N/A

**2.4** Number of outfalls: wastewater outfalls stormwater outfalls instream monitoring sites

**3. OWNER**

NAME		EMAIL ADDRESS	TELEPHONE NUMBER WITH AREA CODE
Department of Natural Resources Division of State Parks			(573) 522-6390

ADDRESS	CITY	STATE	ZIP CODE
1659 East Elm, P.O. Box 176	Jefferson City	MO	65102

**3.1** Request review of draft permit prior to public notice?  YES  NO

**3.2** Are you a publicly owned treatment works?  YES  NO

**3.3** Are you a privately owned treatment works?  YES  NO

**3.4** Are you a privately owned treatment facility regulated by the Public Service Commission? YES  NO

**4. CONTINUING AUTHORITY: Permanent organization that will serve as the continuing authority for the operation, maintenance and modernization of the facility.**

NAME		EMAIL ADDRESS	TELEPHONE NUMBER WITH AREA CODE
Department of Natural Resources Division of State Parks			(573) 522-6390

ADDRESS	CITY	STATE	ZIP CODE
1659 East Elm, P.O. Box 176	Jefferson City	MO	65102

If the continuing authority is different than the owner, please include a copy of the contract agreement between the two parties and a description of the responsibilities of both parties within the agreement.

**5. OPERATOR**

NAME	TITLE	CERTIFICATE NUMBER

EMAIL ADDRESS	TELEPHONE NUMBER WITH AREA CODE

**6. FACILITY CONTACT**

NAME	TITLE
Chris Crocker	Director of Planning & Development

EMAIL ADDRESS	TELEPHONE NUMBER WITH AREA CODE
chris.crocker@dnr.mo.gov	(573) 522-6390

ADDRESS	CITY	STATE	ZIP CODE
1659 East Elm, P.O. Box 176	Jefferson City	MO	65102

## 7. DESCRIPTION OF FACILITY

**7.1 Process Flow Diagram or Schematic:** Provide a diagram showing the processes of the treatment plant. Show all of the treatment units, including disinfection (e.g. – chlorination and dechlorination), influents and outfalls. Indicate any treatment process changes in the routing of wastewater during dry weather and peak wet weather. Include a brief narrative description of the diagram. Attach sheets as necessary.

Please see attached overall site plan drawing (Sheet G-002) and brief narrative description with schematic design (Figure 2A) included in the attached Engineering Report.

**7.2** Attach an aerial photograph or USGS topographic map showing the location of the facility and outfall. See attached USGS map - No outfall

**8. ADDITIONAL FACILITY INFORMATION**8.1 Facility SIC code: 4952; Discharge SIC code: \_\_\_\_\_8.2 Number of people presently connected or population equivalent (P.E.) 0 Design P.E. 90

8.3 Connections to the facility:

Number of units presently connected:

Homes \_\_\_\_\_ Trailers \_\_\_\_\_ Apartments \_\_\_\_\_ Other (including industrial) \_\_\_\_\_

Number of commercial establishments: \_\_\_\_\_

8.4 Design flow: 9,019 Actual flow: N/A8.5 Will discharge be continuous through the year? Yes  No  (If yes, explain.)Discharge will occur during the following months: No Discharge, subsurface disposal

How many days of the week will discharge occur?

8.6 Is industrial waste discharged to the facility? \_\_\_\_\_ Yes  No 8.7 Does the facility accept or process leachate from landfills? \_\_\_\_\_ Yes  No 8.8 Is wastewater land applied?  Yes  No  
If yes, is Form I attached?  Yes  No8.9 Does the facility discharge to a losing stream or sinkhole? \_\_\_\_\_ Yes  No 8.10 Has a wasteload allocation study been completed for this facility? \_\_\_\_\_ Yes  No **9. LABORATORY CONTROL INFORMATION**

