

**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): Jamie Davis Operator Type:
Permittee Mailing Address: PO Box 354 ☐ State ☐ Partnership
Permittee City: Bryant ☐ Federal ☐ Corporation*
Permittee State: AR Zip: 72089 ☒ Sole Proprietorship/Private
Permittee Telephone Number: 501-672-6592 *State of Incorporation: _____
Permittee Fax Number: _____ The legal name of the Permittee must be
Permittee E-mail Address: _____ 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: Jamie Davis Residence Facility Contact Person: Jamie Davis
Facility Address: 9001 Springhill Farm Drive Telephone Number: 501-672-6592
Facility County: Saline Facility City, State & Zip: Alexander, AR 72002
Facility Latitude: 34 Deg 40 Min 42.09 Sec Facility Longitude: 92 Deg 31 Min 26.22 Sec
Datum
Accuracy: _____ Method: _____ : _____ Scale: _____ Description: _____

IV. DISCHARGE INFORMATION

Outfall Number: 001 Flow: 370 gpd (Gallons per Day)
Stream Segment: 2C Hydrologic Basin Code: 8040203
Outfall Latitude: 34 Deg 40 Min 41.41 Sec Outfall Longitude: 92 Deg 31 Min 30.06 Sec
Datum
Accuracy: _____ Method: _____ : _____ Scale: _____ Description: _____
Type of Treatment: Bio Microbics Microfast 0.5 with UV and Post Aeration
Receiving Stream: _____

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

WATER DIVISION
5301 NORTHSHORE DRIVE / NORTH LITTLE ROCK, ARKANSAS 72118
PHONE 501-682-0623 / FAX 501-682-0880
www.adeq.state.ar.us

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

JD (Initial) "I certify that, if this facility is a corporation, it is registered with the Secretary of the State of Arkansas."
JD (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."
JD (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: Jamie Davis Title: Owner
Responsible Official Signature: Jamie Davis Date: 8/15/22
Responsible Official Email: jedavisbuit@yahoo.com
Cognizant Official Printed Name: David Meints Title: Class III Operator
Cognizant Official Signature: David Meints Telephone: 501-804-0837
Cognizant Official Email: david@meincowastewater.com

X. PERMIT REQUIREMENT VERIFICATION

Please check the following to verify completion of permit requirements.

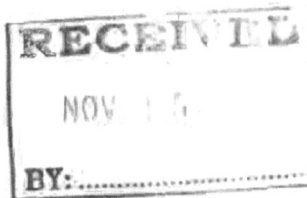
Yes No * If No is answered for any of the questions, then a permit can not be issued!

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? ☐ ☒

WATER DIVISION
5301 NORTHSORE DRIVE / NORTH LITTLE ROCK, ARKANSAS 72118
PHONE 501-682-0623 / FAX 501-682-0880
www.adeq.state.ar.us



Arkansas Department of Health
Environmental Health Protection



ADH Copy

Receipt Number
23212252

Individual Onsite Wastewater System Permit Application

Permit Type ☒ New Installation
☐ Alteration / Repair

DR Environmental ID #

7 6 0 1 0 5 5 4 7

Fee Schedule for Structures		✓
Structures 1500 sq ft or less	\$ 30.00	<input type="checkbox"/>
Structures more than 1500 sq ft and up to 2000 sq ft	\$ 45.00	<input type="checkbox"/>
Structures more than 2000 sq ft and up to 3000 sq ft	\$ 90.00	<input type="checkbox"/>
Structures more than 3000 sq ft and up to 4000 sq ft	\$120.00	<input checked="" type="checkbox"/>
Structures more than 4000 sq ft	\$150.00	<input type="checkbox"/>
Alteration and Repair	\$ 30.00	<input type="checkbox"/>

Part 1 Application

Treatment Type (check one)

Disposal Method (check one)

☐ STD = Standard Septic Tank ☒ ATU = Aerobic Treatment Plant ☐ STD = Standard Absorption Field ☐ LPD = Low Pressure Distribution
☐ ISF = Intermittent Sand Filter ☐ RSF = Re-circulating Sand Filter ☒ SUR = Surface Discharge ☐ HLD = Holding Tank
☐ PMF = Proprietary Media Filter ☐ RGF = Re-circulating Gravel Filter ☐ CPF = Capping Fill ☐ SRL = Serial Distribution
☐ OTH = Other (Describe) ☐ HLD = Holding Tank ☐ OTH = Other ☐ DRP = Drip Irrigation

1. Owner's/Applicant's Name Jamie Davis		2. Phone Number (501) 672-6592	
3. Mailing Address P.O. Box 354, Bryant, AR 72089		4. County Saline	
5. Address of Proposed System (If a 911 address is not available, attach detailed directions or map) 9001 Springhill Farm Drive, Alexander, AR 72002			
6. Subdivision Name Springhill Farms	7. Approval Date n/a Lots>3 acres	8. Date Recorded Prior to rule change	9. Lot Number 35
10. Lot Dimensions 239' x 546'	11. Total Area (Acres) 3.0	12. # Bedrooms # People 3	13. Daily Flow (GPD) 370
14. Brief Legal Description of Property (Attach a separate sheet of paper, if necessary) Section 32, Township 1 North, Range 15 West, Saline County			
15. Water Supply (Specify supplier, if Public Water) Salem Water Users		16. GPS Coordinates Not taken	
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)	
Primary Area Avg n/a	d. Number of Field Lines n/a	n/a	i. Trench Width 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 See back page 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.

David A. Meints

Designated Representative

Soil Certified ☒ Yes ☐ No

Designated Representative Signature

Title

David A. Meints

11/12/2019

501-821-3837/501-804-0837

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

EHS Number

Date

NOTE TO INSTALLER: CALL 303-5650

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"	23"	28"	41"	26"	34"	Mod/41"	0.43
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	18"	n/a	n/a	n/a	n/a	Unsuitable
24. Seasonal Water Table (SWT) Classes Detail							
Primary Area		List Redoximorphic Features and/or Clay Content Restrictions					
Brief	in	Depletions noted on 20% or less of ped surface or interior. Depletion chroma >= chroma 3.					
Moderate	in	Depletions noted on less than 50% of ped surface or interior. Depletion <= chroma 2.					
Long	in	Depletions noted on more than 50% of ped surface or interior. Depletion <= chroma 2.					
Secondary Area		List Redoximorphic Features and/or Clay Content Restrictions					
Brief	in	Depletions noted on 20% or less of ped surface or interior. Depletion chroma >= chroma 3.					
Moderate	in	Depletions noted on less than 50% of ped surface or interior. Depletion <= chroma 2.					
Long	in	n/a					
Comments Soil loaded at 0.43 but not enough room on slope for absorption lines. Site will require an ATU (BioMicrobics Fast 0.5) with UV disinfection and surface discharge. NPDES Permit required. If system is not installed within a year of the date approved, a revalidation fee may be required.							

Part 2 Installation Inspection

Septic tank manufacturer	Whitten	Pump information	—
Septic tank material	Concrete	Trench media and width	—
Dose tank manufacturer	ATU Whitten	Depth of interceptor drain	—
Dose tank material	Concrete	Depth of settled fill	—
Name of Installer	Adam Bray	License Number	1085219
Installation Inspected by <input type="checkbox"/> Environmental Health Specialist <input type="checkbox"/> 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
		1085219	6/10/20

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
		903	6/12/2020
Comments			
Site Revalidation conducted by <input type="checkbox"/> Environmental Health Specialist <input type="checkbox"/> Designated Representative (check one)			
Signature		EHS / License Number	Date

546'

NOTE TO RICH: SEE DISCHARGE
AT 303-5650, 24 HOURS
FOR THE PROPOSED INSTALLATION

100'

PATH OF DISCHARGE

200'

POINT OF DISCHARGE

30' SHOP

40'

ATU 500 GPD

CLEAN OUT

STUB OUT

DRIVEWAY

PARKING

80'

3 BEDROOM

50'

POOL

"PERMIT VOID IF CHANGES MADE TO SITE PLAN"

