**ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY**
**NOTICE OF INTENT**
**INDIVIDUAL TREATMENT FACILITIES**
**NPDES GENERAL PERMIT ARG550000**

**Application Type:** **New** ☒ **Renewal** ☐ **(Permit # ARG55_____)**

## I. PERMITTEE/OPERATOR INFORMATION

Permittee (Legal Name): Michael Benson

Permittee Mailing Address: 13691 Mars Hill Road

Permittee City: Bauxite

Permittee State: Arkansas Zip: 72011

Permittee Telephone Number: 870-245-7218

Permittee Fax Number: NA

Permittee E-mail Address: Mbenson1804@gmail.com

Operator Type:

☐ State ☐ Partnership

☐ Federal ☐ Corporation*

☒ Sole Proprietorship/Private

*State of Incorporation: _____

The legal name of the Permittee must be identical to the name listed with the Arkansas Secretary of State.

## II. INVOICE MAILING INFORMATION (Home owners are exempt.)

Invoice Contact Person: N/A City: _____

Invoice Mailing Company: _____ State: _____ Zip: _____

Invoice Mailing Address: _____ Telephone: _____

## III. FACILITY INFORMATION

Facility Name: Benson Residence Facility Contact Person: Michael Benson

Facility Address: 13691 Mars Hill Road Telephone Number: 870-245-7218

Facility County: Saline Facility City, State & Zip: Bauxite, Arkansas, 72011

Facility Latitude: 34 Deg 29 Min 44.90 Sec Facility Longitude: 92 Deg 27 Min 14.46 Sec

Datum

Accuracy: _____ Method: _____ : _____ Scale: _____ Description: _____

## IV. DISCHARGE INFORMATION

Outfall Number: 001 Flow: 500 gpd (Gallons per Day)

Stream Segment: 2C Hydrologic Basin Code: 804 02 03

Outfall Latitude: 34 Deg 29 Min 45.94 Sec Outfall Longitude: 92 Deg 27 Min 10.41 Sec

Datum

Accuracy: _____ Method: _____ : _____ Scale: _____ Description: _____

Type of Treatment: Bio Microbics Microfast 0.5 with UV and Post Aeration

Receiving Stream: Ouachita River

## V. FACILITY PERMIT INFORMATION

NPDES Individual Permit Number (If Applicable): AR00

NPDES General Permit Number (If Applicable): ARG

State Construction Permit Number: _____

NPDES General Construction Stormwater Permit Number (If Applicable): ARR15

## VI. OTHER INFORMATION:

Operator Name: David Meints
Operator License Number: 009055 License Class: III

Consultant Contact Name: David Meints
Consultant Email Address: david@meincowastewater.com
Consultant Address: PO Box 1001 City: Bryant State: AR Zip: 72089
Consultant Phone Number: 501-804-0837 Consultant Fax Number: 501-821-4048

**Has this treatment system been approved by AHD?** Yes ☒ No ☐

**Disclosure Statements:**

Arkansas Code Annotated Section 8-1-106 requires that all applicants for the issuance or transfer of any permit, license, certification or operational authority issued by the Arkansas Department of Environmental Quality (ADEQ) file a disclosure statement with their applications. The filing of a disclosure statement is mandatory. No application can be considered complete without one. You must submit a new disclosure statement even if you have one on file with the Department. The form may be obtained from ADEQ web site at: http://www.adeq.state.ar.us/disclosure_stmt.pdf.

## VII. CERTIFICATION OF OPERATOR

MB (Initial) "I certify that, if this facility is a corporation, it is registered with the Secretary of the State of Arkansas."

MB (Initial) "I certify that the cognizant official designated in this Application is qualified to act as a duly authorized representative under the provisions of 40 CFR 122.22(b). If no cognizant official has been designated, I understand that the Department will accept reports signed only by the Applicant."

MB (Initial) "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 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."

Responsible Official Printed Name: Michael Benson Title: Owner
Responsible Official Signature: [signature] Date: 1/5/2023
Responsible Official Email: mbenson1804@gmail.com
Cognizant Official Printed Name: David Meints Title: Class III Operator
Cognizant Official Signature: [signature] Telephone: 501-804-0837
Cognizant Official Email: david@meincowastewater.com

## X. PERMIT REQUIREMENT VERIFICATION

Please check the following to verify completion of permit requirements.

| | Yes | No | * If No is answered for any of the questions, then a permit can not be issued! |
|---|---|---|---|
| Submittal of Complete NOI? | ☒ | ☐ | |
| Submittal of Required Permit Fee? | ☐ | ☒ | Check Number: |
| Submittal of AHD Form EHP-19? | ☒ | ☐ | |
| Submittal of Site Map? | ☒ | ☐ | |
| Submittal of Disclosure Statement? | ☐ | ☒ | |


W Miller Sardis Rd
POD
13691 Mars Hill Rd
Mars Hill Rd
POE

# IMPORTANT NOTICE TO PROPERTY OWNER

The Arkansas Department of Health's approval of a discharging sewage system **does not** relieve the property owner of any other local, state, or federal requirement regarding sewage discharging systems. Please be advised that **all** wastewater systems that discharge sewage to the surface are required to notify:

Arkansas Department of Environmental Quality

ATTN: Permits Branch

5301 North Shore Drive

North Little Rock, AR 72118

Phone Number: 501-682-0623

Web Site: www.adeq.state.ar.us

5K

ATU- Surface discharge

**Arkansas Department of Health**
Environmental Health Protection

Receipt Number
2536852

## Individual Onsite Wastewater System Permit Application

Permit Type ☒ New Installation ☐ Alteration / Repair

DR Environmental ID #

| 6 | 3 | 0 | 1 | 1 | 1 | 7 | 0 | 1 | 1 | |
|---|---|---|---|---|---|---|---|---|---|---|

| Fee Schedule for Structures | | √ |
|---|---|---|
| Structures 1500 sq ft or less | $ 30.00 | ☐ |
| Structures more than 1500 sq ft and up to 2000 sq ft | $ 45.00 | ☐ |
| Structures more than 2000 sq ft and up to 3000 sq ft | $ 90.00 | ☐ |
| Structures more than 3000 sq ft and up to 4000 sq ft | $120.00 | ☒ |
| Structures more than 4000 sq ft | $150.00 | ☐ |
| Alteration and Repair | $ 30.00 | ☐ |

**Part 1 Application**

Treatment Type (check one)
- ☐ STD = Standard Septic Tank
- ☐ ISF = Intermittent Sand Filter
- ☐ PMF = Proprietary Media Filter
- ☐ OTH = Other (Describe)
- ☒ ATU = Aerobic Treatment Plant
- ☐ RSF = Re-circulating Sand Filter
- ☐ RGF = Re-circulating Gravel Filter
- ☐ HLD = Holding Tank

Disposal Method (check one)
- ☐ STD = Standard Absorption Field
- ☒ SUR = Surface Discharge
- ☐ CPF = Capping Fill
- ☐ OTH = Other
- ☐ LPD = Low Pressure Distribution
- ☐ HLD = Holding Tank
- ☐ SRL = Serial Distribution
- ☐ DRP = Drip Irrigation

| | |
|---|---|
| 1. Owner's/Applicant's Name<br>Michael Benson | 2. Phone Number<br>870-245-7218 |
| 3. Mailing Address<br>213 Pope Drive, Benton, AR 72015 | 4. County<br>Saline |

5. Address of Proposed System (If a 911 address is not available, attach detailed directions or map)
13691 Mars Hill Road, Bauxite, AR 72011

| | | | |
|---|---|---|---|
| 6. Subdivision Name<br>Timber Point Phase 1 | 7. Approval Date<br>n/a | 8. Date Recorded<br>n/a | 9. Lot Number<br>1 |
| 10. Lot Dimensions<br>445' x 350' x 445' x 320' | 11. Total Area (Acres)<br>3.32 | 12. # Bedrooms # People<br>5 | 13. Daily Flow (GPD)<br>500 |

14. Brief Legal Description of Property (Attach a separate sheet of paper, if necessary)
S1-T3S-R14W

| | |
|---|---|
| 15. Water Supply (Specify supplier, if Public Water)<br>Sardis Water | 16. GPS Coordinates<br>34.4956866, -92.4530244 |

| 17. Loading Rates | (gpd/ft²) | 18. System Specifications | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Primary Area | n/a | a. Size of Septic Tank | ATU | gal | f. Trench Depth | n/a | inches | |
| Secondary Area | n/a | b. Size of Dose Tank | n/a | gal | g. Trench Spacing | n/a | feet | |
| Percolation Test | (min/in) | c. Absorption Area | n/a | ft² | h. Trench Media (List Below) | | i. Trench Width | |
| Primary Area Avg | n/a | d. Number of Field Lines | n/a | | n/a | | n/a | in |
| Secondary Area | n/a | e. Length of Field Lines | n/a | ft | n/a | | n/a | in |

TO THE OWNER
The permit for construction may be deemed invalid by the local Environmental Health Specialist before the start of construction, if the site and/or soil conditions have changed after approval of this permit, or if the information within this permit is inaccurate or has been found to be misrepresented. Approval for operation does not constitute a guarantee that the system will function properly. The approval states that the system was designed and installed according to the Arkansas Department of Health, Rules and Regulations Pertaining to Onsite Wastewater Systems, unless there are exceptions or deviations noted in the comments. A Permit for Construction is valid for one (1) year from the date of approval. The authorized agent must revalidate a permit more than one (1) year old prior to the start of any construction.