## LABORATORY WORK CONDUCTED BY PLANT PERSONNEL

Lab work conducted outside of plant.  Yes  NoPush-button or visual methods for simple test such as pH, settleable solids. \_\_\_\_\_ Yes  No Additional procedures such as dissolved oxygen, chemical oxygen demand, biological oxygen demand, titrations, solids, volatile content.  Yes  NoMore advanced determinations such as BOD seeding procedures, fecal coliform, nutrients, total oils, phenols, etc. \_\_\_\_\_ Yes  No Highly sophisticated instrumentation, such as atomic absorption and gas chromatograph. \_\_\_\_\_ Yes  No **10. COLLECTION SYSTEM**10.1 Length of pipe in the sewer collection system? \_\_\_\_\_ Feet, or 0.97 Miles (either unit is appropriate)10.2 Does significant infiltration occur in the collection system? \_\_\_\_\_ Yes  No 

If yes, briefly explain any steps underway or planned to minimize inflow and infiltration:

**11. BYPASSING**Does any bypassing occur in the collection system or at the treatment facility? No

If yes, explain:

**12. SLUDGE HANDLING, USE AND DISPOSAL**

**12.1** Is the sludge a hazardous waste as defined by 10 CSR 25?  Yes  No

**12.2** Sludge production, including sludge received from others: \_\_\_\_\_ Design dry tons/year \_\_\_\_\_ Actual dry tons/year

**12.3** Capacity of sludge holding structures:

Sludge storage provided: \_\_\_\_\_ cubic feet; \_\_\_\_\_ days of storage; \_\_\_\_\_ average percent solids of sludge;

No sludge storage is provided.  Sludge is stored in lagoon.

**12.4** Type of Storage:  Holding tank  Building  
 Basin  Lagoon  
 Concrete Pad  Other (Please describe) \_\_\_\_\_

**12.5** Sludge Treatment:  
 Anaerobic Digester  Lagoon  Composting  
 Storage Tank  Aerobic Digester  Other (Attach description) **Septic Tanks**  
 Lime Stabilization  Air or Heat Drying

**12.6** Sludge Use or Disposal:

Land Application  Surface Disposal (Sludge Disposal Lagoon, Sludge held for more than two years)  
 Contract Hauler  Hauled to Another treatment facility  
 Incineration  Sludge Retained in Wastewater treatment lagoon  
 Solid waste landfill

**12.7** Person responsible for hauling sludge to disposal facility:

By applicant  By others (complete below)

NAME		EMAIL ADDRESS	
ADDRESS	CITY	STATE	ZIP CODE
CONTACT PERSON	TELEPHONE NUMBER WITH AREA CODE	PERMIT NO. MO-	

**12.8** Sludge use or disposal facility

By applicant  By others (Please complete below.)

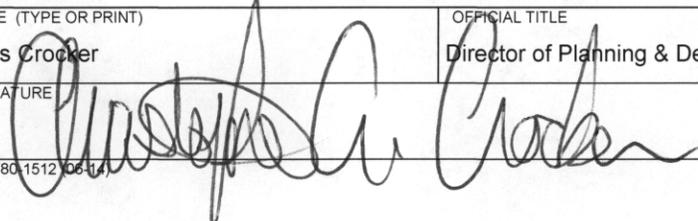
NAME		EMAIL ADDRESS	
ADDRESS	CITY	STATE	ZIP CODE
CONTACT PERSON	TELEPHONE NUMBER WITH AREA CODE	PERMIT NO. MO-	

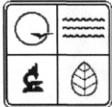
**12.9** Does the sludge or biosolids disposal comply with federal sludge regulations under 40 CFR 503?

Yes  No (Please explain)

**13. CERTIFICATION**

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

NAME (TYPE OR PRINT) Chris Crocker	OFFICIAL TITLE Director of Planning & Development	TELEPHONE NUMBER WITH AREA CODE (573) 522-6390
SIGNATURE 		DATE SIGNED 1-14-2015



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
 WATER PROTECTION PROGRAM  
**FORM E – APPLICATION FOR GENERAL PERMIT**  
 UNDER MISSOURI CLEAN WATER LAW

FOR AGENCY USE ONLY	
CHECK NUMBER	
DATE RECEIVED	FEE SUBMITTED

1.00 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS  
 State Park

1.10  
 a. This facility is now in operation under Missouri Operating Permit Number, or NPDES, MO – \_\_\_\_\_ and there is not a proposed increase in design stormwater or wastewater flow.  
 b. This facility is now in operation under Missouri Operating Permit Number MO – \_\_\_\_\_ and there is a proposed increase in design stormwater or wastewater flow.  
 c. This is a new permit (for a new facility).  
 d. Construction Permit if required by the General Permit.  
 If you checked either item **b** or **c** above then you may need to submit an antidegradation review. See instructions.

