



# ARG (NPDES non-stormwater general permit) Notice of Intent - ARG160000, ARG250000, ARG500000, ARG550000, ARG640000, ARG670000, ARG750000, and ARG790000 Applications for New Permit Coverage

version 1.22

(Submission #: HQ5-KX2B-QFNKF, version 1)

## Details

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**Submission ID** HQ5-KX2B-QFNKF

## Form Input

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### Type of Permit Application

**Permit Type**

ARG550000 - Individual Treatment System for Domestic Waste

**Is this permit for an individual homeowner?**

Yes

**Initial Fee (in dollars)**

0

**Total Fee due with Application (in dollars)**

0

### ARG550000: Specific Information

**Exclusions**

Please note that the following discharges are excluded from coverage under the ARG550000 general permit:

1. Systems with multiple discharges,
2. Facilities requiring financial assurance in accordance with Arkansas Code Annotated 8-4-203(b), and
3. Discharges that include non-domestic waste

**I certify that to the best of my knowledge, this facility is not subject to the exclusions listed above.**

Yes

**Other Exclusions**

In addition to the above exclusion, waterbody-specific exclusions and/or other exclusions may be applicable.

See the permit for details:

<https://www.adeq.state.ar.us/downloads/WebDatabases/PermitsOnline/NPDES/Permits/ARG550000.pdf>

The Aquaview application may be useful if you wish to check the status of receiving waters for the facility:

<https://arkansasdeq.maps.arcgis.com/apps/webappviewer/index.html?id=fb5a6aa70fd940cda4c9a3d7bc2fbb15>

**Site Map**

Please attach a site map that shows the following:

1. Entrance/driveway of the facility/residence,

2. Location of the treatment system, and
3. Location of the outfall

#### Site Map

Harrison.jpg - 08/03/2024 01:19 PM

#### Comment

NONE PROVIDED

#### Please attach approval from the Arkansas Department of Health (typically the EHP-19 form)

Harrison\_Cathy\_Kirkland Road\_Approved\_1.pdf - 08/03/2024 01:19 PM

#### Comment

NONE PROVIDED

### Permittee Information

#### AFIN (Enter if available)

NONE PROVIDED

#### Permittee (Legal Name)

The permittee means any person (an individual, association, partnership, corporation (i.e. LLC or Inc.), municipality, state, or federal agency) who has the primary management and ultimate decision-making responsibility over the operation of a facility or activity.

For individual homeowners, the permittee must be the name of the homeowner or homeowners, e.g. "Jane Doe" or "John and Jane Doe"

For corporations, the permittee legal name must be an EXACT MATCH with the Arkansas Secretary of State (including all punctuation). Below is a link to verify the match:

[Arkansas Secretary of State](#)

#### Permittee (Legal Name)

Cathy Harrison

#### Permittee Type

Individual Homeowner

#### Permittee Mailing Information

##### Prefix

NONE PROVIDED

##### First Name

Cathy

##### Middle Name

NONE PROVIDED

##### Last Name

Harrison

##### Title

Homeowner

##### Phone Type

Mobile

##### Number

901-299-2317

##### Extension

##### Email

biggsc74@yahoo.com

##### Address

9551 Kirkland Road

Des Arc, AR 72040

#### Is the invoice address the same as the mailing address for permit documents?

Yes

#### Is there an active consultant for this facility?

Yes

## Consultant Information

### Prefix

NONE PROVIDED

### First Name

David

### Middle Name

NONE PROVIDED

### Last Name

Meints

### Title

Class III Operator

### Consulting Firm Name

Meinco Wastewater Systems

### Phone Type

Business

### Number

501-821-3837

### Extension

### Email

david@meincowastewater.com

### Address

P.O. Box 1001

Bryant, AR 72089

United States

## Facility/Site Information

### Facility/Site Name

Cathy Harrison

### Location of the Facility/Site

Please provide the 911 address if available. If a 911 address is not available, please provide a description of the site location (e.g. 0.5 miles north of intersection of A Street and B Street).