19. Utilization Verification
I hereby attest that item 12, the number of bedrooms (number of persons for commercial) and square footage of the structure that will utilize the designed individual onsite wastewater system in this permit application, is accurate. I have reviewed the permit application and understand the layout, installation, maintenance, operation and expense(s) that may be associated with this system.

Owner/Applicant Signature Opt A Date

20. I certify that I have conducted the above tests and that the above listed information is in accordance with the latest requirements of the Arkansas Department of Health Rules and Regulations Pertaining to Onsite Wastewater Systems.

Designated Representative Signature | Designated Representative Title | Soil Certified ☒ Yes ☐ No

| Scott Krupicki | 08-24-2022 | 501-776-7702 |
|---|---|---|
| Print Name | Date | Phone Number |

21. Approval of Health Authority
The information and specifications in the application has been reviewed and found to meet the requirements of the Arkansas Department of Health Rules and Regulations Pertaining To Onsite Wastewater Systems. A PERMIT FOR CONSTRUCTION is hereby issued.

Environmental Specialist Signature | 836 EHS Number | 8-31-2022 Date

NOTE TO INSTALLER: CONTACT EHS AT (501) 303-5650 24 HOURS PRIOR TO BEGINNING INSTALLATION

Individual Onsite Wastewater System Permit Application

| Receipt Number |
|---|
| |

Continue Part 1

| 22. Soil Criteria (Primary Area) | | | Indicate the depth to items a-f, if observed in the soil (designate in inches) | | | | |
|---|---|---|---|---|---|---|---|
| a. Bedrock | b. BSWT | c. MSWT | d. LSWT | e. Adj. MSWT | f. Adj. LSWT | g. H.C./Depth | h. Loading Rate (gpd/ft$^2$) |
| 48" | Surface | 12" | 24" | n/a | n/a | mod/48" | not loadable |

| 23. Soil Criteria (Secondary Area) | | | Indicate the depth to items a-f, if observed in the soil (designate inches) | | | | |
|---|---|---|---|---|---|---|---|
| a. Bedrock | b. BSWT | c. MSWT | d. LSWT | e. Adj. MSWT | f. Adj LSWT | g. H.C./Depth | h. Loading Rate (gpd/ft$^2$) |
| 48" | Surface | 12" | 24" | n/a | n/a | mod/48" | not loadable |

24. Seasonal Water Table (SWT) Classes Detail

| Primary Area | | | List Redoximorphic Features and/or Clay Content Restrictions |
|---|---|---|---|
| Brief | 0 | in | depletions and concentrations |
| Moderate | 12 | in | chroma 2 |
| Long | 24 | in | chroma 2>50% |
| Secondary Area | | | List Redoximorphic Features and/or Clay Content Restrictions |
| Brief | 0 | in | depletions and concentrations |
| Moderate | 12 | in | chroma 2 |
| Long | 24 | in | chroma 2>50% |

Comments Soil not suitable for standard drain field. Advanced treatment for surface discharge required

* Site appeared to have ~~had~~ 3' to 4' of soil excavated.

## Part 2 Installation Inspection

| Septic tank manufacturer | Pump information |
|---|---|
| Septic tank material | Trench media and width |
| Dose tank manufacturer | Depth of interceptor drain |
| Dose tank material | Depth of settled fill |

| Name of Installer | License Number |
|---|---|
| | |

Installation Inspected by ☐ Environmental Health Specialist ☐ Designated Representative
(check one or installer signs System Installation Verification below)

Signature _____ EHS / License Number _____ Date _____

System Installation Verification
I have installed this system as designed and in compliance with all Rules and Regulations Pertaining to Onsite Wastewater Systems.

Installer Signature _____ License Number _____ Date _____

## Part 3 Permit for Operation

The information contained in Part 1 and 2 of this form has been reviewed and found to meet the requirements of the Arkansas Department of Health. THE PERMIT FOR OPERATION of this system is hereby issued.

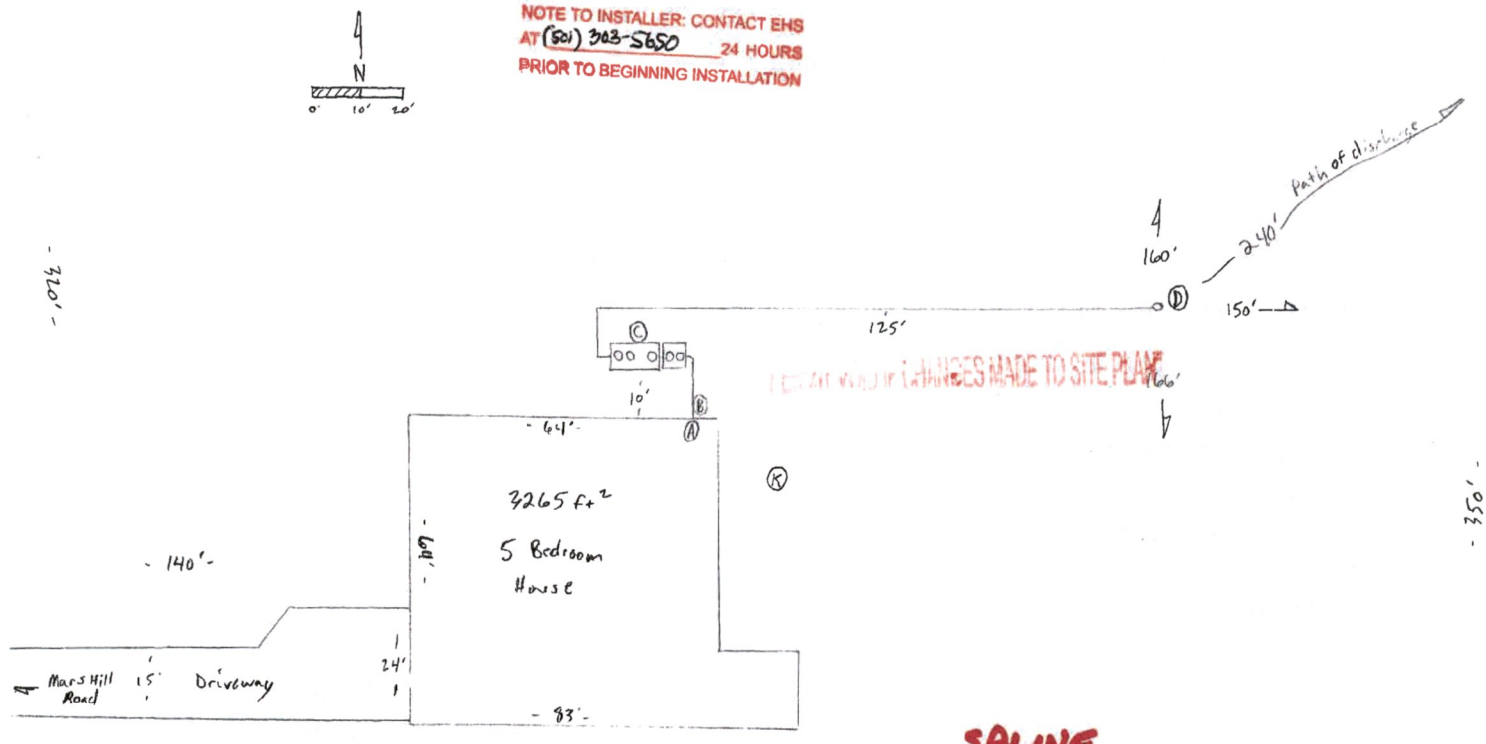
Environmental Health Specialist _____ Signature _____ EHS Number _____ Date _____

Comments

Site Revalidation conducted by ☐ Environmental Health Specialist ☐ Designated Representative
(check one)

Signature _____ EHS / License Number _____ Date _____

445'




ANY CHANGES MADE TO SITE PLAN

SALINE COUNTY HEALTH UNIT
Approved Jane Kuhn, RS
8-31-2022

Drawing notes

A = House sewer stub out location

B = 4" two way clean out installed outside of structure

C = 500 gallon trash tank and 500 gallon per day ATU

D = Point of discharge

E = Unsuitable soil pits

J = Proposed water service line. Must be 10' away from any part of the septic system