2.00 NAME OF FACILITY  
 Current River SP, New Development - Facility 3 WWTP

2.10 ADDRESS (PHYSICAL) County Road 19-250	CITY Salem	STATE MO	ZIP CODE 65560
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**3.00 OWNER**

NAME	E-MAIL ADDRESS	PHONE NUMBER WITH AREA CODE	FAX NUMBER WITH AREA CODE
STREET 1659 East Elm, P.O. Box 176	CITY	STATE	ZIP CODE

**4.00 CONTINUING AUTHORITY**

NAME	E-MAIL ADDRESS	PHONE NUMBER WITH AREA CODE	FAX NUMBER WITH AREA CODE
STREET 1659 East Elm, P.O. Box 176	CITY	STATE	ZIP CODE

**5.00 OPERATOR (if applicable)**

NAME	PHONE NUMBER WITH AREA CODE
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**6.00 FACILITY CONTACT**

NAME	PHONE NUMBER WITH AREA CODE	FAX NUMBER WITH AREA CODE
TITLE		

7.00 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION (ATTACH ADDITIONAL SHEETS AS NECESSARY)  
 Outfall Number \_\_\_\_\_ ¼ \_\_\_\_\_ ¼ Sec. \_\_\_\_\_ T \_\_\_\_\_ R \_\_\_\_\_ County  
 Outfall Number \_\_\_\_\_ ¼ \_\_\_\_\_ ¼ Sec. \_\_\_\_\_ T \_\_\_\_\_ R \_\_\_\_\_ County

7.10 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER  
 Outfall Number \_\_\_\_\_ Receiving Water \_\_\_\_\_  
 Outfall Number \_\_\_\_\_ Receiving Water \_\_\_\_\_

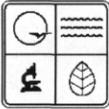
7.20 Does the discharge(s) for which you are seeking a permit discharge to a combined sewer system? Yes No  
 7.40 Primary SIC Code 4952  
 7.50 If this application is for a storm water permit, please provide an attached list of **any** materials that are stored outside and exposed to storm water.  
 7.60 Attach a USGS 1" = 2,000' scale map showing the location of the facility in relation to the local road system. Indicate on the map the facility, the receiving stream, the points of discharge and the map section, township and range.  
 7.70 If this is an existing discharge, submit a summary of pollutants analyzed in the past two years.  
 7.80 If applying for a permit for an industrial site (i.e. stormwater), what is the method of domestic wastewater disposal? \_\_\_\_\_  
 7.90 I certify that I am familiar with the information contained in the application and to the best of my knowledge and belief such information is true, complete and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders and decisions, subject to any legitimate appeal available to applicant under the Missouri Clean Water Law of Missouri Clean Water Commission.

A. NAME AND OFFICIAL TITLE (TYPE OR PRINT) Chris Crocker Director of Planning & Development	B. TELEPHONE NUMBER WITH AREA CODE (573) 522-6390
C. SIGNATURE 	D. DATE SIGNED 1-14-2015

## INSTRUCTIONS

This form must be submitted with the application fee (listed below). Persons with more than one operating location shall obtain a general permit for each location unless other permitting arrangements are allowed by the terms of the general permit. Where multiple discharge points exist at a single operating location, one application may cover all the applicable discharges. **If there are any questions concerning this form, please contact the appropriate regional office (see map available at [www.dnr.mp.gov/regions/regions.htm](http://www.dnr.mp.gov/regions/regions.htm)).**