WATER TRIBUTARY DURING WET SEASON

SALINE

COUNTY HEALTH UNIT

Approved

James R. Saline
11-19-15

4
North

Scale

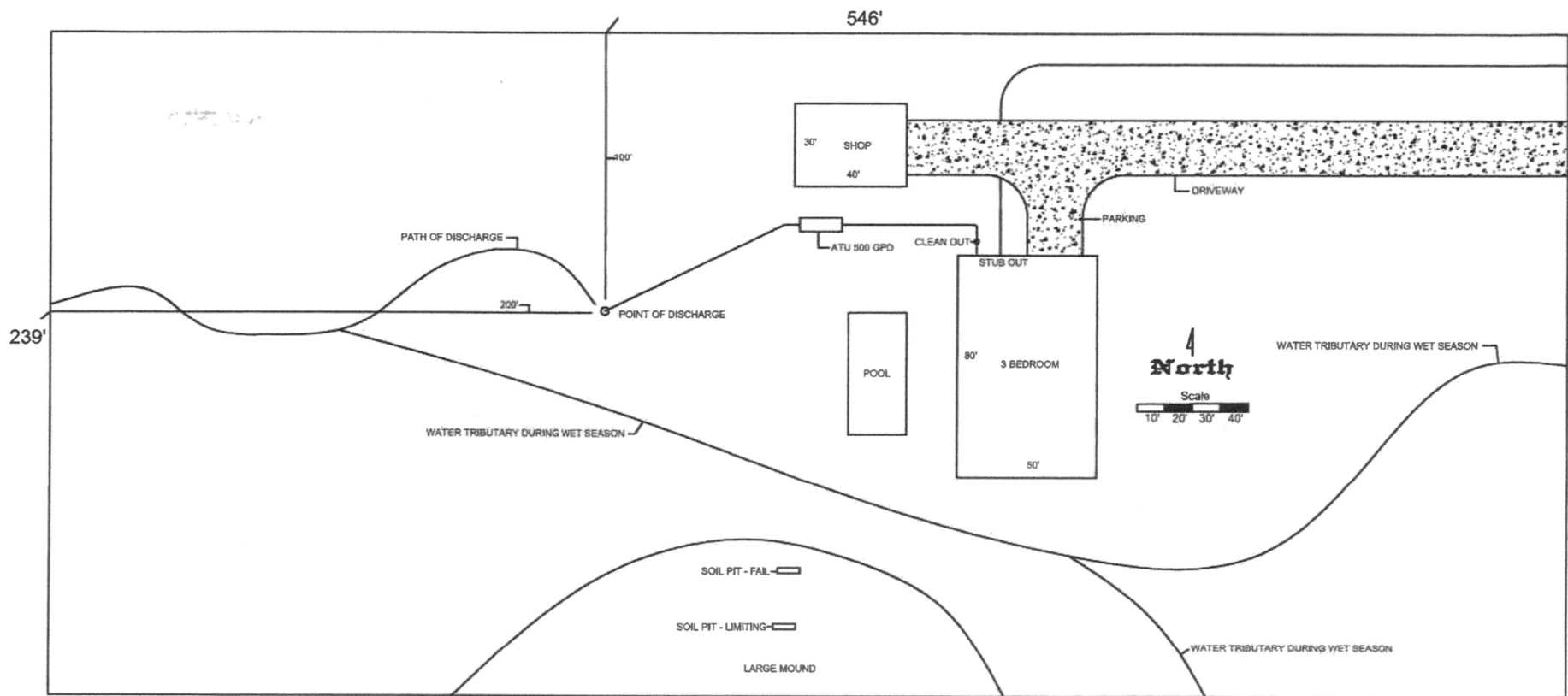
10' 20' 30' 40'

SOIL PIT - FAIL

SOIL PIT - LIMITING

LARGE MOUND

WATER TRIBUTARY

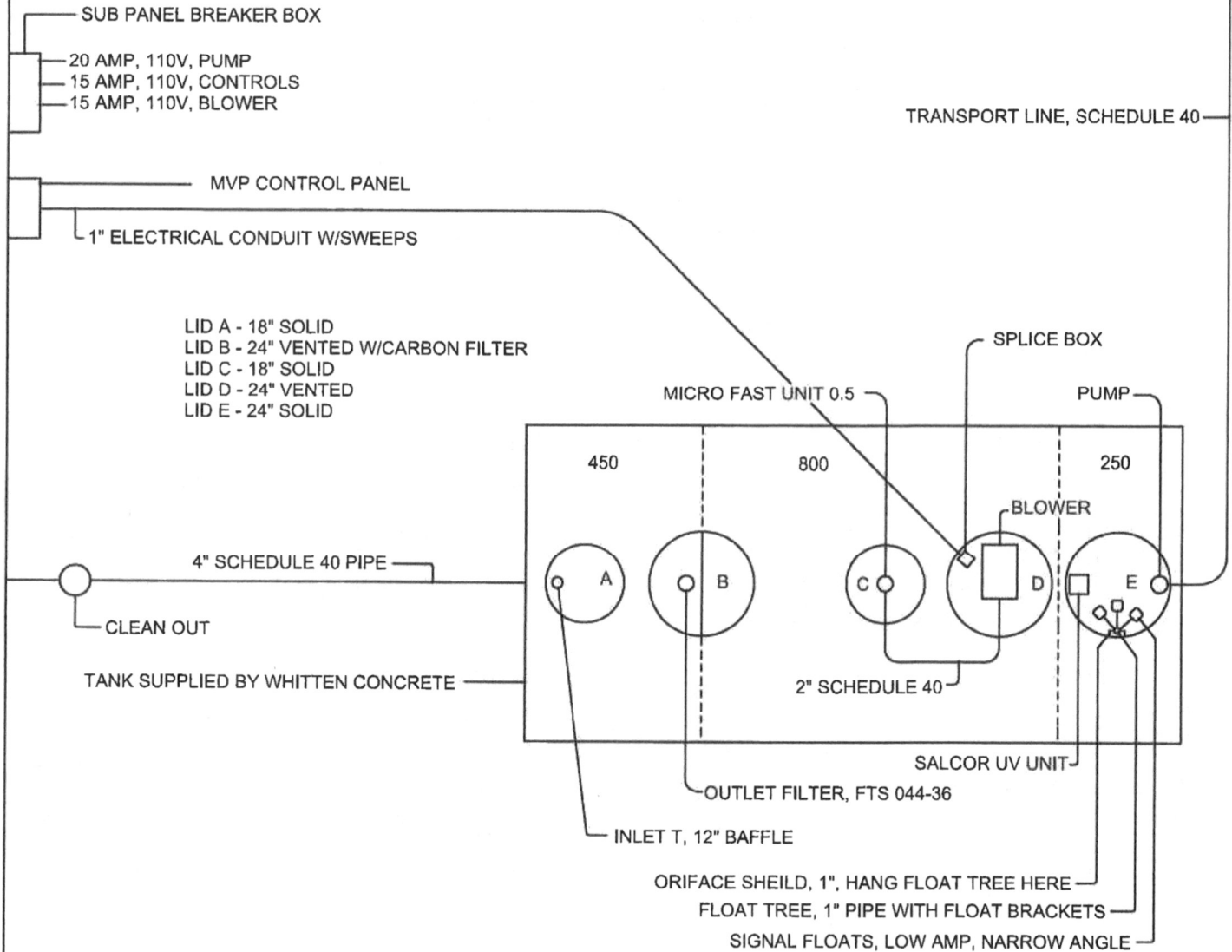


BIO-MICROBICS MicroFAST 0.5 SPECIFICATIONS

DISTRIBUTOR - MEINCO, INC.