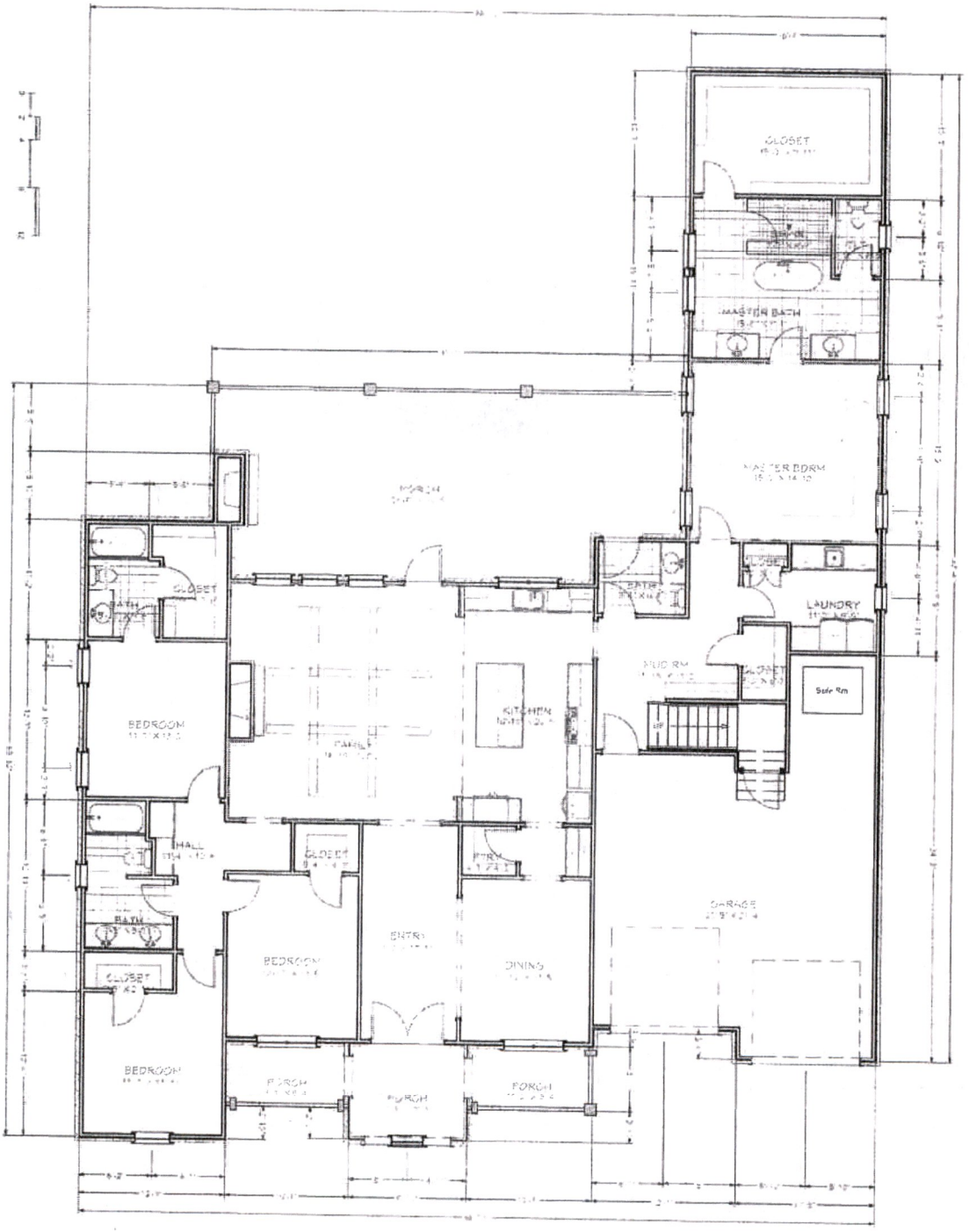
K = Benchmark is top of back porch slab

Pipe Specifications

Use 4" schedule 40 from house stub out to tank inlet and from tank outlet to point of discharge

Elevations (ground/installed flow line or trench bottom)

Stub out = 1'6"/3'6"
500g inlet = 2'1"/3'9"
500g outlet = 2'1"/4'0"
ATU inlet = 2'1"/4'1"
ATU outlet = 2'1"/5'2"
POD= 7'9"
Benchmark = 1'5"




1st Floor Plan 1/4 in = 1 ft

LIVING AREA
2064 sq ft

10' Ceiling Height
Unless noted otherwise

**Heated/Cooled Square Footage**

| | To Stud | To Brick |
|---|---|---|
| 1st Floor Area | 2064 sq ft | 2366 sq ft |
| 2nd Floor Area | 270 sq ft | 299 sq ft |
| Total | 2334 sq ft | 2665 sq ft |

2 of 4

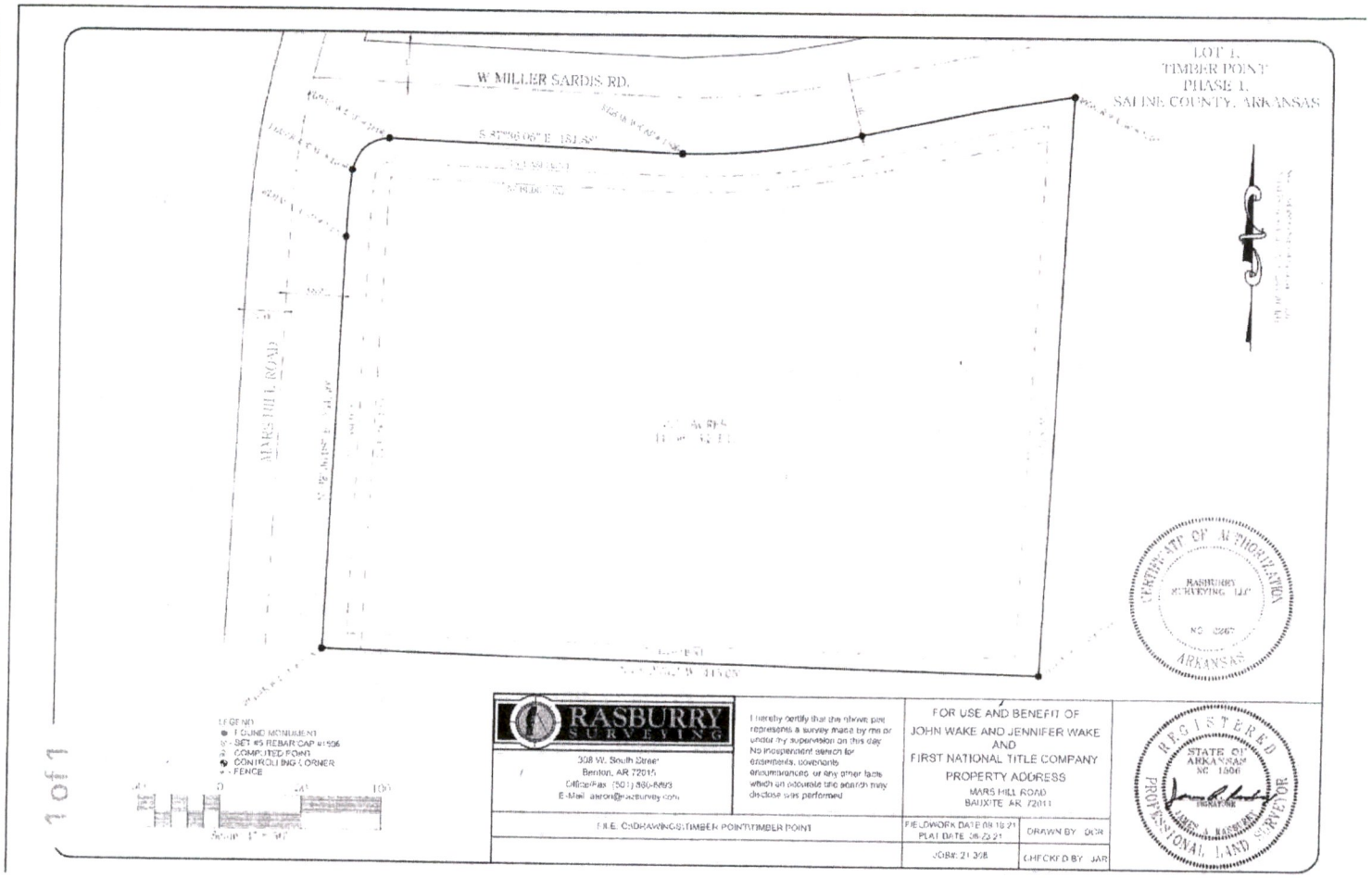
A1

Floor Plan

Residence for
Michael & Courtney Benson
13691 Mars Hill Rd
Bauxite, AR 72011

C:\Users\Dustan\OneDrive\Documents\Plans\2021 Michael & Courtney Benson\Michael & Courtney Benson Layout

MIRDJA CUSTOM HOMES, LLC
Dushan Mirdja Phone 501 794 8415
2034 Wesshaw Avenue
Benton, AR 72019 E-mail Dushan.Mirdja@ATT.Net