## Facility/ Site Information

### Facility/Site Contact

#### Prefix

NONE PROVIDED

#### First Name

Cathy

#### Middle Name

NONE PROVIDED

#### Last Name

Harrison

#### Title

Homeowner

#### Phone Type

Mobile

#### Number

901-299-2317

#### Extension

#### Email

biggsc74@yahoo.com

### Facility/Site Address

9551 Kirkland Road

Des Arc, AR 72040

### Facility County (if the facility/site is in multiple counties, choose "other" and explain)

Prairie

### Coordinates of the Facility/Site Entrance. This should be the driveway or front gate for most facilities, or the location of the project trailer/other local staging point for hydrostatic testing

34.971276,-91.403427

## Common SIC & NAICS Codes

Facility Type	SIC Code	NAICS Code
Individual Homeowner (sewage treatment)	4952	221320

Facility Type	SIC Code	NAICS Code
Solid Waste Landfill	4953	562212
Construction Sand and Gravel	1442	212321
Crushed and Broken Limestone	1422	212321
Crushed and Broken Stone, Not Elsewhere Classified	1429	212319
Water Supply	4941	221310
Carwashes	7542	811192

For other SIC and NAICS codes, you can search the following website:

<https://www.naics.com/search/>

**Primary SIC Code**

4952

**Primary NAICS Code**

221320

**Other applicable SIC codes and/or NAICS codes**

NONE PROVIDED

**Permit Numbers and/or names of any permits issued by DEQ or EPA for an activity located in Arkansas that is presently held by the applicant or its parent or subsidiary corporation**

Permit Name	Permit Number	Held By
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Licensed Wastewater Operator(s) (if applicable). ARG55 coverage requires a Class II Municipal or higher license. ARG64 coverage requires a Class I Municipal or Basic Industrial, or higher license. ARG16 and ARG79 coverage requires a Basic Industrial or higher license or higher. ARG67 coverage does not require a licensed operator. Other ARG coverage may or may not require a licensed operator depending on the type of treatment, see the permits for details.

Operator Name	License Number	Municipal License Class	Industrial License Class
David Meints	009055	III	N/A

## Discharge/Outfall Information

### Receiving Stream Information

Below is a link the DEQs AquaView Mapping Tool that may be useful for receiving stream information and ultimate receiving stream information. You can also check for special waterbody designations and impairments that could exclude discharges from coverage under a general permit.

[Aquaview](#)

**The outfall latitude and longitude must be entered in decimal format (like 36.1234, -92.1234). Do you have a Degree/Minute/Second measurement (like 36°12'34.56", 92°12'34.56") that you need to convert?**

No

### Outfall Information

Outfall Number	Latitude	Longitude	Estimated Flow - Please include units, such as MGD or GPD	Effluent Description	Name of Receiving Stream (i.e. an unnamed tributary of Mill Creek, thence into Mill Creek, thence into the Arkansas River)	Type of Treatment System (Include all components of the treatment system. Can be "none" if no treatment is used)	Coordinates Check
001	34.970860	-91.403279	370 GPD	Treated Sanitary Wastewater	White River	Bio Microbics Microfast 0.5 w/ UV	NONE PROVIDED

Outfall Number	Latitude	Longitude	Estimated Flow - Please include units, such as MGD or GPD	Effluent Description	Name of Receiving Stream (i.e. an unnamed tributary of Mill Creek, thence into Mill Creek, thence into the Arkansas River)	Type of Treatment System (Include all components of the treatment system. Can be "none" if no treatment is used)	Coordinates Check
NONE PROVIDED	NONE PROVIDED	NONE PROVIDED	NONE PROVIDED	NONE PROVIDED	NONE PROVIDED	NONE PROVIDED	NONE PROVIDED
NONE PROVIDED	NONE PROVIDED	NONE PROVIDED	NONE PROVIDED	NONE PROVIDED	NONE PROVIDED	NONE PROVIDED	NONE PROVIDED

## Responsible and Cognizant Official Information

### Cognizant Official (duly authorized representative)

40 CFR 122.22(b) states that all reports required by the permit, or other information requested by the Director, shall be signed by the applicant (or person authorized by the applicant) or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- (1) the authorization is made in writing by the applicant (or person authorized by the applicant);
- (2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity responsibility, or an individual or position having overall responsibility for environmental matters for the company.

### Cognizant Official Designation

More than one Cognizant Official is designated for this facility

The applicant hereby designates the following person as a Cognizant Official, or duly authorized representative, for signing reports, etc., including Discharge Monitoring Reports (DMR) required by the permit, and other information requested by the Director:

### Cognizant Official

#### Prefix

NONE PROVIDED

#### First Name

David

#### Middle Name

NONE PROVIDED

#### Last Name

Meints

#### Title

Class III Operator

#### Phone Type

Business

#### Number

501-821-3837

#### Extension

#### Email

david@meincowastewater.com

The applicant hereby designates the following additional person(s) as Cognizant Official(s), or duly authorized representative(s), for signing reports, etc., including Discharge Monitoring Reports (DMR) required by the permit, and other information requested by the Director:

### Additional Cognizant Officials

Name	Title	Telephone	Email
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### Responsible Official

In accordance with 40 CFR 122.22, all NOI shall be signed as follows:

- 1) For a corporation: by a responsible corporate officer. For purposes of this section, a responsible corporate officer means:
  - a. A president, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
  - b. The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make

management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to ensure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

- 2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;
- 3) For a municipality, State, Federal or other public agency: by either a principal executive or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
- a. The chief executive officer of the agency; or
  - b. A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

For individual homeowners seeking coverage under the ARG550000 general permit, the homeowner is the responsible official. For joint ownership, one of the co-owners must sign as the responsible official.