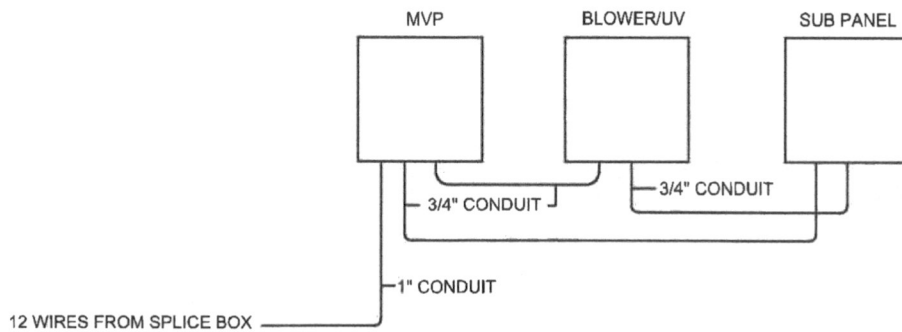
501-804-0837, DAVID MEINTS

POWER REQUIREMENTS



BIO-MICROBICS MicroFAST 0.5 WIRING SPECIFICATIONS DISTRIBUTOR - MEINCO, INC.

501-804-0837, DAVID MEINTS



MVP PANEL WIRING REFERENCE

<u>FROM SPLICE BOX</u>	<u>GOES TO</u>
PUMP BLACK (BLACK)	MVP TERMINAL 6
PUMP WHITE (YELLOW)	MVP TERMINAL 7
PUMP GROUND (GREEN)	MVP GROUND TERMINAL
BOTTOM FLOAT BLACK (BLUE)	MVP TERMINAL 1
MIDDLE FLOAT BLACK (BLUE BLACK)	MVP TERMINAL 2
TOP FLOAT BLACK (RED)	MVP TERMINAL 3
FLOAT COMMONS WHITE (RED BLACK)	MVP TERMINAL 5
UV BLACK (ORANGE BLACK)	BLOWER PANEL UV
UV WHITE (ORANGE)	BLOWER PANEL UV
BLOWER BACK	BLOWER PANEL BLOWER
BLOWER WHITE	BLOWER PANEL BLOWER
BLOWER GROUND	BLOWER PANEL BLOWER

MVP PANEL SETTINGS LOGO UNIT

TIMER ON	(SEC)	30:00
TIMER OFF	(MIN)	30:00
TIMER OVR ON	(SEC)	30:00
TIMER OVR OFF	(MIN)	03:00
TOTAL TIMER OVR	(MIN)	10:00
HLA DELAY	(HRS)	04:00

BLOWER PANEL WIRING REFERENCE

<u>FROM BLOWER</u>	<u>GOES TO</u>
BLOWER BLACK (BLACK)	BLOWER TERMINAL L1
BLOWER WHITE (WHITE)	BLOWER TERMINAL N/L2
BLOWER GROUND (GREEN)	BLOWER TERMINAL G

NOTE: CURRENT SENSOR JUMPER NEEDS TO BE MOVED TO "OFF"

SUB PANEL WIRING REFERENCE

<u>FROM SUB PANEL</u>	<u>GOES TO</u>
20 AMP 110V, PUMP CIRCUIT	MVP PANEL 20 AMP BREAKER
20 AMP 110V, NEUTRAL	MVP PANEL 20 AMP BREAKER
GROUND	MVP PANEL GROUND
15 AMP 110V, CONTROL CIRCUIT	MVP PANEL 10 AMP BREAKER
15 AMP 110V, NEUTRAL	MVP PANEL TERMINAL N
15 AMP 110V, BLOWER CIRCUIT	BLOWER PANEL POWER L1
15 AMP 110V, NEUTRAL	BLOWER PANEL N/L2
GROUND	BLOWER GROUND



ENVIRONMENTAL

Zoeller Family of Water Solutions™

Zoeller Company

System Head Curve and Pump Selection Tool



PUMP COMPANY

Zoeller Family of Water Solutions™

Static Head Information	
Static Head - elevation difference from low water to outfall	5.0 feet
System high point above outfall?	No

Friction Head Information	
Pipe	
How many different pipes in the system (not counting laterals)?	1
Pipe 1 Length	180 feet
Pipe 1 Size	1 1/4 inches
Pipe 1 Class	SCH 40
Pipe 2 Length	
Pipe 2 Size	
Pipe 2 Class	
Pipe 3 Length	
Pipe 3 Size	
Pipe 3 Class	

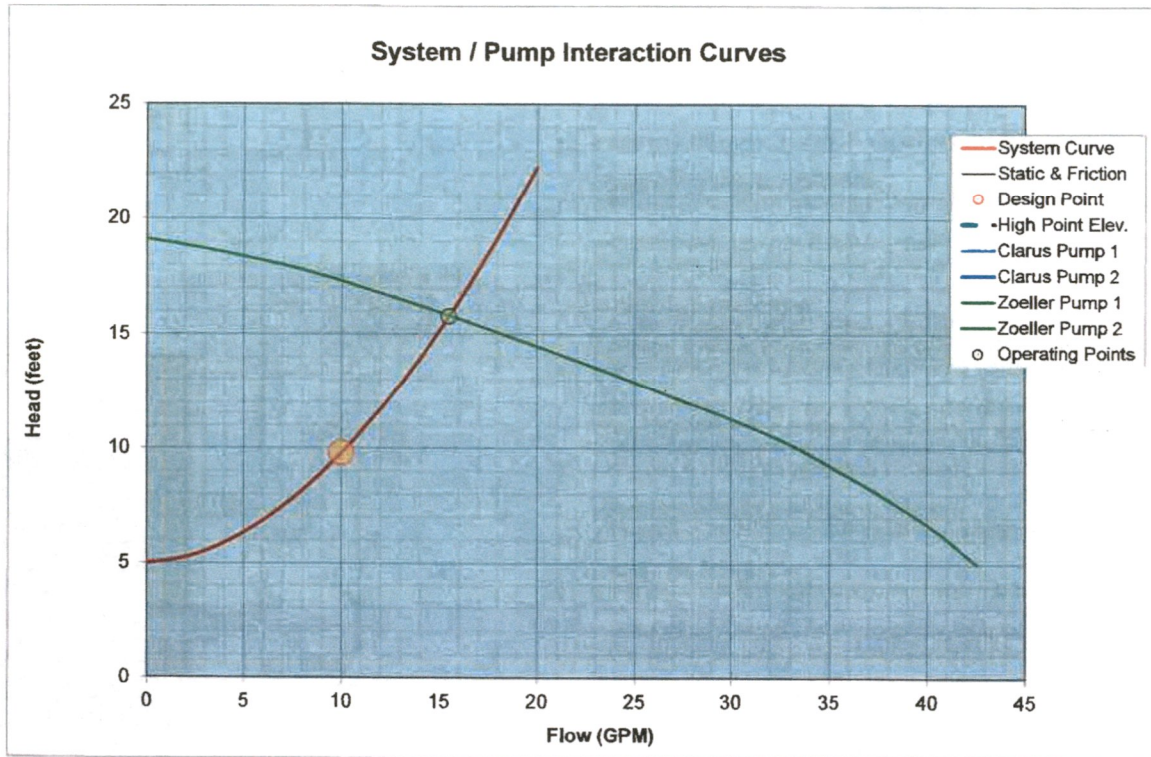
Pressurized Laterals?	
Is the system pressurized?	No
Length of pressurized lateral	
Size of lateral	
Class of lateral	

Fittings & Discharge Assemblies		
Type	Size	Quantity
Discharge Assembly	1 1/4 inches	

Special Friction Considerations	
Weep Hole	Yes
Add-In Friction	15 % of Pipe Loss
Automatic Multizone Valve?	No
Pressure Filter?	No

Operating Head Information	
System Type	Non-Pressurized
Specify Flow Requirement?	Yes
Flow Requirement	10.0 GPM
Number of Discharge Assemblies	
Size of Discharge	
Class of Discharge	
Discharge Material or Size	
Discharge Material or Size	
Discharge Material or Size	

Factors and Coefficients	
Hazen-Williams C Factor	130
Discharge Coefficient (Cd)	0.61
Lateral Design Mode	Off