LOT 1,
TIMBER POINT
PHASE 1,
SALINE COUNTY, ARKANSAS
W. MILLER SARDIS RD.
S 87°56'05" E 151.58'
MARS HILL ROAD
CERTIFICATE OF AUTHORIZATION
RASBURRY SURVEYING, LLC
NO. 1566
ARKANSAS
LEGEND
FOUND MONUMENT
SET #5 REBAR CAP #1566
COMPUTED POINT
CONTROLLING CORNER
FENCE
0
50'
100'
SCALE: 1" = 50'
RASBURRY SURVEYING
308 W. South Street
Benton, AR 72015
Office/Fax (501) 580-8693
E-Mail aaron@razesurvey.com
I hereby certify that this survey plat represents a survey made by me or under my supervision on this day. No independent search for easements, covenants, encumbrances, or any other facts which an accurate title search may disclose was performed
FOR USE AND BENEFIT OF
JOHN WAKE AND JENNIFER WAKE
AND
FIRST NATIONAL TITLE COMPANY
PROPERTY ADDRESS
MARS HILL ROAD
BAUXITE, AR 72011
REGISTERED
STATE OF
ARKANSAS
NO. 1566
SURVEYOR
AARON A. RASBURRY
PROFESSIONAL LAND SURVEYOR
F.B.E. C:\DRAWINGS\TIMBER POINT\TIMBER POINT
FIELDWORK DATE 08.19.21
PLAT DATE 08.20.21
DRAWN BY DCR
JOB#: 21-308
CHECKED BY JAR

1 of 1

* Optional System Utilization Verification Form

**Arkansas Department of Health**
Environmental Health Protection

| Receipt Number |
|---|
| |

**Individual Onsite Wastewater System Permit Application**

Permit Type ☑ New Installation ☐ Alteration / Repair

DR Environmental ID #

| 6 | 3 | 0 | 1 | 1 | 1 | 7 | 0 | 1 | 1 | |
|---|---|---|---|---|---|---|---|---|---|---|

| Fee Schedule for Structures | ✓ |
|---|---|
| Structures 1500 sq ft or less $ 30.00 | ☐ |
| Structures more than 1500 sq ft and up to 2000 sq ft $ 45.00 | ☐ |
| Structures more than 2000 sq ft and up to 3000 sq ft $ 90.00 | ☐ |
| Structures more than 3000 sq ft and up to 4000 sq ft $120.00 | ☑ |
| Structures more than 4000 sq ft $150.00 | ☐ |
| Alteration and Repair $ 30.00 | ☐ |

☐ Homeowner

☑ Builder/Developer

TO THE PROPERTY OWNER

Onsite Wastewater System Utilization Verification

Property location: 13691 Mars Hill Road, Bauxite AR 72011
*(Address of Proposed System, City, State, Zip)*

I hereby attest there are 5 bedrooms (____ number of persons for commercial) and the square footage of the structure that will utilize the designed onsite wastewater system in this permit application is accurate. I have reviewed the permit application and understand the layout, installation, maintenance, operation and expense(s) that may be associated with this system.

As Developer/Builder, I hereby attest that the above information is correct and prior to the sale of the property, I will convey, to the buyer, all information associated with this system.

Owner/Applicant Signature _____

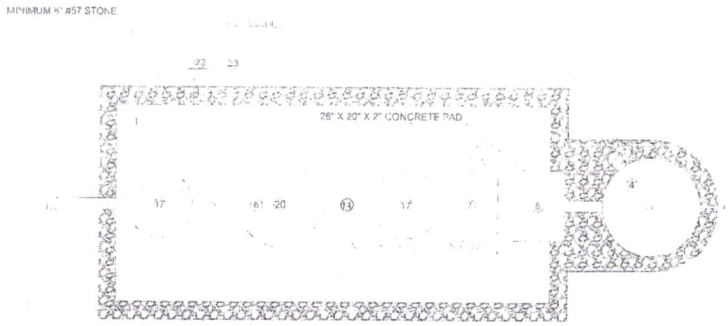
Date 9-10-2022

*This document must be submitted with the permit application, if the Owner/Applicant Signature Section (number 19 on the EHP-19) is not signed.*


SECTION VIEW

EQUIPMENT AND PARTS LIST

1. WHITTEN CONCRETE TANK OR EQUIVALENT, VOLUME 1500 GALLONS
2. SETTLING TANK, 500 GALLONS
3. TREATMENT TANK VOLUME, 1000 GALLONS
4. STEELE PLASTICS PUMP BASIN 30" X 72" (STEELE PLASTICS BA30X072TA & CVF30SLDRT) OR EQUIVALENT
5. MICROFAST TREATMENT UNIT, (BIOMICROBICS MFC 0.5)
6. EFFLUENT FILTER, (BIOMICROBICS SANITEE-418)
7. BLOWER, (BIOMICROBICS FUJI ½ HP 1PH VCF30) & HOUSING, (BIOMICROBICS 250-BBHSFL)
8. BLOWER, (BIOMICROBICS FUJI ¼ HP 1 PH VCF20) & HOUSING, (BIOMICROBICS 250-BBHSFL)
9. UV DISINFECTION UNIT, (SALCOR 3G)
10. DISCHARGE PUMP, (ORENCO PF100511) OR EQUIVALENT
11. DISCHARGE ASSEMBLY, 1"
12. UNIVERSAL FLOW INDUCER, (ORENCO FIT D 60) OR EQUIVALENT
13. EXTERNAL SPLICE BOX, (ORENCO SB4EX) OR EQUIVALENT
14. VENT CAP, 4", (GIZMO ENGINEERING) OR EQUIVALENT
15. BOOT SEAL, (POLYLOK 3005-CE)
16. RISER, ULTRA-RIB, 18"
17. FIBERGLASS LID, 18", (ORENCO FLD18G) OR EQUIVALENT
18. SANITARY "T", 4" SCHEDULE 40
19. RISER, ULTRA-RIB, 24"
20. FIBERGLASS LID, 24", (ORENCO FLD24G) OR EQUIVALENT
21. DIFFUSER, (FINE BUBBLE, 10 SCFM, 304 SS) OR EQUIVALENT
22. CONTROL PANEL, (BIOMICROBICS 110V AMI)
23. CONTROL PANEL, POST AIR
24. GROMMET, MATCH DIAMETER OF PIPE




PLAN VIEW

ETS ENVIRO-TECH SOLUTIONS, LLC ENGINEERING SERVICES

BIOMICROBICS WASTEWATER TREATMENT SYSTEM

BIOMICROBICS WASTEWATER TREATMENT SYSTEM MICRO FAST FLOW = 500 GPD

10-M131

Specifications for MicroFAST 0.50 Wastewater Treatment System

1. GENERAL

The contractor shall furnish and install (1) MicroFAST®0.50 treatment system as manufactured by Bio-Microbics, Inc. The treatment system shall be complete with all needed equipment as shown on the drawings and specified herein.

The principal items of equipment shall include the FAST® system insert, blower assembly, blower controls and leg extensions or lid. All other items will be provided by others. The MicroFAST 0.50 unit shall be situated within a 450 Gallon [1700L] minimum compartment as shown on the drawings. Suggested maximum settling zone is (1) X the daily flow. Tank must provide adequate pump out access and conform to local, state, and all other applicable codes. The contractor shall coordinate the proper fabrication of the tank between the FAST system and tank supplier with regard to fabrication of the tank, installation of the FAST unit, and delivery to the job site.

2. OPERATING CONDITIONS

The MicroFAST 0.50 treatment system shall be capable of treating the wastewater produced by typical family activities (bath, laundry, kitchen, etc.) ranging from (1) one to (8) eight people and not to exceed 500 US Gallons per day (1800 LPD) provided the waste contains nothing that will interfere with biological treatment. The FAST system is a biological treatment system not meant for non-biodegradable or industrial wastewater.

3. MEDIA

The FAST® media shall be manufactured of rigid PVC, polyethylene, or polypropylene and it shall be supported by the polyethylene insert. The media shall be fixed in position and contain no moving or wearing parts and shall not corrode. The media shall be designed and installed to ensure that sloughed solids descend through the media to the bottom of the septic tank.

4. BLOWER

The MicroFAST 0.50 unit shall come equipped with a regenerative type blower capable of delivering 17-25 CFM (31-46 m3/hr). The blower assembly shall include an inlet filter with metal filter element. The blower shall be mounted outside the tank on a contractor supplied concrete base. Blower piping to the tank shall use non-corrosive material (PVC, Galvanized, or stainless Steel) Do not run galvanized pipe inside the treatment tank. Refer to Installation Manual for further details.

5. REMOTE MOUNTED BLOWER

The blower shall be placed on a contractor supplied concrete base. The blower must not sit in standing water and its elevation must be higher than the tank and normal flood level. A two-piece, rectangular housing shall be provided. The discharge air line from the blower to the MicroFAST® System shall be provided and installed by the contractor.