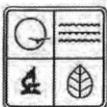
- Fees:** Land Disturbance (Form G must be included) - \$300 (due at application time only)  
Ag Chem Fertilizer/Pesticide Storage- \$150 due with application for new permits; \$50/year while permit is in effect; no fee required with renewal application  
Concentrated Animal Feeding Operation, or CAFO - \$150 (due at application time only)  
Pesticide Applications - \$150 due for the application for new permit and each year until expiration; \$60/year thereafter; no fee required with renewal application.  
General Permit – Other (e.g., Motor Vehicle Salvage, Limestone Quarry, Petroleum Storage, Sand/Gravel Mining, etc.) - \$150 due with application for new permits and each year until expiration; \$60/year thereafter; no fee required with renewal application.  
Construction Permit \$750
- 1.00 Give the name of the specific general permit you are applying for: (e.g. Motor Vehicle Salvage.) and describe the primary business conducted at this site. If you are unsure about the specific name for the general permit, contact the Water Protection Program, Water Pollution Branch at 573-751-6825.
- As of April 27, 2012, a new general permit is available for private domestic no-discharge facilities with design flow of less than 50,000 gallons per day. These facilities must have no industrial contributors and are subject to specific requirements. Please see the web address below to review MO-G823 before applying for this permit.
- 1.10 Fill out either item (a., item (b., item (c., or item (d. as applicable.
- Each general permit may have specific antidegradation review requirements contained within it. Go to the following websites to verify your specific requirements:  
For MO-G permits visit [www.dnr.mo.gov/env/wpp/permits/wpcpermits-general.htm](http://www.dnr.mo.gov/env/wpp/permits/wpcpermits-general.htm).  
For MO-R permits visit [www.dnr.mo.gov/env/wpp/permits/wpcpermits-stormwater.htm](http://www.dnr.mo.gov/env/wpp/permits/wpcpermits-stormwater.htm).
- Effective Sept. 1, 2008, facilities are required to use *Missouri's Antidegradation Rule and Implementation Procedure*. This document is available on the Web at [www.dnr.mo.gov/env/wpp/docs/aip-cwc-appr-050708.pdf](http://www.dnr.mo.gov/env/wpp/docs/aip-cwc-appr-050708.pdf). For more information please contact the Department at 800-361-4827 or 573-751-1300.
- For some general permits, a construction permit is required prior to beginning construction of the facility. For other general permits, an exemption is provided from construction permit requirements. Please review the general permits at one of the web addresses noted above. For domestic wastewater treatment facilities, an engineering report, plans, and specifications as defined in 10 CSR 20-8.020 or 8.110 through 8.220 must be submitted for approval and issuance of a Construction Permit. If the facility is designed for greater than 22,500 gallons per day, the engineering report must be submitted and approved prior to submittal of the Form E Application, fee, plans and specifications. A Summary of Design Data must be submitted with the engineering plans and specifications.
- 2.00 Name of facility – by what name is this facility known locally? (e.g., Southwest Sewage Treatment Plant or Oak Hill Mobile Home Park.)
- 2.10 Give the street address of the facility. If the facility lacks a mailing address, give an accurate geographic description. (e.g., Intersection of Route A and M.)
- 3.00 Owner – legal name and address of owner.
- 4.00 Continuing Authority – permanent organization which will serve as the continuing authority for the operation, maintenance and modernization of the facility.
- 5.00 Operator – name, certificate number of person operating the facility.
- 6.00 Give name of person at the facility who can be contacted by the Department if necessary.