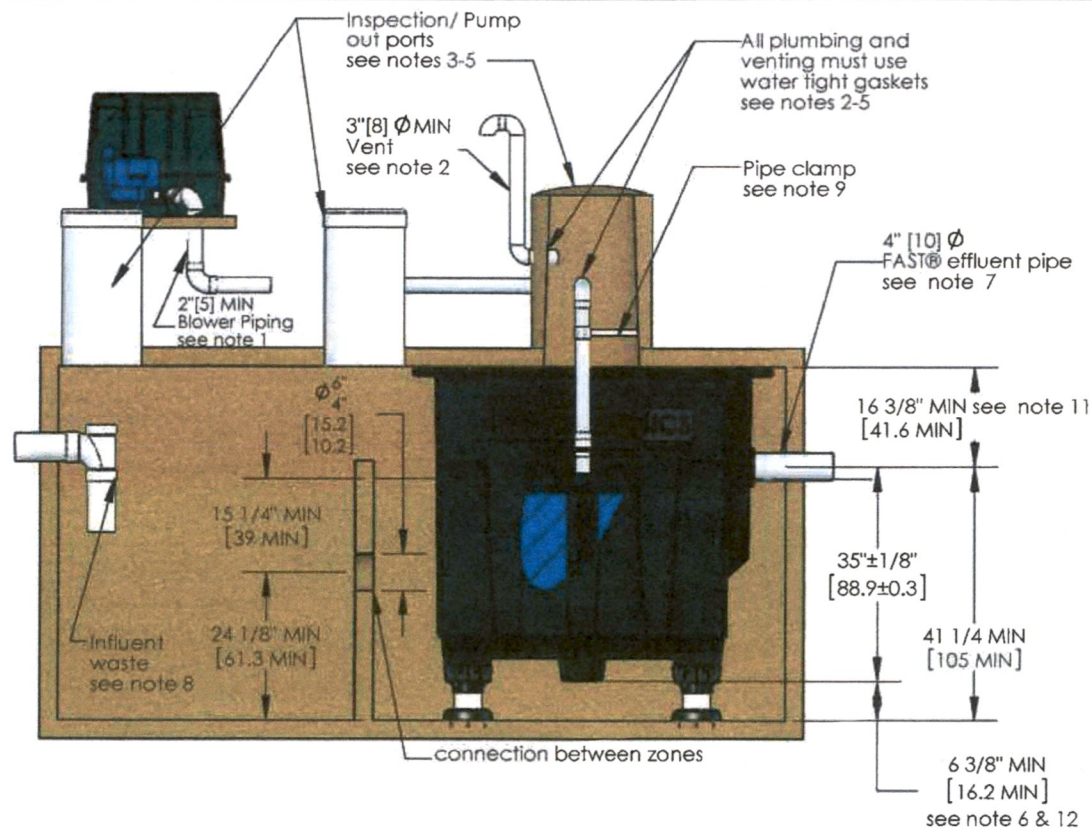
Flow Requirement 10.0 GPM

NOTE: THE DISPLAYED PUMP CURVES HAVE BEEN ADJUSTED TO ACCOUNT FOR THE EFFECT OF THE WEEP HOLE

Pump Selection	
60 Hz	Frequency
Clarus Environmental Pumps	
Clarus Pump 1	
Clarus Pump 2	
Operating Points	
Clarus Pump 1	
Clarus Pump 2	
Zoeller Pump Company Pumps	
Zoeller Pump 1	53/55/57/59, 0.3hp, 60Hz
Zoeller Pump 2	15.5 GPM @ 15.6'

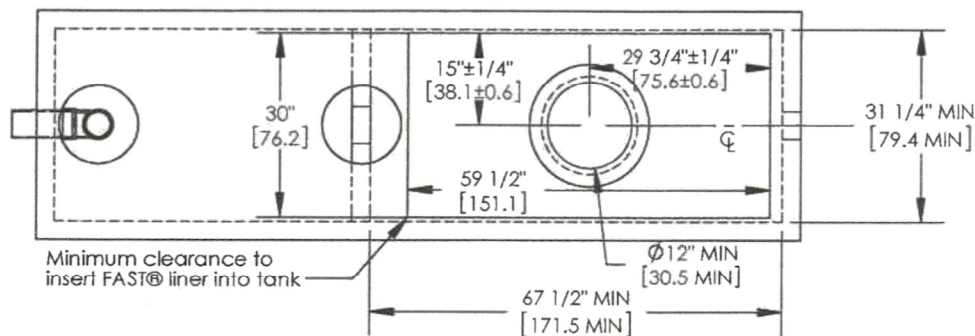
Design Point	Curve Zoom Range
10.0 GPM	20 GPM
@ 9.8' TDH	

Project Data		Notes
Project Name:	Jamie Davis	1 1/4" discharge assembly
Project Address:	Lot 35, Springhill Farms Drive	1 1/4" transport line
	Alexander, AR 72002	
Contact Info:	David A. Meints	
	501-804-0837	



Settling Zone
350 Gallon MIN [1300 L MIN]

Treatment Zone
450 Gallon MIN [1700 L MIN]



NOTES

1. Airline piping to FAST® may not exceed 100 FT [30m] total length and have a maximum of 4 elbows in the piping system. For distances greater than 100 FT [30m] consult factory. Blower must be located above flood levels on a concrete base 26" X 20" X 2" [65 X 50 X 5cm] min.
2. Vent to desired location and cover opening with a vent grate with at least 7 sq in. [45 sq. cm] open surface area. Secure with stainless steel screws. Vent piping must not allow condensate build up or create back pressure. Vent must be above finished grade or higher (see sheet 4 of 4).
3. All appurtenances to FAST® (e.g. tanks, access ports, electrical, etc.) must conform to all applicable country, state, province, and local plumbing and electrical codes. Pump out access shall be adequate to thoroughly clean out both zones.
4. All inspection, viewing and pump out ports must be secured to prevent accidental or unauthorized access.
5. Tank, piping, conduit, etc. are provided by others. Blower control system by Bio-Microbics, Inc. See Installation Manual.
6. If less than the specified minimums are considered necessary, consult factory for guidance.
7. All piping and ancillary equipment installed after FAST must not impede or restrict free flow of effluent.
8. The tank(s) shall be designed to prevent air passage between the settling zone/tank and the treatment zone and preventing an air lock. Examples include a baffle wall sealed to the lid or treatment zone inlet line with a pipe cap. Consult factory for guidance.
9. The air supply line into the FAST® unit must be secured to prevent vibration induced damage. The air supply line should be secured with a non-corrosive clamp every 2' min [60 cm]. See alternate air supply option on sheet 4 of 4.
10. Specialized treatment levels may require specific features to be incorporated into the design. Consult factory for guidance.
11. Min. height may be reduced, consult factor and reference "Low Profile Module Procedure.pdf"
12. Refer to sheet 4 of 4 for leg extensions requirements.

DO NOT SCALE
UNLESS NOTED
DIMENSIONS
ARE IN INCHES
[CENTIMETERS]
TOLERANCES
± 0.02 IN/IN
[± 0.05 CM/CM]

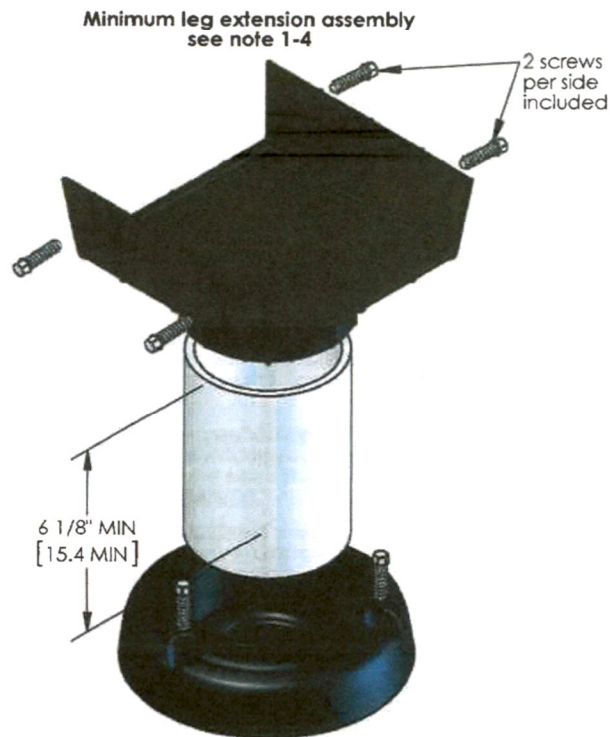
BIO MICROBICS
BETTER WATER. BETTER WORLD.™