6. ELECTRICAL

The electrical source should be within 150 feet [45 meters] of the blower consult local codes for longer wiring distances. All wiring must conform to all applicable codes(IEC, NEC, etc.). Wiring distances must prevent significant voltage loss. Input power on 60Hz electrical systems 110/220VAC, 1Ø, 3.5/1.7 FLA on 50 Hz electrical systems 220VAC, 1Ø, 1.9 FLA. Other voltages and phase are also available. Actual power consumption varies with site conditions. All conduit and wiring shall be supplied by contractor.

7. CONTROLS

The control panel provides power to the blower and contains an alarm system consisting of a visual and audible alarm capable of signaling blower circuit failure and high water conditions. The control panel is equipped with SFR® (Sequencing Fixed Reactor) timed control feature. A manual alarm silence button is included.

8. INSTALLATION AND OPERATING INSTRUCTIONS

All work must be done in accordance with local codes and regulations. Installation of the FAST 0.50 shall be done in accordance with the written instructions provided by the manufacturer. Manuals shall be furnished, which will include a description of system installation, operation, and maintenance procedures.

9. FLOW AND DOSING

FAST® systems have been successfully designed, tested and certified receiving gravity, demand-based influent flow. When influent flow is controlled by pump or other means to help with highly variable flow conditions, then multiple dosing events should be used to maximize performance. The flow rate shall not exceed 5 gpm (19 Lpm) with a maximum hourly flow not to exceed 10% of the design daily flow (50 gph (190 LPH)).

10 WARRANTY

Bio-Microbics, Inc. warrants all new residential FAST® models (MicroFAST® 0.50, 0.625, 0.75, 0.90, and 1.5) against defects in materials and workmanship for a period of two years after installation or three years from date of shipment which ever occurs first. All other FAST® system models are warranted for a period of one year after installation or eighteen months from date of shipment, whichever occurs first. All are subject to the following terms and conditions below:

During the warranty period, if any part is defective or fails to perform as specified when operating at design conditions and if the equipment has been installed and is being operated and maintained in accordance with the written instructions provided by Bio-Microbics, Inc., Bio-Microbics, Inc. will repair or replace at its discretion such defective parts free of charge. Defective parts must be returned by owner to Bio-Microbics, Inc.'s factory postage paid, if so requested. The cost of labor and all other expenses resulting from replacement of the defective parts and from installation of parts furnished under this warranty and regular maintenance items such as filters or bulbs shall be borne by the owner. This warranty does not cover general system misuse, and/or components which have been damaged by flooding or any components that have been disassembled by unauthorized persons, improperly installed or damaged due to altered or improper wiring or overload protection. This warranty applies only to the treatment plant and does not include any of the structure wiring, plumbing, drainage, septic tank or disposal system. Bio-Microbics, Inc. reserves the right to revise, change or modify the construction and/or design of the FAST system, or any component part or parts thereof, without incurring any obligation to make such changes or modifications in present equipment. Bio-Microbics, Inc. is not responsible for consequential or incidental damages of any nature resulting from such things as, but not limited to, defect in design, material or workmanship, or delays in delivery, replacements, or repairs.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. BIO-MICROBICS SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NO REPRESENTATIVE OR PERSON IS AUTHORIZED TO GIVE ANY OTHER WARRANTY OR TO ASSUME FOR BIO-MICROBICS, INC., ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF ITS PRODUCTS. Contact your local distributor for parts and service.

DO NOT SCALE

UNLESS NOTED DIMENSIONS ARE IN INCHES [CENTIMETERS] TOLERANCES ± 0.02 IN/IN [± 0.05 CM/CM]

BIO MICROBICS

BETTER WATER. BETTER WORLD.

MicroFAST 0.50 FAST Unit

| WEIGHT | lb | SIZE | DRAWING NUMBER | |
|---|---|---|---|---|
| NAME | DATE | A | MicroFAST® 0.50 Specifications | SHEET 3 OF 4 |
| DRAWN CTC | 12/19/2006 | | | |
| CHECKED MS | 12/19/2006 | | REVISED 4/16/2013 | REV IN-05-V |

# MODEL AT 1500

## UV DISINFECTION SYSTEM

# INSTALLATION AND OPERATION MANUAL

The Model AT 1500 UV disinfection system is listed with Underwriters Laboratories (UL) under Standard 979 as a residential treatment device. The installer should provide a power disconnect switch mounted to the exterior of the facility being served to de-energize power to the unit during maintenance. Electrical work must be performed in accordance with the latest edition of the National Electrical Code, as well as all applicable local codes. The Model AT 1500 UV disinfection system conforms to the applicable provisions of the Code of Federal Regulations (CFR) requirements including Title 21, Chapter 1, Subchapter J, Radiological Health. **CAUTION: DO NOT LOOK DIRECTLY AT THE UV LAMP OR EXPOSE SKIN DURING OPERATION. PERMANENT EYE DAMAGE AND SKIN BURNS WILL OCCUR FROM UV RADIATION EXPOSURE. UV BLOCKING SAFETY GLASSES MUST BE WORN DURING INSTALLATION, SERVICE OR ANY TIME THE LAMP MAY BE ILLUMINATED. UV BLOCKING SAFETY GLASSES ARE AVAILABLE FROM NORWECO.**

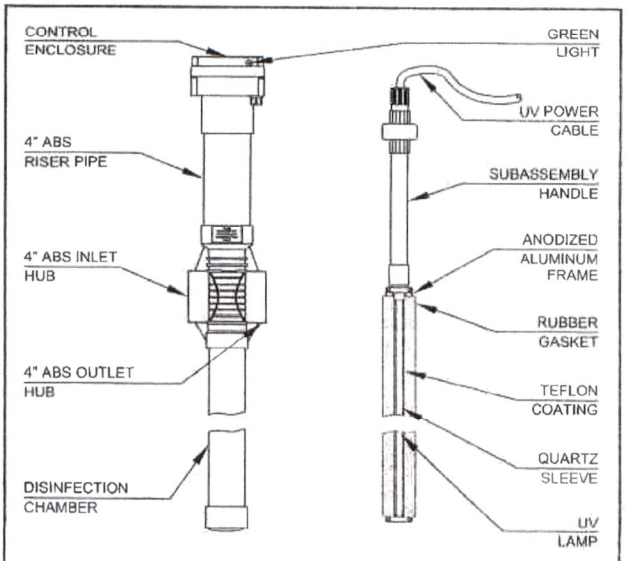
### COMPONENTS

The Model AT 1500 UV disinfection system consists of the following components:

1) Control enclosure
2) 4" ABS riser pipe
3) Disinfection chamber with turbulence inducer
4) UV lamp (bulb) with male connector
5) Power cable with female twist lock connector
6) UV subassembly with quartz sleeve and Teflon coating
7) Subassembly handle

The components should be supplied by the installer:

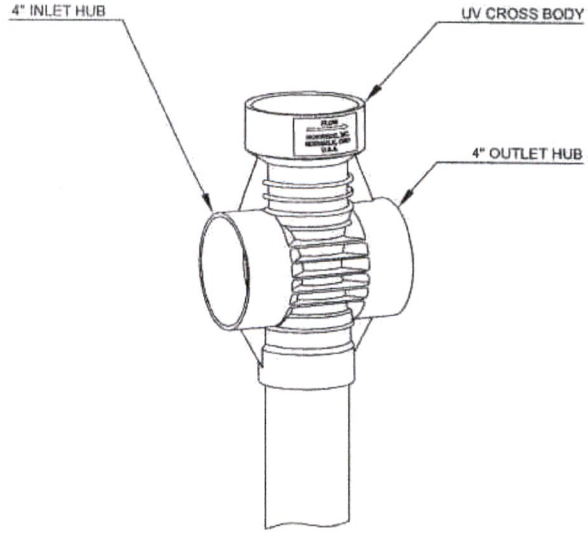
1) Disconnect switch
2) Solvent cement
3) Hacksaw
4) Glycerin (optional)
5) Clean, soft cloth
6) Isopropyl alcohol
7) #14/2 AWG cable
8) Conduit and fittings
9) Flat head screwdriver
10) Phillips head screwdriver




**UV DISINFECTION CHAMBER AND SUBASSEMBLY**

### INSTALLATION INSTRUCTIONS

1. The excavation for the upstream wastewater treatment system should include an additional 3 feet of length to allow for installation of the Model AT 1500.
2. Carefully unpack the Model AT 1500 system. Remove and properly discard all packaging materials from the system components. The UV lamp should remain in the protective shipping sleeve until it is installed.
3. Flow direction indicator arrows are molded into the disinfection chamber. When installing the disinfection chamber, be sure to orient the chamber correctly with the flow arrows pointing towards the effluent plumbing.