**Responsible Official Information**

<b>Prefix</b>		
NONE PROVIDED		
<b>First Name</b>	<b>Middle Name</b>	<b>Last Name</b>
Cathy	NONE PROVIDED	Harrison
<b>Title</b>		
Homeowner		
<b>Phone Type</b>	<b>Number</b>	<b>Extension</b>
Mobile	901-299-2317	
<b>Email</b>		
biggsc74@yahoo.com		

# Notice to Installer

24 hour notice **MUST** be provided before construction begins. You may call or text Rick Barnhardt @ 870 648 5446 (leave your name, number, system name, county it is in, and the date you plan to start). There shall be **ABSOLUTLEY NO** deviations from the plans as submitted without prior approval from the submitting DR and the EHS.

Record shots on shot sheet (EHP-6). Use bottom of trenches in the field area, on solid pipe use top of pipe, and natural ground. **MAKE SURE YOU INCLUDE YOUR BENCHMARK SHOT!** If the system is a capping fill record the 4 corners and the center of the cap once it has been installed.

Once you have completed the system sign and date the back of the shot sheet and fill out Part 2 on the back of the permit (EHP-19) then sign and date it. The shot sheet and permit must be turned in within **5 DAYS** of job completion.

You may leave them with the clerk at the county health unit or place them in an envelope and take them to nearest health unit where you live with:

**40S**

**Attn: Rick**

on the front of the envelope and ask the clerk there to put it on the courier.



**Arkansas Department of Health  
Environmental Health Protection**

Receipt No. <b>2634 6902</b>
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**Individual Onsite Wastewater System Installation Specifications**

**(Must be signed and returned to ADH Authorized Agent within five working days.)**

Name of Applicant		<b>TB = Trench Bottom Elevation</b> <b>PE = Top of Pipe Elevation</b> <b>GE = Ground Elevation</b> <b>FL = Flow Line Elevation (Top of Pipe Elev. + 4")</b> <b>TE = Tank Lid Elevation</b>
Location of System		
Name of Installer	License #	



Septic Tank Size	Gal	Dose Tank Size	Gal	Drawdown Inches	<b>Benchmark</b>
Type of System				Number and Length of Lines	at ft
Orifice Head	ft	Pump Run	min	sec	Pump Rest min sec

Trench Media		Trench Width
Stub-out	FL	GE

Tank Inlet	FL	GE	TE	Dose Tank Inlet	FL	GE	TE
Tank Outlet	FL	GE	TE	Dose Tank Outlet	FL	GE	TE

D-box Inlet	FL	GE	D-box Outlet	FL	GE	Other Devices	GE	PE
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**Line 1**

Line Length	Beginning	Middle	End
	TB	TB	TB
	GE	GE	GE

**Line 2**

Line Length	Beginning	Middle	End
	TB	TB	TB
	GE	GE	GE

**Line 3**

Line Length	Beginning	Middle	End
	TB	TB	TB
	GE	GE	GE

**Line 4**

Line Length	Beginning	Middle	End
	TB	TB	TB
	GE	GE	GE

Receipt No.

**Line 5**

Line Length	Beginning	Middle	End
	TB	TB	TB
	GE	GE	GE

**Line 6**

Line Length	Beginning	Middle	End
	TB	TB	TB
	GE	GE	GE

**Line 7**

Line Length	Beginning	Middle	End
	TB	TB	TB
	GE	GE	GE

**Line 8**

Line Length	Beginning	Middle	End
	TB	TB	TB
	GE	GE	GE

**Line 9**

Line Length	Beginning	Middle	End
	TB	TB	TB
	GE	GE	GE

**Line 10**

Line Length	Beginning	Middle	End
	TB	TB	TB
	GE	GE	GE

Environmental Health Specialist \_\_\_\_\_ Date \_\_\_\_\_

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



**Arkansas Department of Health**  
Environmental Health Protection

Receipt Number

26346902

**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 checked="" 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 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)**