MicroFAST 0.50 FAST Unit

WEIGHT	lb	SIZE	DRAWING NUMBER	SHEET 2 OF 4
NAME	DATE	A	MicroFAST® 0.50 with feet	
DRAWN	CTC	12/18/2006		
CHECKED	PF	9/18/2013	REVISED 9/18/2013 REV. INI-05-V	

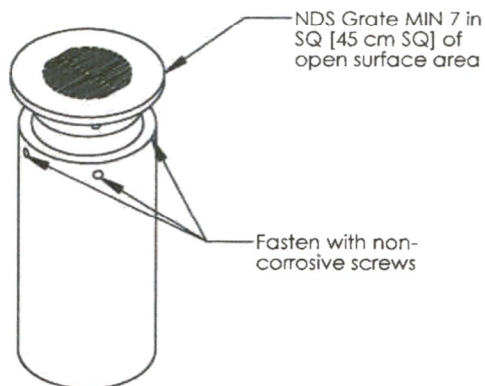
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF BIO-MICROBICS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF BIO-MICROBICS INC. IS PROHIBITED. DESIGN AND INVENTION RIGHTS ARE RESERVED. IN THE INTEREST OF TECHNOLOGICAL ADVANCEMENT, ALL PRODUCTS ARE SUBJECT TO DESIGN AND OR MATERIAL CHANGE WITHOUT NOTICE.

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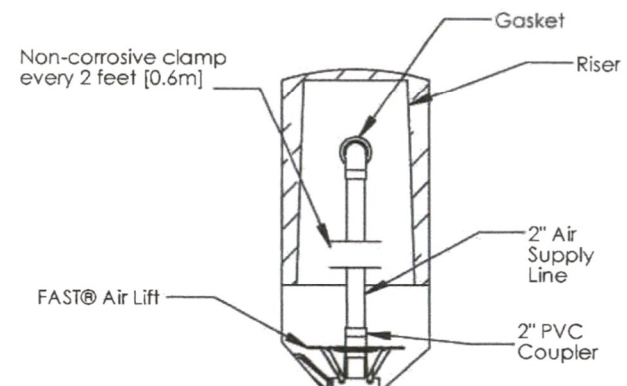
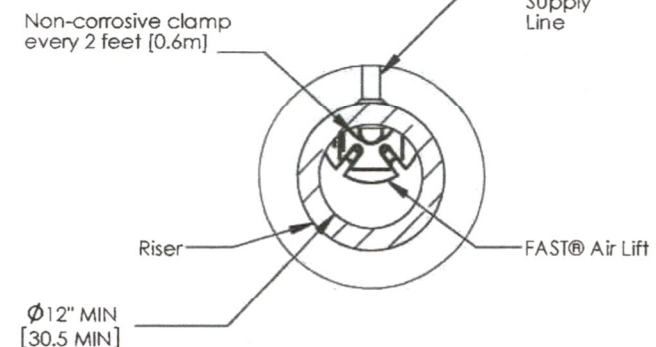
DETAIL
SCALE 1 : 5

FAST® Vent Option



DETAIL
SCALE 1 : 4

Alternate Air Supply Option



Notes

1. Secure leg extension to the FAST® unit by placing two screws on each side of the leg extension (4 screws per foot are included).
2. Cut 4" schd. 40 PVC pipe (not included) to obtain the desired height. Minimum pipe length of 6 1/8" [15.56cm] will provide minimum clearance of 10". For heights greater than 18" [45.7cm] use schd. 80 PVC pipe (not included). Consult factory for extending leg beyond 36" [90 cm].
3. Anchor the leg extensions to the tank with non-corrosive hardware (not included) at the provided mounting points.
4. If less than the specified minimums are considered necessary, consult factory for guidance.
5. The air supply line into the FAST® unit must be secured to prevent vibration induced damage. The air supply line should be secured with a non-corrosive clamp every 2ft [0.6m] minimum.
6. Tank, anchors, piping conduit, blower, housing pad and vents are provided by others.

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 A	DRAWING NUMBER MicroFAST® 0.50 Details	SHEET 4 OF 4
NAME		DATE			
DRAWN CTC		12/18/2006			
CHECKED PF		9/18/2013			
			REVISED 9/18/2013	REV. INI-05-V	

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BIO-MICROBICS © 2014

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 whichever 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, aerator 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.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF BIO-MICROBICS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF BIO-MICROBICS INC. IS PROHIBITED. DESIGN AND INVENTION RIGHTS ARE RESERVED. IN THE INTEREST OF TECHNOLOGICAL ADVANCEMENT, ALL PRODUCTS ARE SUBJECT TO DESIGN AND OR MATERIAL CHANGE WITHOUT NOTICE.

BIO-MICROBICS © 2014

DO NOT SCALE		 BETTER WATER. BETTER WORLD.™ MicroFAST 0.50 FAST Unit		
UNLESS NOTED DIMENSIONS ARE IN INCHES [CENTIMETERS] TOLERANCES ± 0.02 IN/IN [± 0.05 CM/CM]				
WEIGHT	lb	SIZE	DRAWING NUMBER	SHEET 3 OF 4
		A	MicroFAST® 0.50 Specifications	
DRAWN	CTC	12/15/2006		
CHECKED	PF	9/18/2013	REVISED 9/18/2013 REV. INI-05-V	