- 7.00 An outfall is the point(s) at which wastewater is discharged. For storm water this may be the point(s) where water leaves the property. Outfalls should be given in terms of the legal description of the facility. Sufficient information should be submitted so the outfall may be located by Department staff.
- 7.10 Receiving stream(s) – the name of the stream(s) to which the discharge is directed and any subsequent tributary until a lake or continuous flowing stream is reached.
- 7.30 A combined sewer system is one in which the sanitary and storm sewers are one pipe. In Missouri, parts of Macon, Moberly, Cape Girardeau, St. Joseph, Kansas City, Sedalia and all of the city of St. Louis are on combined sewer systems. To find out information, consult with your municipal public works department or, if in St. Louis, the St. Louis Metropolitan Sewer District (MSD). **If this discharge is to a combined sewer system, it is exempt from storm water permitting requirements. You do not need to file this application if it is for storm water discharges only.**
- 7.40 List only your primary Standard Industrial Classification, or SIC, code. The SIC system was devised by the U.S. Office of Management and Budget to cover all economic activities. The primary SIC code is that of the operation that generates the most revenue, or, secondly, employs the most personnel. To find the correct SIC code, contact the Missouri Department of Natural Resources at 573-526-6627 or refer to the following Web sites: [www.census.gov/epcd/www/naicstab.htm](http://www.census.gov/epcd/www/naicstab.htm) or [www.osha.gov/pls/imis/sicsearch.html](http://www.osha.gov/pls/imis/sicsearch.html). Do not list the North American Industry Classification System (NAICS) code.
- 7.50 Please list anything stored outside, including wood pallets, empty storage barrels, waste disposal containers (except for a secured Dempsey dumpster), or **anything** that is a raw material, by-product, or product of your manufacturing activities.
- If your facility is listed under any of the following SIC codes or major group codes, and you can certify that no materials are stored outside, then **you are exempt from storm water permitting requirements. You do not need to file this application if it is for storm water discharges only.** This information refers to the first two, first three, or all four numbers of your SIC code listed in 7.40 above. The SIC codes that are exempt from regulations if no materials are stored outside are: 20xx-23xx, 25xx, 265x, 267x, 27xx, 283x, 285x, 30xx, 31xx, 323x, 34xx-39xx, and 4221-4225.
- 7.60 A map showing the facility in relation to the local roads and receiving streams is required. Attach a 1" = 2000' scale U.S. Geological Survey topographic map, available from the department's Division of Geology and Land Survey in Rolla at 573-368-2125.
- 7.70 If this is an existing discharge, submit a list of pollutants analyzed in the past two years and any laboratory findings.
- 7.80 Give the method of domestic wastewater disposal; identify the future method if the site is currently undeveloped. If public sewers, give name of sewer agency. If private system with a State Operating Permit, give name of facility and permit number. If other, please describe.
- 8.00 Signature – all applications must be signed as follows and the signature must be original.
- For a corporation, by an officer having responsibility for the overall operation of the regulated facility or activity or for environmental matters.
  - For a partnership or sole proprietorship, by a general partner or the proprietor (owner).
  - For a municipal, state, federal, or other public facility, by either a principal executive officer or by an individual having overall responsibility for environmental matters at the facility.