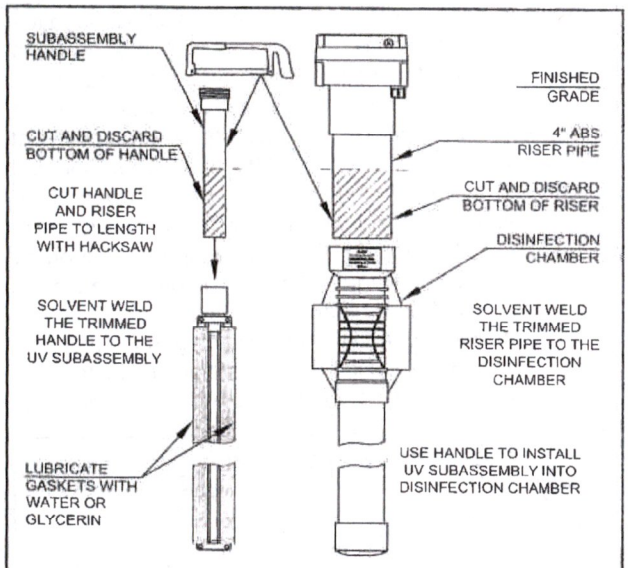



**INLET AND OUTLET HUBS**

4. Solvent weld the effluent line of the upstream treatment system to the 4" inlet hub of the Model AT 1500. Next, solvent weld the 4" outlet hub to the final effluent line. Cover the open top of the disinfection chamber and backfill up to the bottom of the plumbing.

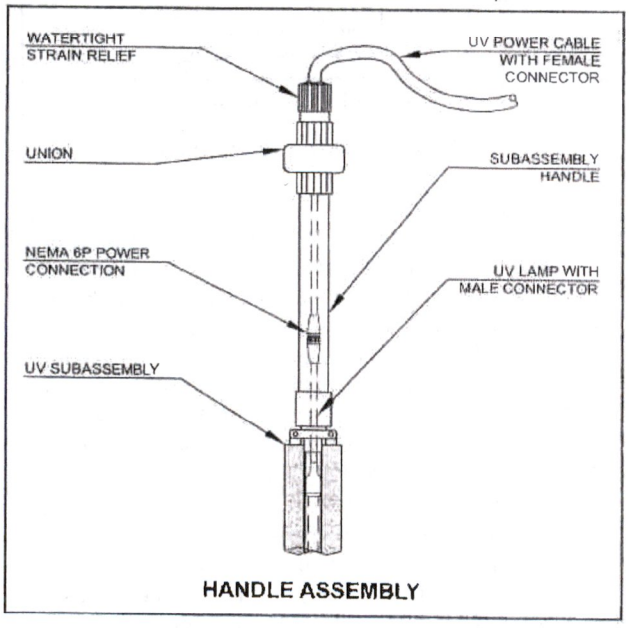
# AT 1500 UV DISINFECTION INSTALLATION AND OPERATION (Cont.)

5. The control enclosure should be completely above grade in the finished installation. The riser pipe and subassembly handle are purposely manufactured longer than necessary and must be trimmed. Fit the riser pipe into the top of the disinfection chamber and mark a trim line on the bottom. Mark the subassembly handle on the bottom to trim the same amount.

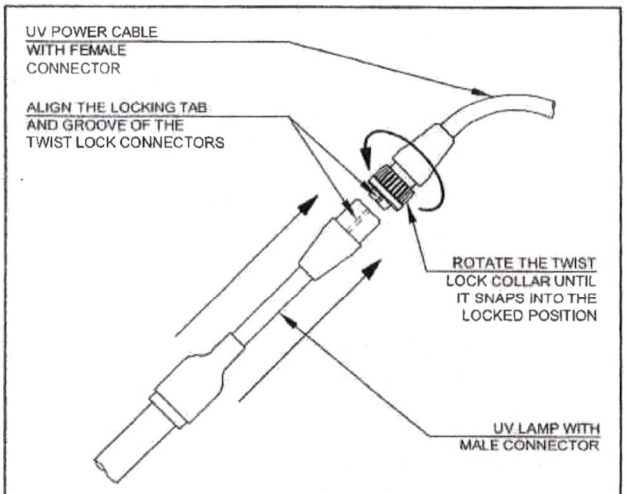



**TRIM RISER PIPE AND HANDLE**

6. Disassemble the union on subassembly handle and set aside the top portion with UV power cable.
7. Use a hacksaw to cut along the trim line on both the riser pipe and handle to make them the proper length.
8. Solvent weld the riser pipe to the disinfection chamber and solvent weld the handle to the UV subassembly.
9. The Model AT 1500 is shipped with the UV power cable connected to the control enclosure. If this power cable has become disconnected, it must be reconnected at this time. To do so, remove the gasketed cover from the control enclosure. Connect the lead labeled "ONE" on the UV power cable to the terminal block marked "1". Connect the lead labeled "TWO" to the terminal block marked "2". Connect the lead labeled "THREE" to the terminal block marked "3". Connect the yellow/green lead to the terminal marked "Y/G".




**HANDLE ASSEMBLY**




**LAMP POWER CONNECTION**

10. Remove the threaded access plug from the riser pipe.
11. Match the alignment tab on the male connector from the UV lamp to the alignment groove in the female twist lock connector on the UV power cable. Push the two connectors together until the male connector is fully seated in the female connector. Rotate the twist lock collar until it snaps into the locked position.
12. Insert the UV lamp and power cable into the handle assembly until the base of the lamp is seated in the bottom of the quartz sleeve. Rotate the power cable if the lamp becomes misaligned.
13. Lower the union onto the handle assembly, making sure to pull any slack cable through the strain relief connector. Assemble and tighten the union and strain relief to insure a watertight seal.
14. Use water or glycerin to lubricate the rubber gaskets located on both sides of the UV subassembly.
15. Do not touch the Teflon coating or allow excess glycerin to contact it. Use a clean, soft cloth and isopropyl alcohol to thoroughly clean the coating.
16. Fill the disinfection chamber with clean water.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norweco®

**NORWECO, INC.**
**NORWALK, OHIO**
**U.S.A. 44857**
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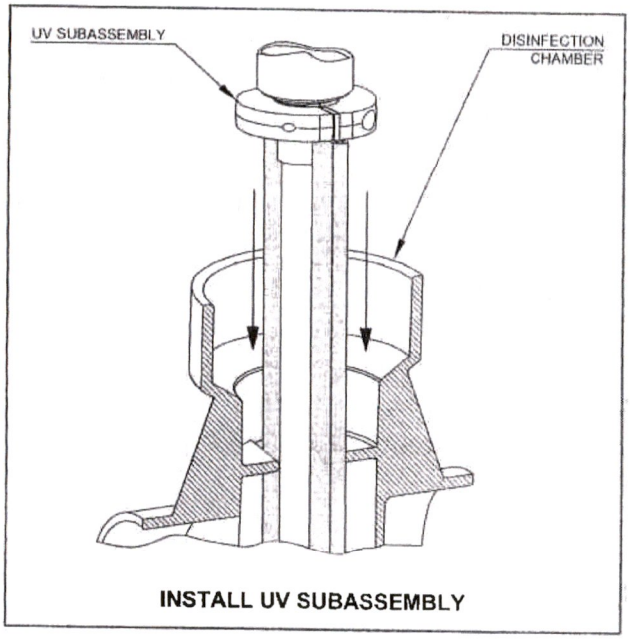
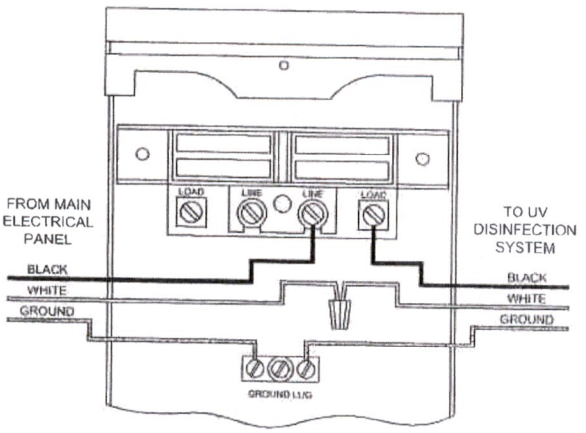
# AT 1500 UV DISINFECTION INSTALLATION AND OPERATION (Cont.)



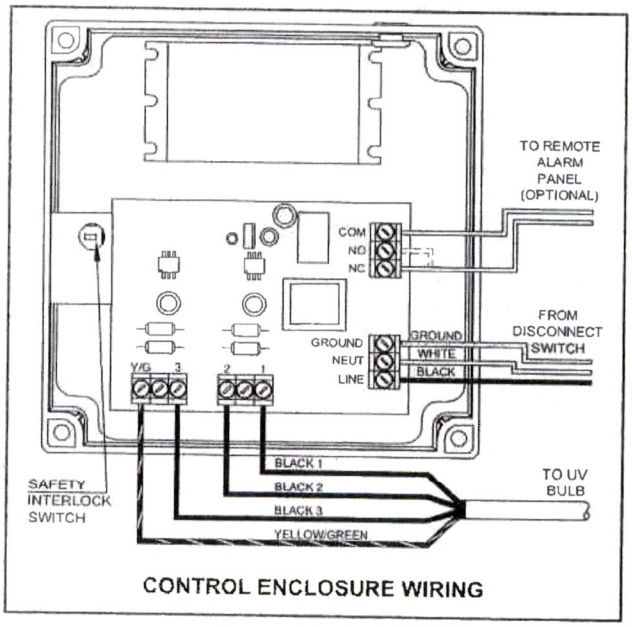

**INSTALL UV SUBASSEMBLY**

17. Align the rubber gaskets with the rectangular opening and lower the UV subassembly into the disinfection chamber.
18. Tuck the excess power cable into the riser pipe.
19. Use a dedicated 115 volt AC single phase 15 amp circuit in the main electrical panel for the AT 1500. **NOTE:** Make sure the breaker is off before proceeding
20. Use a disconnect switch to de-energize power during service. Mount directly to the facility being served.
21. Install a #14/2 AWG cable from the dedicated breaker in the main electrical panel to the disconnect switch
22. In the disconnect switch enclosure, connect the hot (black) lead from the main electrical panel to the "LINE" terminal. Connect the black lead from the UV system to the "LOAD" terminal. Wire nut both white leads together. Connect ground leads to the ground lug.