Salcor 3G UV Disinfection Unit

NOTE: Not all dimensions to scale

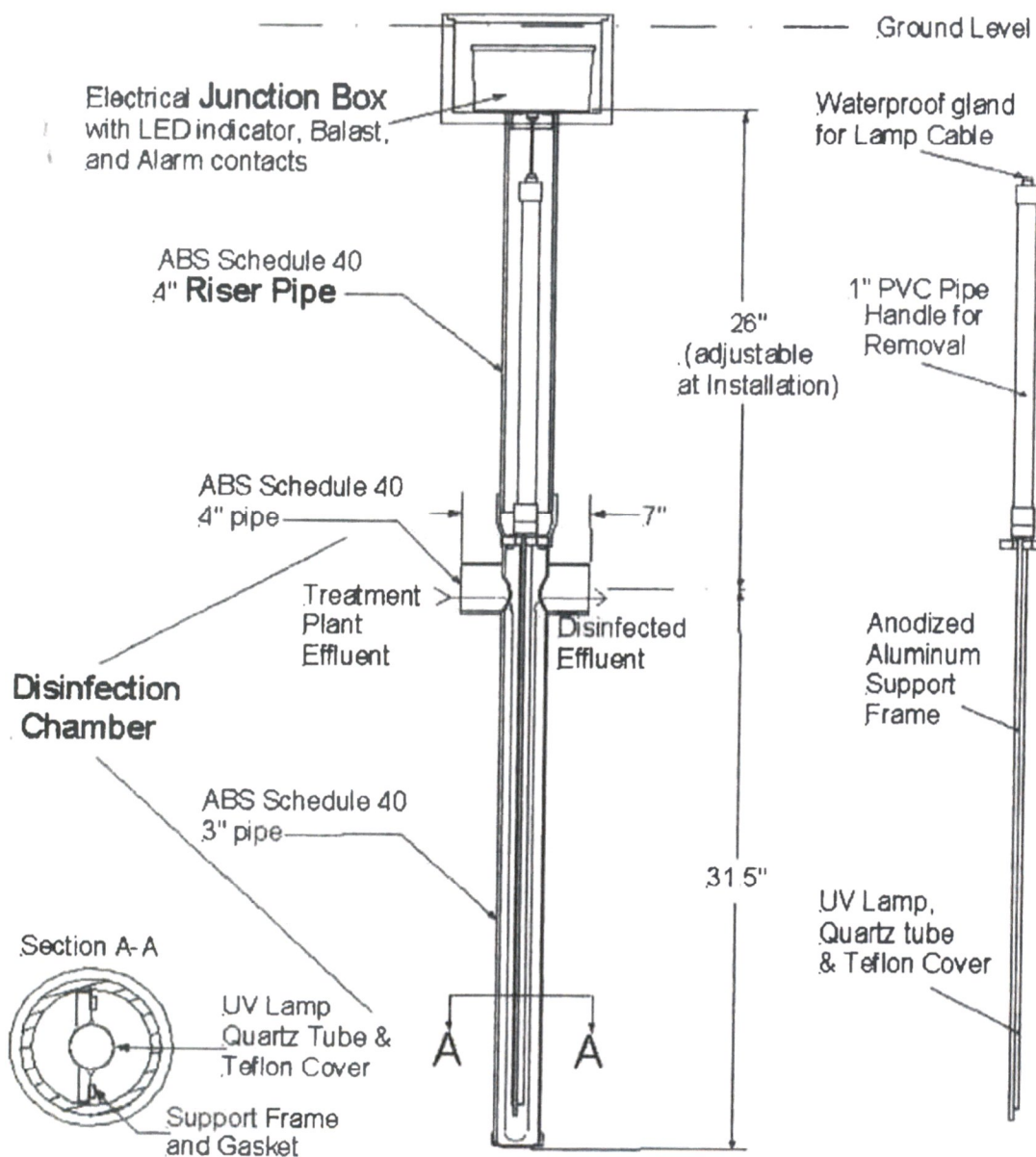


Figure 1

In Ground Installation

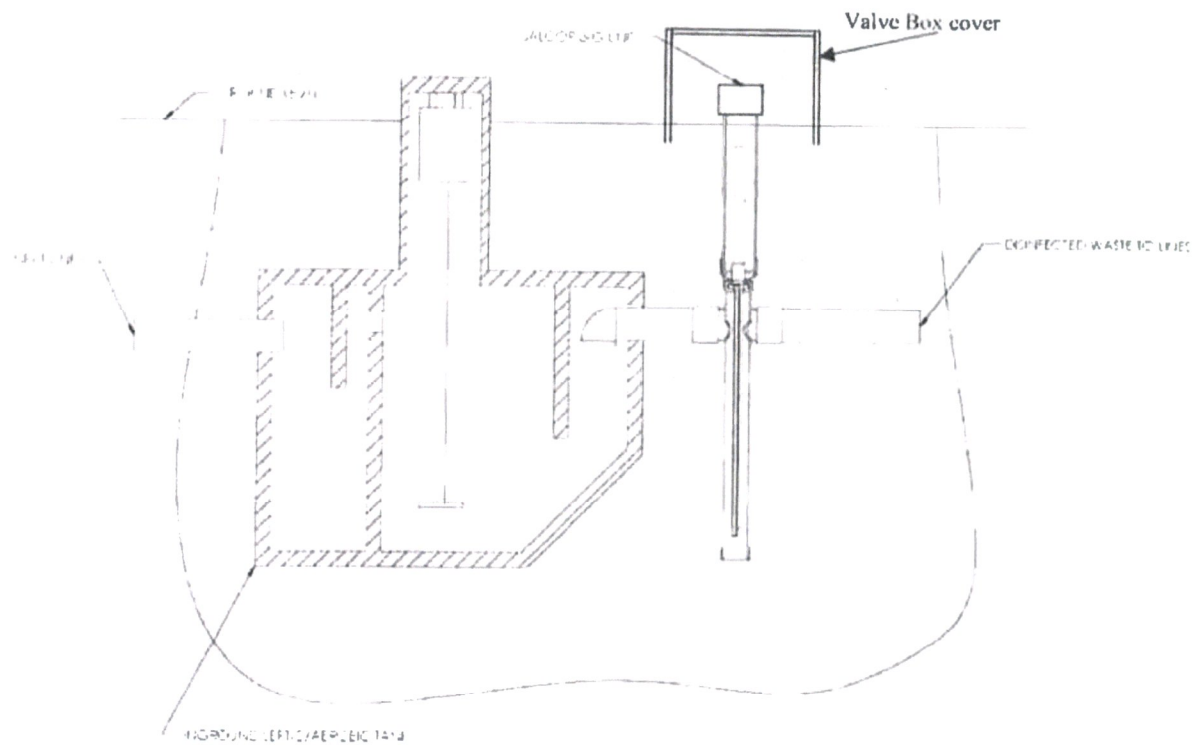


Figure 2

In Tank Installation

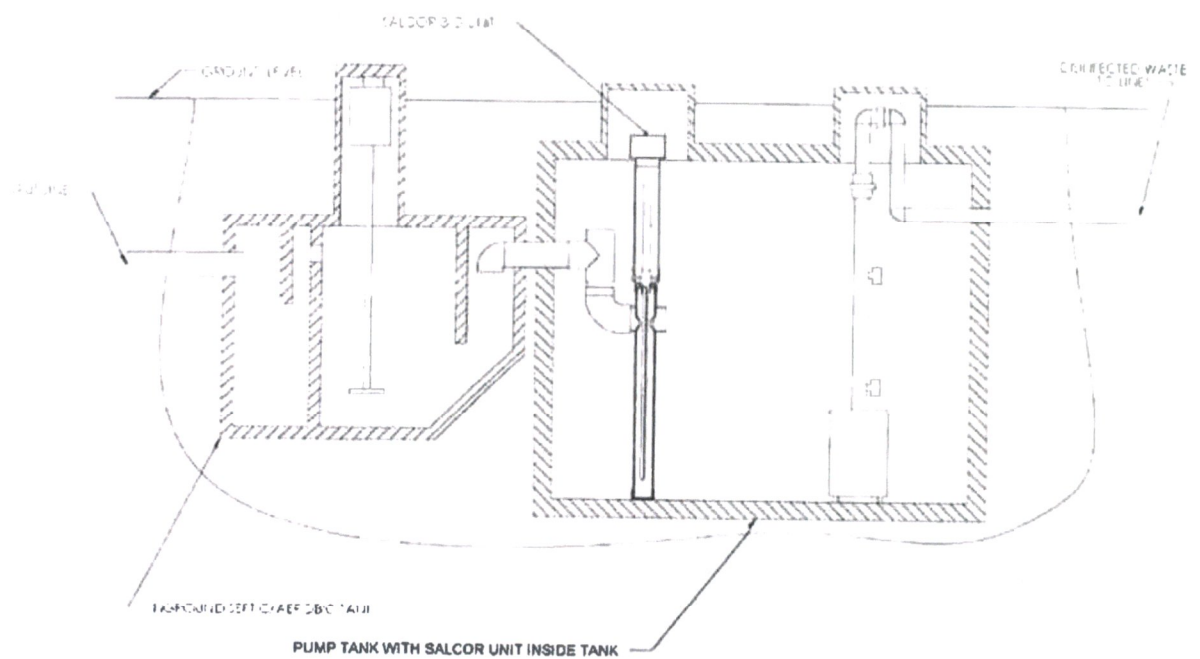


Figure 3

SALCOR INC.

P.O Box 1090
Fallbrook, Ca. 92088
Telephone: 760 731 0745

V. ELECTRICAL JUNCTION BOX LID

The Ballast and terminal strips are now mounted on the Alarm Board, mounted to the Junction Box Lid.