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
 WATER PROTECTION PROGRAM  
**FORM G – APPLICATION FOR STORMWATER PERMIT (FORM E MUST BE INCLUDED)**  
**UNDER THE GENERAL PERMIT: LAND DISTURBANCE (MORA AND MOR100)**

**Applicants wishing to obtain a MORA permit must apply using the ePermitting system, unless prior approval has been granted by the department. To request approval please call the Department of Natural Resources' Water Protection Program at 573-751-1300. For more information, or to use ePermitting, visit [dnr.mo.gov/env/wpp/epermit/help.htm](http://dnr.mo.gov/env/wpp/epermit/help.htm).**

NAME OF DEVELOPMENT*	
Current River SP, New Development - Facility 3 WWTP	
PHASE (INDICATE PHASE I, II, ETC., IF APPLICABLE)	
NATURE OF CONSTRUCTION ACTIVITY	
State Park - installation of sanitary sewer collection and treatment system	
PHYSICAL LOCATION OF DEVELOPMENT (ADDRESS, IF ASSIGNED)**	
County Road 19-250, Salem, MO 65560	
DATE CONSTRUCTION IS TO BEGIN	
2/24/15	
Total area of site: <u>408.00</u> acres	
Total area of land to be disturbed: <u>2.95</u> acres	
Has a Stormwater Pollution Prevention Plan (SWPPP) been developed for this site? (This plan must be developed in accordance with requirements and guidelines specified within the general permit for stormwater discharges from land disturbance activities. The application will be considered incomplete if the Stormwater Pollution Prevention Plan has not been developed. Do not enclose a copy of the plan. A copy of the Stormwater Pollution Prevention Plan may be requested by the department at any time.) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Is any part of the area that is being disturbed discharging to a jurisdictional water of the United States? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If yes, have you received a Clean Water Act Section 404 permit for this site from the U.S. Army Corps of Engineers? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
There may be an established Local Authority Erosion Control Plan in the city or county where land disturbance activities covered under this general permit will occur. Please contact your local authority to determine if any requirements exist.	
I certify I am familiar with the information contained in the application, that to the best of my knowledge and belief such information is true, complete and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders and decisions, subject to any legitimate appeal available to an applicant under the Missouri Clean Water Law of the Missouri Clean Water Commission.	
NAME AND OFFICIAL TITLE	TELEPHONE NUMBER WITH AREA CODE
Chris Crocker, Director of Planning & Development	
SIGNATURE	DATE SIGNED
	1-14-2015
<p><b>Note:</b> This form must be submitted with the permit fee (\$300), map and <i>Form E – Application for a General Permit</i> (780-0795). The form is available at <a href="http://dnr.mo.gov/forms/780-0795.pdf">dnr.mo.gov/forms/780-0795.pdf</a>.</p> <p>A map of the department's regional offices is available on the department's website at <a href="http://www.dnr.mo.gov/regions/regions.htm">www.dnr.mo.gov/regions/regions.htm</a>.</p> <p>*In the case of an MOR100 permit, the name of the development should be the name of the entity applying for the permit.        **If applying for an MOR100 permit, use the company office address.</p>	



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
 WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH  
 (SEE MAP FOR APPROPRIATE REGIONAL OFFICE)  
**FORM I - PERMIT APPLICATION FOR CONSTRUCTION AND  
 OPERATION OF WASTEWATER IRRIGATION SYSTEMS**

<b>FOR AGENCY USE ONLY</b>
PERMIT NUMBER MO -
DATE RECEIVED

**INSTRUCTIONS:** The following forms must be submitted with Form I: FORM B for domestic wastewater. Submit FORMS E and G for land disturbance permit if construction areas total one acre or more.

**1.00 FACILITY INFORMATION**

1.10 Facility Name  
Current River SP, New Development - Facility 3 WWTP

1.20 Application for:  Construction Permit (attach Engineering report, Plans and Specifications per 10 CSR 20-8)  
 Operating Permit (if no construction permit, attach engineering documents)  
 Date Irrigation System Began Operation: \_\_\_\_\_  
 Operating Permit Renewal

1.30 Type of wastewater to be irrigated:  Domestic  Municipal  State/National Park  Seasonal business  
 Municipal with Pretreatment Program or Significant Industrial Users  Other (explain) \_\_\_\_\_  
 SIC Codes (list all that apply, in order of importance) \_\_\_\_\_

1.40 Months when the business or enterprise will operate or generate wastewater:  
 12 months per year  Part of year (list Months): \_\_\_\_\_

1.50 This system is designed for:  
 No-discharge  Partial irrigation when feasible and discharge rest of time.  
 Irrigation during recreation season (April - October) and discharge during November - March.  
 Other (explain) \_\_\_\_\_

1.60 List the Facility outfalls which will be applicable to the irrigation system from outfalls listed on Form B.  
 Outfall Nos. \_ \_ \_ \_ \_

**2.00 STORAGE BASINS**

2.10 Number of storage basins: 0 Type of basin:  Steel  Concrete  Fiberglass  Earthen  
 Earthen with membrane liner

2.20 Storage basin dimensions at inside top of berm (feet): Report freeboard as feet from top of berm to emergency spillway or overflow pipe.  
 (Complete Attachment A: Profile Sketch)  
 Basin #1: Length \_\_\_\_\_ Width \_\_\_\_\_ Depth \_\_\_\_\_ Freeboard \_\_\_\_\_ Berm Width \_\_\_\_\_ % Slope \_\_\_\_\_  
 Basin #2: Length \_\_\_\_\_ Width \_\_\_\_\_ Depth \_\_\_\_\_ Freeboard \_\_\_\_\_ Berm Width \_\_\_\_\_ % Slope \_\_\_\_\_

2.30 Storage Basin operating levels (report as feet below emergency overflow level)  
 Basin #1: Maximum water level \_\_\_\_\_ ft. Minimum operating water level \_\_\_\_\_ ft.  
 Basin #2: Maximum water level \_\_\_\_\_ ft. Minimum operating water level \_\_\_\_\_ ft.