**DISCONNECT SWITCH WIRING**

23. Remove the control enclosure cover and black electrical insulator. Install a #14/2 AWG cable from the disconnect switch to the control enclosure. Insure the connection to the UV system is made in conduit, solvent welded to the conduit fitting provided. A watertight connection is critical for proper operation and safety.
24. Attach the incoming hot (black) lead to the terminal block marked "LINE". Attach the common (white) lead to the terminal block marked "NEUT". Attach the incoming ground lead to the terminal block marked "GROUND".
25. If a remote alarm panel is required, the alarm leads should be installed in a separate conduit, solvent welded to the second conduit fitting provided. Connect one alarm lead to either the normally open (NO) terminal or the normally closed (NC) terminal. Choose the correct terminal for the type of signal required by the remote alarm panel. Connect the other lead to the common (COM) terminal.
26. Solvent weld a conduit plug into any unused fittings.
27. Apply thread sealant to the access plug and install plug in the riser opening. Tighten to insure a watertight seal.




**CONTROL ENCLOSURE WIRING**

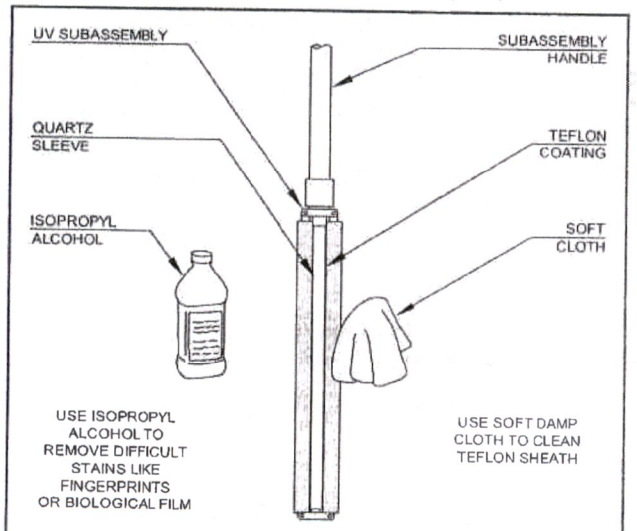
28. Reinstall the electrical insulator and four thumb screws. Make sure that the cutout for the safety interlock switch is positioned correctly over the switch.
29. Reinstall the control enclosure cover, insuring that the safety interlock post is aligned with the safety interlock switch. Tighten the four screws on the cover to insure a watertight seal. **NOTE:** If the switch is not aligned with the post, the UV lamp will not operate and the green light on the side of the enclosure will not illuminate.
30. Backfill around the disinfection chamber and riser pipe. Finished grade should be below the control enclosure to prevent the entry of surface water.
31. Turn on power at the disconnect switch and main service panel. Confirm the green light on the enclosure is illuminated indicating proper operation.

# AT 1500 UV DISINFECTION INSTALLATION AND OPERATION (Cont.)

## MAINTENANCE AND SERVICE

UV protective eyewear must be worn during service or any time the lamp may be illuminated. It is recommended that the subassembly be removed and serviced every six months to insure proper disinfection. To inspect and clean the Teflon coating:

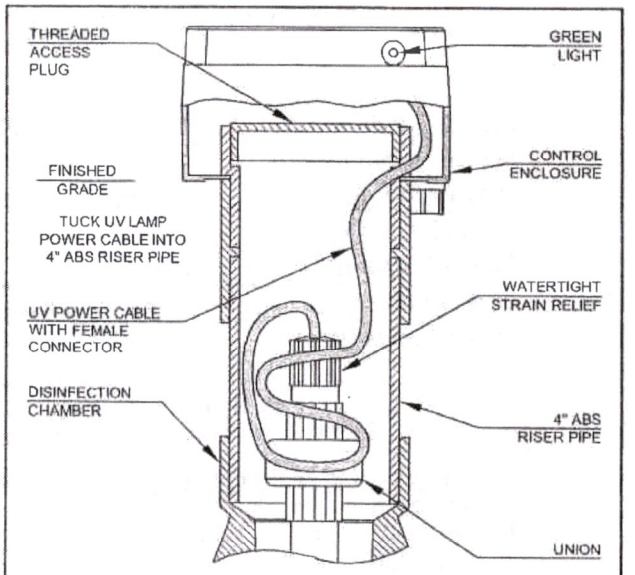
1. Turn off power to the UV system at the disconnect switch and/or main service panel. Confirm that the green light on the side of the enclosure is off.
2. Remove the control enclosure cover and access plug.
3. Carefully remove the UV subassembly from the disinfection chamber
4. Inspect the quartz sleeve and Teflon coating for signs of damage or an accumulation of biological film. If the quartz sleeve has been damaged, the UV subassembly must be replaced. If biological film is present on the surface of the Teflon coating, the coating must be cleaned to insure proper disinfection.
5. Use a soft damp cloth to carefully and thoroughly clean the Teflon coating.
6. Use isopropyl alcohol on a soft cloth to carefully remove difficult stains like fingerprints or biological film.
7. Remove all accumulated solids from the disinfection chamber using a vacuum or service pump.




**CLEANING THE TEFLON COATING**

It is recommended that the UV lamp be replaced every two years to insure proper disinfection of the treatment system effluent. The green light on the side of the control enclosure will no longer illuminate when the lamp needs replaced. To replace the lamp:

1. Repeat steps 1, 2 and 3 above.
2. Disassemble the union on the subassembly handle and remove the UV lamp using the power cable.
3. Disconnect the UV lamp from the UV power cord by rotating the twist lock collar ¼ turn.




**TUCK POWER CABLE INSIDE RISER**

4. Connect new lamp and carefully lower into the UV subassembly. Make sure the lamp is fully seated in the quartz sleeve.
5. Reassemble union and tighten strain relief.
6. Lower the subassembly into the disinfection chamber.
7. Reinstall the threaded access plug into the riser.
8. Reinstall the enclosure cover, insuring that the safety interlock post is aligned with the safety interlock switch. Tighten the four screws to insure a watertight seal.
9. Turn on power at the disconnect switch or main service panel. Verify that the green light on the side of the control enclosure is illuminated.

**NOTE:** UV lamps contain mercury which is harmful to the environment. Recycle old UV lamps at an authorized center.

## ALARM CIRCUIT

The Model AT 1500 system is equipped with a current sensing circuit to monitor the UV lamp performance. If the UV lamp output drops below an acceptable level for proper disinfection, the alarm circuit will turn off the green light on the enclosure. When connected to the Service Pro control center, the service provider can be immediately notified that maintenance to the UV system is required. For more information regarding connection of the Model AT 1500 UV disinfection system alarm to a Service Pro control center, please refer to the Service Pro Control Center with MCD Technology Installation and Operation Instructions.

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**NORWALK, OHIO**
**U.S.A. 44857**
**www.norweco.com**

# WASTEWATER SYSTEM SERVICE AND MAINTENANCE AGREEMENT

| | |
|---|---|
| **System Owner:** | Michael and Courtney Benson |
| **System Location:** | 13691 Mars Hill Rd, Bauxite, AR |
| **Wastewater System:** | Microfast 0.5 surface Discharge with UV Disinfection |
| **Daily Flow Limit:** | 500 GPD |
| **Phone Number(s):** | 870-245-7218 |
| **Email Address(es):** | Mbenson1804@gmail.com |
| **Billing Address:** | |

In consideration of the mutual covenants in this Agreement, the sufficiency of which is hereby acknowledged, MEINCO Wastewater Systems, Inc. ("MEINCO") and ("SYSTEM OWNER") agree as follows:

**1. Service and Maintenance Fees.** Commencing as of the Effective Date (defined in the footer) and continuing each month (the "Billing Cycle") through the Term (defined in Section 4 below), SYSTEM OWNER shall pay to MEINCO (a) the service and maintenance fees stated at the bottom of the table on the first page of EXHIBIT A attached hereto (the "Service and Maintenance Expenses") and (b) the consumable material expenses stated at the bottom of the table on the second page of EXHIBIT A attached hereto ("Consumable Materials Expense") (Service and Maintenance Expenses and Consumable Materials Expense are referred to as "Service and Maintenance Fees"). With thirty (30) days' prior written notice to SYSTEM OWNER, MEINCO may amend EXHIBIT A one or more times, if MEINCO deems an amendment necessary in MEINCO's sole discretion to capture additional unforeseen Service and Maintenance Fees and any actual Consumable Material Expenses.