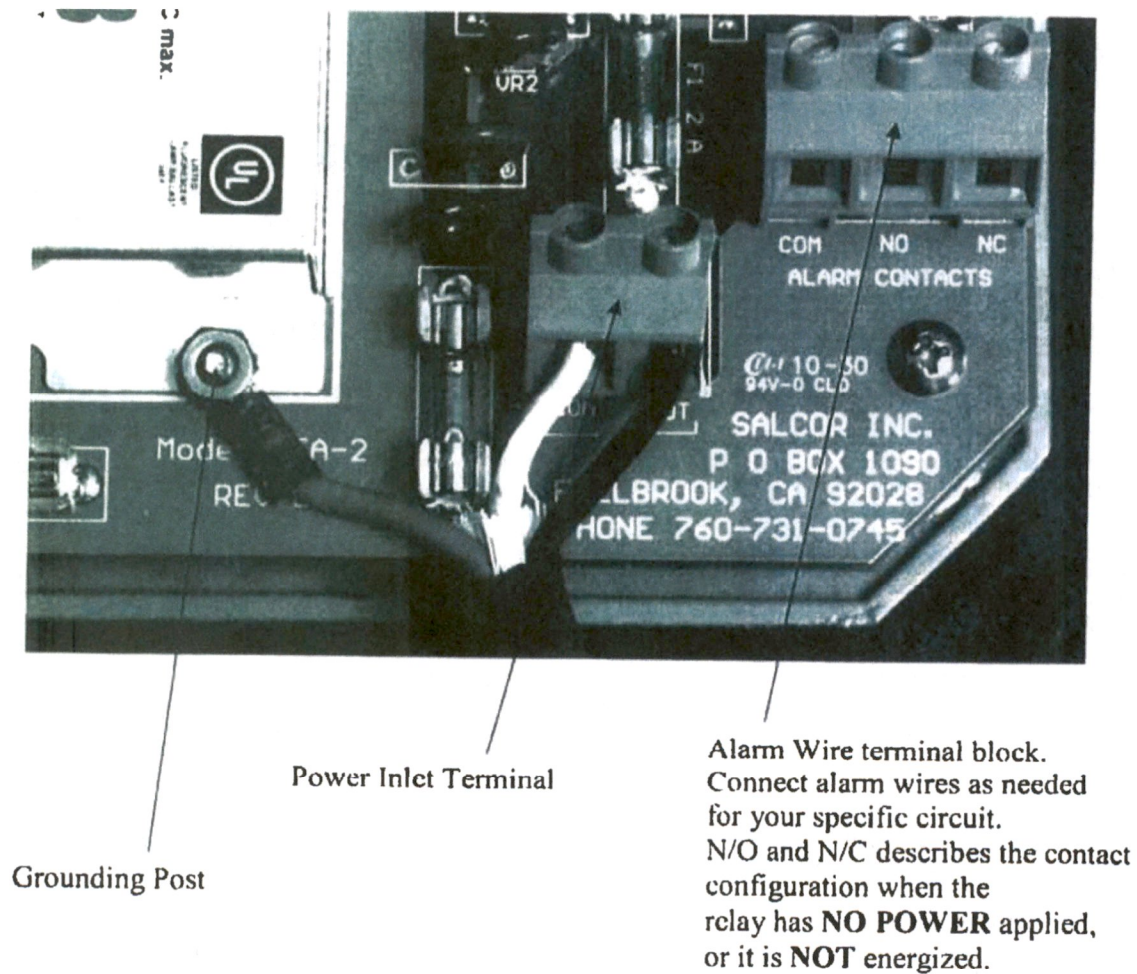


Figure 4

SERVICE AND MAINTENANCE CONTRACT

1. **Parties.** This contract ("Agreement" or "Contract") is between Meinco Septic Systems, Inc., ("Meinco") and Jamie Davis, ("Client"), referred to individually as a "Party" and collectively as the "Parties."
2. **Service Location.** This is a Contract for septic system service and maintenance services provided by Meinco for Client located at 9001 Springhill Farm Drive, Alexander, AR 72002, hereinafter referred to as the "Service Site."
3. **Service Fees.** Client agrees to pay Meinco Ninety Dollars (\$90.00) for septic system service and maintenance specifically work performed every Three Months (Quarterly) and described more specifically below (hereinafter referred to as "Service Work"). Meinco and Client agree that the invoiced amount is good consideration for this Contract and the services set forth below and reflects the bargained for terms of this agreement.
4. **Materials Charges.** During regular maintenance Meinco will replace materials necessary to keep the septic system operating efficiently (chlorine tablets, UV light bulbs, floats, filters, etc.). Meinco and Client agree that Meinco shall submit to client the costs of maintenance parts and materials and Client will promptly pay the same.
5. **Laboratory Fees.**
 - A) ☐ This paragraph is inapplicable.
 - B) ☒ Client agrees that Meinco will use a third party laboratory, Environmental Services, Inc., for any sampling that is required under this Contract. In such event, Meinco shall submit to Client a laboratory fee of \$ 125.00 and Client will promptly pay the same.
6. **Services Provided.** Meinco agrees to provide the following Service Work to the Client and the Service Site:
 - A) Maintenance requirements, including review of system components and their working condition, monitoring of solid levels to determine system efficiency, and periodic cleaning of system filters or media.
 - B) I. ☒ This paragraph is inapplicable.
 II. ☐ Necessary sampling and submission of paperwork every month(s) or as required to comply with the Arkansas Department of Health Onsite Maintenance Program.
 - C) Necessary paperwork every 6 month(s) as required to comply with the Arkansas Department of Health and/or the Arkansas Department of Environmental Quality.
 - D) I. ☐ This paragraph is inapplicable.
 II. ☒ Sampling of discharge every 6 month(s) in coordination with a 3rd party laboratory for required laboratory tests.
7. **Contract Duration.** This contract shall be for a period of 24 month(s) from the date this Contract is executed by the parties on page 2
8. **Flow Requirements.** This contract shall be null and void if septic system flow exceeds 450 gallons per day.
9. **Modification to System.** If the septic system is modified, abused, mis-used, or altered, then Meinco's responsibility to service or maintain the septic system is terminated. Meinco may remedy such conditions by replacing parts or correcting defects. If Meinco makes such changes to the septic system, then it may charge to client the costs of repairs, modifications, parts, and labor. Meinco may, at its discretion, seek payment in advance of making any repairs or modifications to the septic system. In such event, Meinco shall not be responsible for any damage or adverse effects for its delay in making repairs or modifications to the septic system.
10. **Access to System.** Client agrees to provide Meinco access to the septic system as well as its parts and components.
11. **Termination by Client.** Client may terminate this contract by providing thirty (30) days written notice to Meinco.
12. **Termination by Meinco.** Notwithstanding, and in addition to, any other provision or term in this Contract, **MEINCO MAY TERMINATE THIS CONTRACT AT ANY TIME AND WITHOUT PREVIOUS NOTICE TO CLIENT.**
13. **Solid Removal.** Solid removal is not a covered service and shall incur an additional fee. If Meinco removes solids from the septic system, then it may charge to client the costs of solid removal. In any event, Meinco shall not be responsible for any damage or adverse effects for any delay in removing solids.
14. **Indemnity.** To the fullest extent permitted by law, Client shall indemnify, hold harmless, and defend Meinco and any agent or employees of Meinco from and against all injuries, claims, damages, losses, and expenses, including, but not limited to, attorneys' fees, arising directly or indirectly out of the obligations herein undertaken or resulting out of operations related to the Service Work or Service Site conducted by Meinco, Meinco's agents, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such injury, claim damage, losses, or expenses is caused in part by a party indemnified. Such obligation shall not negate, abridge, or otherwise reduce the rights or obligations of indemnity which would otherwise exist to a party or person described in this paragraph.

15. **Assignment.** Client agrees that even though this is a contract for services, Meinco may assign this Contract to any third party without written notice to Client.
16. **Bilateral Contract.** Meinco and client specifically agree that Client is seeking Meinco's promise to perform and not its performance.
17. **Claims Against Meinco.** Client shall give Meinco written notice of all claims within five (5) days of Client's knowledge of facts giving rise to the event for which claim is made. Otherwise, such claims shall be deemed waived by Client. All unresolved claims, disputes, and other matters in question between Meinco and Client shall be resolved in the manner provided for in this Agreement.
18. **Rights Upon Breach.** If Client breaches this Agreement with Meinco, Meinco may stop all work, including all Service Work. Additionally, Client will be liable to Meinco for consequential, incidental, and reliance damages as well as attorneys' fees and court costs. Such liability upon Client shall extend to petitions for and orders of contempt as well as any attempts by Meinco to collect upon any debt or damages owed to it by Client, including those entered by court of law or other dispute resolution proceeding.
19. **Direct Discussion.** If a dispute arises out of or relates to this Agreement, the Parties shall endeavor to settle the dispute through direct discussion before advancing to any dispute resolution proceeding.
20. **Joint Drafting.** The Parties expressly agree that this Agreement was jointly drafted and that this Agreement shall be construed neither against nor in favor of either Party. Instead, this Agreement shall be construed in a neutral manner.
21. **Choice of Law.** The Parties expressly agree that any dispute or claim filed or heard in any jurisdiction concerning or relating to this Agreement or worked performed as a result of this Agreement shall be governed by the laws of the State of Arkansas.
22. **Forum Selection and Choice of Venue.** The Parties expressly agree that any dispute or claim arising from, filed, or heard concerning or relating to this Agreement or work performed as a result of this Agreement shall be heard in Saline County, Arkansas, and no other forum. If this clause is penetrated and the hearing

concerning the dispute removed to the United States federal court system, then the Parties expressly agree that the dispute shall be heard in the United States District Court for the Eastern District of Arkansas, Western Division, at the Richard Sheppard Arnold United States Courthouse in Little Rock, Arkansas.