2.40 Depth of sludge in lagoons and storage basins \_\_\_\_\_ ft.  
 Total sludge stored \_\_\_\_\_ dry tons \_\_\_\_\_ cu. ft.

**3.00 LAND APPLICATION SYSTEM**

3.10 Number of irrigation sites 1 Total Acres 1.55 Maximum % field slopes 15%  
 Location: 1/4, 1/4, 1/4, 8 Sec. 30N T 4W R Shan County \_\_\_\_\_ Acres  
 Location: 1/4, 1/4, 1/4, \_\_\_\_\_ Sec. \_\_\_\_\_ T \_\_\_\_\_ R \_\_\_\_\_ County \_\_\_\_\_ Acres

3.11 Type of vegetation:  Grass hay  Pasture  Timber  Row crops  Other (describe) \_\_\_\_\_

3.20 Wastewater flow (dry weather) gallons/day:  
Average annual: 9,019 Seasonal \_\_\_\_\_ Off-season \_\_\_\_\_  
Months of seasonal flow: 12  
Human Population Equivalent: 90

3.21 Land Application rate per acre (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  
Total Irrigation per year (gallons): \_\_\_\_\_ Design \_\_\_\_\_ Actual  
Actual months used for Irrigation (check):  Jan  Feb  Mar  Apr  May  Jun  Jul  Aug  Sep  
 Oct  Nov  Dec

3.22 Land Application Rate is based on:  
 Nutrient Management Plan (N&P)  
 Hydraulic Loading  
 Other (describe) \_\_\_\_\_

3.30 Equipment type:  Sprinklers  Gated pipe  Center pivot  Traveling gun  Other (describe) LPP  
Equipment Flow Capacity: 50 Gallons per hour 8760 Total hours of operation per year

3.40 Public Access Restrictions for irrigation sites:  Site is Fenced  Wastewater disinfection prior to irrigation  
 Other (describe): Subsurface discharge

3.50 Separation distance (in feet) from the outside edge of the wetted irrigation area to down gradient features:  
\_\_\_\_\_ Permanent flowing stream \_\_\_\_\_ Losing Stream \_\_\_\_\_ Intermittent (wet weather) stream \_\_\_\_\_ Lake or pond  
200 Property boundary 200 Dwellings 500 Water supply well \_\_\_\_\_ Other (describe) \_\_\_\_\_

3.60 SOILS INFORMATION: Use information from the County Soil Survey, NRCS, or professional soil scientist.  
Soil Series Name \_\_\_\_\_ Depth of bedrock > 4 Feet Depth of water table > 4 Feet  
Soil Infiltration rate in inches/hour (in/hr) for most restrictive layer within the following soil depth ranges:  
0.6 In/hr for 0-12 in soil depth 1.0 In/hr for 12-24 inch soil depth 0.2 In/hr for 24-60 inch soil depth

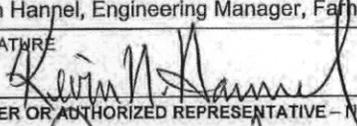
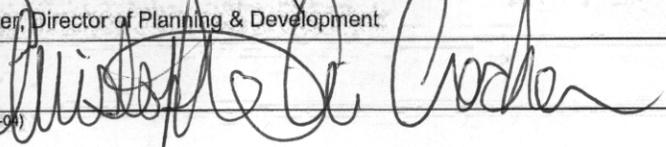
3.70 Include a recent Geologic Report by the Department's Geological Survey and Resource Assessment Division with your construction permit.