**2. Service and Maintenance Responsibilities.** SYSTEM OWNER grants MEINCO access to the System Location (defined above) and the Wastewater System (defined above) and all components of the Wastewater System, including any alarm system, pressure pump, riser, or tank connected to the Wastewater System (collectively, the "SYSTEM") to perform the following routine service and maintenance services on the SYSTEM (collectively, "Routine Service and Maintenance"):

**(a)** during normal business hours Monday through Friday (excluding any national holidays): MEINCO agrees to the following, as recommended by the SYSTEM's manufacturer to:

- **i.** conduct inspections of the SYSTEM; and
- **ii.** perform routine maintenance to the SYSTEM;

**(b)** prepare field reports documenting the SYSTEM's performance, as required by the Arkansas Department of Health (ADH) or other applicable federal, state, or local regulatory agency;

**(c)** manage analytical sampling of the SYSTEM performance per regulatory permit requirements to include the following:

- **i.** submit analytical data to regulatory agency, if applicable;
- **ii.** retain and file written copies of analytical data per regulatory agencies permit requirements, if applicable;

**(d)** communicate, in writing, any recommendations that MEINCO believes the SYSTEM requires to operate efficiently; and

**(e)** within 8 hours after receiving any emergency service request, respond to the request either verbally or at the System Location (as MEINCO deems necessary).

**3. Excluded Service and Maintenance Responsibilities.** Unless MEINCO and SYSTEM OWNER agree otherwise in writing, MEINCO has no obligation to repair, replace, or perform any of the following in relation to the SYSTEM (collectively, the "Excluded Service and Maintenance Responsibilities"):

**(a)** monitoring or taking any action to adjust the SYSTEM's inflow rate, or

**(b)** any consumable or replacement parts or inventory required for the SYSTEM to operate as designed, which may include, without limitation, chlorine tablets, floats, soda ash, UV bulbs, pumps, or control panel(s), provided that MEINCO shall notify SYSTEM OWNER, either verbally or in writing, prior to incurring expenses pursuant to this subsection, and, MEINCO may proceed unless SYSTEM OWNER objects in writing within 24 hours after MEINCO sends notification; or

**(c)** removing solids or grease from the SYSTEM; or

**(d)** maintaining the grass and/or landscaping on or around any part of the Wastewater System, including any disposal area used by the Wastewater System, unless noted in Exhibit A or as agreed to in writing; or

**(e)** paying any application fees or professional fees associated with any permit renewals, corrective action plans, or any other application fees or professional fees that may be required by the regulatory agencies to remain in compliance, with the SYSTEM.

**4. Term.** This Agreement commences as of the Effective Date and continues through the _365_ day after the Effective Date (the "Initial Term"). The Initial Term will renew automatically for an additional _365_ days (a "Renewal Term"), and each Renewal Term will renew automatically for an additional 365_ days (the Initial Term and all Renewal Terms are referred to collectively as the "Term"). Either MEINCO or SYSTEM OWNER may terminate this Agreement at any time, provided that (i) the terminating party delivers to the other party a written termination notice at least thirty (30) days prior to the effective termination date and (ii) if SYSTEM OWNER is the terminating party, SYSTEM OWNER has paid MEINCO in full for all then-due Service and Maintenance Fees and any agreed-to Excluded Service and Maintenance Responsibilities.

**5. Automatic Termination Events.** Unless MEINCO agrees otherwise in writing, MEINCO may terminate this Agreement if any of the following occur:

**(a)** the flow rate of the SYSTEM exceeds the Maximum System Flow Rate or otherwise violates SYSTEM OWNER's regulatory permit(s); or

**(b)** the SYSTEM is modified, abused, misused, or altered; or

**(c)** SYSTEM OWNER fails or refuses to pay any Service and Maintenance Fee, repair costs, or agreed-to Excluded Service and Maintenance Responsibilities for longer than 60 days after the payment for the Service and Maintenance Fees, repair costs, or agreed-to Excluded Service and Maintenance Fees was otherwise due.

**6. Assignment.** MEINCO or SYSTEM OWNER may assign this Agreement without the other's consent provided that the assigning party delivers the other party notice, either written or verbally, at least thirty (30) days prior to any assignment.

**7. Non-Waiver.** No failure by a party to insist upon strict compliance with any term of this Agreement, to enforce any right, or seek any remedy upon any default of the other party shall affect or constitute a waiver of the first party's right to insist upon such strict compliance, enforce that right, or seek that remedy with respect to that default or any prior, contemporaneous, or subsequent default, nor shall any custom or practice of the parties at variance with any provision of this Agreement affect, or constitute a waiver of, any party's right to demand strict compliance with all provisions of this Agreement.

**8. No Third-Party Benefit.** This Agreement is intended for the exclusive benefit of SYSTEM OWNER and MEINCO and their respective permitted successors and assigns, and nothing contained in this Agreement shall be construed as creating any right or benefit in or to any third party.

**9. Complete Agreement.** This Agreement contains the entire agreement between the parties and supersedes any prior negotiations, representations, understandings, or agreements among them respecting the subject matter. No change, alteration, modification, addition, or qualification to the terms of this Agreement shall be made or be binding unless made in writing and signed by each of the parties.

**10. No Partnership or Joint Venture.** Nothing contained in this Agreement shall constitute or be construed to be or create a partnership or joint venture between SYSTEM OWNER and MEINCO.

**11. Force Majeure.** MEINCO's obligation to perform Routine Service and Maintenance shall be extended to the extent that the performance thereof shall be delayed by acts of God, fire, windstorm, flood,

explosion, collapse of structures, riot, war, acts of terrorism, labor disputes, delays or restrictions by government action (including, without limitation, any federal, state, or local order, ordinance, or warning to shelter in place or otherwise restrict public interactions), inability to obtain necessary materials, or any other cause beyond MEINCO's reasonable control.

EXECUTED AND ENTERED INTO AS OF THE EFFECTIVE DATE.

**SYSTEM OWNER:**

By: _____

Title: Owner

**MEINCO:**

MEINCO Wastewater Systems, Inc.

By: _____

Title: Owner

**Arkansas Department of Health**
4815 West Markham, Slot 46
Little Rock, Arkansas 72205-3867

# MEMORANDUM OF AGREEMENT

SUBJECT: ONSITE WASTEWATER SYSTEM APPLICATION

This is an agreement that the onsite wastewater system installed on this property has been permitted under authority of Act 402 of 1977 and by the Arkansas Department of Health with the understanding that the following provisions are met:

1. Onsite Wastewater Systems requiring a Monitoring Contract with a Certified Monitoring Personnel are Holding Tanks, Experimental Systems (i.e. Reduced Absorption Areas, *ABGs), and Drip Dispersal Systems. *Aerobic Biological Generators – Commercial applications only, residential applications must follow manufacturers' service contract requirements.

2. The property owner assumes all responsibility for the proper operation of the onsite wastewater system.

3. The property owner must maintain a monitoring contract with a licensed Certified Monitoring Personnel for the life of the system and retain Onsite Wastewater System Assessments (EHP-71), on file, for at least five (5) years.

4. The Arkansas Department of Health has no responsibility in the operation and maintenance of such systems.

5. That the Arkansas Department of Health may monitor the system as to its operation capabilities.

6. That the Arkansas Department of Health is granted permission to make such inspections as deemed necessary.

7. Subsurface systems with flows ≥3000 gpd and all surface discharging systems require the owner to file an additional permit application with the Arkansas Department of Environmental Quality (ADEQ).

8. **That, on the sale of the property, the owner of the property must disclose to the perspective buyer notice of this agreement and any permit requirements. The buyer is to sign memoranda, contracts or permit name change forms and submit these documents to the appropriate regulatory agency.**

SIGNED: _____ SIGNED: _____
(Property Owner) (Health Department)

DATE: 8/22/22 DATE: 8-31-2022

EHP-35 (R 1/13)

Google Maps

# Saline County Health Department, 1612 Edison Ave, Benton, AR 72015 to 13298-13026 Mars Hill Rd, Bauxite, AR 72011

Drive 11.4 miles, 18 min


| | | |
|---|---|---|
| via AR-183 N<br>Fastest route now due to traffic conditions | 18 min<br>11.4 miles |
| via AR-35 and Mars Hill Rd | 18 min<br>11.6 miles |
| via AR-35 and Bauxite Cutoff Rd | 21 min<br>11.9 miles |

Explore 13298-13026 Mars Hill Rd

Restaurants Hotels Gas stations Parking Lots More