23. **Waiver of Agreement Terms.** Meinco, at its sole discretion and leisure, may waive any term in this Agreement. Such waiver shall not, under any conditions or circumstances, constitute a modification of this Agreement. Additionally, such waiver shall not, under any conditions or circumstances, constitute a course of performance, course of dealings, or trade usage between Meinco and Client. Any waiver by Meinco shall be limited to a single incident or event. No waiver of any term of this Agreement is valid unless it is in writing, signed by Meinco, and attached to this Agreement as an addendum. It is the responsibility and duty of Client to draft any written waiver and to present it to Meinco for Meinco's approval and signature.
24. **Force Majeure.** Neither Party shall be in breach of its obligations under this Agreement (other than payment obligations) or incur any liability to the other Party for any losses or damages of any nature whatsoever incurred or suffered if and to the extent that the other party it is prevented from carrying out its obligations by, or such losses or damages are caused by, a *force majeure* event. For purposes of this paragraph, the failure of the state of Arkansas or the United States of America to act according to current practices, procedure, or law at the time of the making of this Contract shall be considered a *force majeure* event. Such event by the government shall be in addition to any current or commonly accepted definition of *force majeure* event.
25. **Merger and Integration.** Meinco and Client agree that this Agreement represents a full, final, and complete memorial of their Agreement for the Service Work and that this Agreement does not rely upon any term or promise not otherwise specified within the four corners of this Agreement.
26. **No Oral Modification.** Meinco and Client agree that this Agreement shall not be subject to oral modification. The Parties agree that any modification made or agreed to by the Parties shall be in writing, signed by both Parties, and attached to this Agreement as an Addendum.

By signing this Agreement below, I indicate that I have read this Agreement and its terms, consisting of two (2) pages, excluding any Addendum or Addenda, and that these express terms are both acceptable and agreeable to me. I further declare that these terms do not represent an undue hardship, are not illusory, and are not unconscionable as I have expressly bargained for these terms in consideration of entering into this Contract for the value specified in paragraph three (3).



Meinco Septic Systems, Inc.

11/12/2019

Date


Client

Date

11/13/19



Arkansas Department of Health
Environmental Health Protection

Receipt Number

Individual Onsite Wastewater System Permit Application

Permit Type ☒ New Installation
☐ Alteration / Repair

DR Environmental ID #

7 6 0 1 0 5 5 5 4 7

Fee Schedule for Structures		√
Structures 1500 sq ft or less	\$ 30.00	<input type="checkbox"/>
Structures more than 1500 sq ft and up to 2000 sq ft	\$ 45.00	<input type="checkbox"/>
Structures more than 2000 sq ft and up to 3000 sq ft	\$ 90.00	<input type="checkbox"/>
Structures more than 3000 sq ft and up to 4000 sq ft	\$120.00	<input checked="" type="checkbox"/>
Structures more than 4000 sq ft	\$150.00	<input type="checkbox"/>
Alteration and Repair	\$ 30.00	<input type="checkbox"/>

Part 1 Application

Treatment Type (check one)

Disposal Method (check one)

<input type="checkbox"/> STD = Standard Septic Tank	<input checked="" type="checkbox"/> ATU = Aerobic Treatment Plant	<input type="checkbox"/> STD = Standard Absorption Field	<input type="checkbox"/> LPD = Low Pressure Distribution
<input type="checkbox"/> ISF = Intermittent Sand Filter	<input type="checkbox"/> RSF = Re-circulating Sand Filter	<input checked="" type="checkbox"/> SUR = Surface Discharge	<input type="checkbox"/> HLD = Holding Tank
<input type="checkbox"/> PMF = Proprietary Media Filter	<input type="checkbox"/> RGF = Re-circulating Gravel Filter	<input type="checkbox"/> CPF = Capping Fill	<input type="checkbox"/> SRL = Serial Distribution
<input type="checkbox"/> OTH = Other (Describe)	<input type="checkbox"/> HLD = Holding Tank	<input type="checkbox"/> OTH = Other	<input type="checkbox"/> DRP = Drip Irrigation

1. Owner's/Applicant's Name Jamie Davis		2. Phone Number (501) 672-6592	
3. Mailing Address P.O. Box 354, Bryant, AR 72089		4. County Saline	
5. Address of Proposed System (If a 911 address is not available, attach detailed directions or map) 900 Springhill Farm Drive, Alexander, AR 72002			
6. Subdivision Name Springhill Farms	7. Approval Date n/a Lots>3 acres	8. Date Recorded Prior to rule change	9. Lot Number 35
10. Lot Dimensions 239' x 546'	11. Total Area (Acres) 3.0	12. # Bedrooms # People 3	13. Daily Flow (GPD) 370
14. Brief Legal Description of Property (Attach a separate sheet of paper, if necessary) Section 32, Township 1 North, Range 15 West, Saline County			
15. Water Supply (Specify supplier, if Public Water) Salem Water Users		16. GPS Coordinates Not taken	

17. Loading Rates	(gpd/ft ²)	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	ft ²	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 Jamie Davis Date 11/13/19

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.

David A. Meints

Designated Representative

Soil Certified ☒ Yes ☐ No

Designated Representative Signature

Title

David A. Meints

11/12/2019

501-821-3837/501-804-0837

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

EHS Number

Date



Arkansas Department of Health

4815 West Markham, Slot 46
Little Rock, Arkansas 72205-3867

MEMORANDUM OF AGREEMENT

SUBJECT: ONSITE WASTEWATER SYSTEM APPLICATION

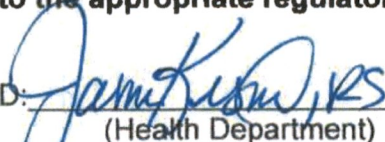
This is an agreement that the onsite wastewater system installed on this property has been permitted under authority of Act 402 of 1977 and by the Arkansas Department of Health with the understanding that the following provisions are met:

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 prospective 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:


(Property Owner)

SIGNED:


(Health Department)

DATE:

11/13/19

DATE:

11-19-19



1615 Edison Ave, Benton, AR 72015 to 3287-9143
Springhill Farms Dr, Alexander, AR 72002

Drive 10.7 miles, 21 min



1615 Edison Ave

Benton, AR 72015

Take Benton Pkwy, Alcoa Rd and Springhill Rd to Springhill Farms Dr in Owen Township

20 min (10.3 mi)

- ↑ 1. Head east on Edison Ave
 - ↶ 2. Turn left onto Benton Pkwy
 - ↑ 3. Continue onto Alcoa Rd
 - ↷ 4. Turn right toward I-30 Frontage Rd (signs for I-30 E/Little Rock)
 - ↷ 5. Turn right onto I-30 Frontage Rd
 - ↷ 6. Turn right (signs for I-30 W)
 - ↶ 7. Turn left onto Springhill Rd
 - ↷ 8. Turn right onto Springhill Farms Dr
- 285 ft
- 2.6 mi
- 1.7 mi
- 0.1 mi
- 0.8 mi
- 0.6 mi
- 4.5 mi
- 58 s (0.4 mi)



Davis Discharge

Davis Entrance



Meinco, Inc

PO Box 1001 * Bryant, AR 72089



ADEQ
Water Permits
5301 North Shore Drive
North Little Rock, AR 72118