3.80 Attach a current copy of the Operation and Maintenance (O&M) Plan for the irrigation system. Date of O&M Plan: \_\_\_\_\_

3.81 Attach a site map showing topography, storage basins, irrigation sites, property boundary, streams, wells, roads, dwellings and other pertinent features.

3.82 Attach a facility sketch showing treatment units, storage basins, pipelines, irrigation equipment, application sites and other features.

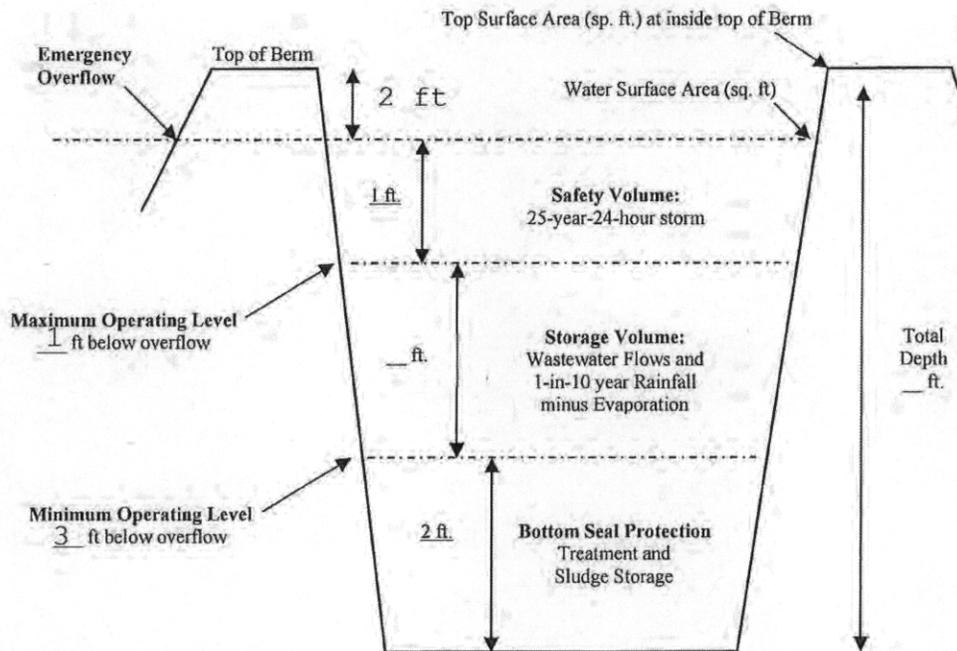
**4.00 CERTIFICATION**  
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine or imprisonment.

CONSULTING ENGINEER - Name, Official Title and Engineering Firm (TYPE OR PRINT) Kevin Hannel, Engineering Manager, Farnsworth Group	TELEPHONE NUMBER (area code and number) (309) 663-8435
SIGNATURE 	DATE SIGNED <u>1/13/15</u>
OWNER OR AUTHORIZED REPRESENTATIVE - Name and Official Title (TYPE OR PRINT) Chris Crocker, Director of Planning & Development	TELEPHONE NUMBER (area code and number) (573) 522-6390
SIGNATURE 	DATE SIGNED <u>1-14-2015</u>

# ATTACHMENT A

(To be included with Form I)

## Lagoon or Storage Basin PROFILE SKETCH



### DEFINITION OF TERMS (REFER TO THE PROFILE SKETCH ABOVE).

- Freeboard is depth from top of berm to emergency spillway (minimum 1 foot);
- Safety Volume is depth for 25-year, 24-hour storm (minimum of 1 foot);
- Maximum Operating Level is at bottom of the safety volume (minimum of 2 feet below top of berm).
- Minimum Operating Level is 2 feet above bottom of lagoon for seal protection per 10 CSR 20-8.  
The minimum operating level may be greater than 2 feet when additional treatment volume is included.
- Storage Volume and days storage are based on the volume between Minimum and Maximum Operating Levels.
- Total Depth is from top of berm to bottom of basin including freeboard.