- ☐ 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 Cathy Harrison		2. Phone Number (901) 299-2317	
3. Mailing Address 9551 Kirkland Road, Des Arc, AR 72040		4. County Prairie	
5. Address of Proposed System (If a 911 address is not available, attach detailed directions or map) 9551 Kirkland Road, Des Arc, AR 72040			
6. Subdivision Name n/a	7. Approval Date n/a	8. Date Recorded n/a	9. Lot Number n/a
10. Lot Dimensions 500' x 295'	11. Total Area (Acres) 3.3	12. # Bedrooms # People 3	13. Daily Flow (GPD) 370
14. Brief Legal Description of Property (Attach a separate sheet of paper, if necessary) Section 15, Township 4 North, Range 4 West, Prairie County			
15. Water Supply (Specify supplier, if Public Water) Prairie County		16. GPS Coordinates HM34.97086, -91.40589      POD 34.97093, -91.40563	
17. Loading Rates (gpd/ft <sup>2</sup> )	18. System Specifications		
Primary Area n/a	a. Size of Septic Tank ATU	gal	f. Trench Depth n/a
Secondary Area n/a	b. Size of Dose Tank n/a	gal	g. Trench Spacing n/a
Percolation Test (min/in)	c. Absorption Area n/a	ft <sup>2</sup>	h. Trench Media (List Below)
Primary Area Avg n/a	d. Number of Field Lines n/a		i. Trench Width n/a
Secondary Area n/a	e. Length of Field Lines n/a	ft	n/a

**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 Opt. A Date n/a

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

10/27/2023

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.

[Signature]

Environmental Specialist Signature

#828

EHS Number

11/15/23

Date

# 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 <sup>2</sup> )
>48"	n/a	Surface	12"	n/a	n/a	Low/12"	Unsuitable
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 <sup>2</sup> )
>48"	n/a	Surface	12"	n/a	n/a	Low/12"	Unsuitable
24. Seasonal Water Table (SWT) Classes Detail							
Primary Area		List Redoximorphic Features and/or Clay Content Restrictions					
Brief	in	n/a					
Moderate	in	Depletions noted on less than 50% of ped surface or interior. Depletion <= chroma 2.					
Long	in	Clay percentage and Chroma 2's > 50%. (Jackport Soil Series)					
Secondary Area		List Redoximorphic Features and/or Clay Content Restrictions					
Brief	in	n/a					
Moderate	in	Depletions noted on less than 50% of ped surface or interior. Depletion <= chroma 2.					
Long	in	Clay percentage and Chroma 2's > 50%. (Jackport Soil Series)					
Comments Site requires a 500 gallon Trash Tank, an ATU (BioMicrobics Fast 0.5) with UV disinfection and dose basin pumped to surface discharge. NPDES Permit required. If system is not installed within a year of the date approved, a revalidation fee may be required. Service contract only applies if Meinco installs system.							

## 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 <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

## 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

\* 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 #

7601055547

☒ Homeowner

☐ Builder/Developer

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

TO THE PROPERTY OWNER

**Onsite Wastewater System Utilization Verification**

Property location: 9551 Kirkland Rd, Des Arc, AR 72070  
(Address of Proposed System, City, State, Zip)

I hereby attest there are 3 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 Cathy L. Harrison

Date 10/17/23

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

## 500'



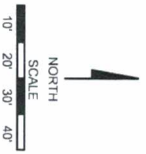
KIRKLAND ROAD

500'

PIT FAIL

PIT FAIL

PROPOSED WATER LINE



DRIVEWAY 16'

POINT OF DISCHARGE -  
100' FROM RESIDENCE  
300' FROM NEIGHBORS

50'  
DEFINE PATH OF DISCHARGE

295'

295'

3 BEDROOM  
14' x 70'

30'

10'

PARKING 24'

120'

70'

150'

500'

PIT FAIL



References are found in the Arkansas State Board of Health Rules and Regulations Pertaining to Onsite Wastewater Systems Effective 08/01/2022.

### **LEGEND TO AutoCAD DRAWING**

- A Sewer stub out location. Maximum depth of flow line from existing grade is 0" (Reference Appendix F). Show this drawing to your plumber.
- B 2-way clean out location. Sewer popper required. Install clean out and sewer popper at or above grade (Reference 8.13). Fall to inlet of septic tank can be no less than 1/8" per foot, and no more than 1/4" per foot (Reference 4.1).
- C Trash tank location. Risers to grade over inlet and outlet, minimum 18" diameter (Reference 10.7.8). Effluent filter required - Orenco Filter FTS0436-28 (Reference 10.7.6). Bed and backfill septic tank with 3/4" or smaller gravel (Reference 10.4). Septic tank must meet or exceed manufacturer requirements, 5000 psi, aged 28 days minimum (Reference 10.7.3 – 10.7.5.1)
- D Aerobic Treatment Unit location. Disinfection required. Refer to included spec sheet for precise model.
- E Disinfection Unit. JET 952 UV
- F Dose tank. (Basin)
- G Point of Discharge (POD). POD meets all setbacks required. (Reference 9.8)
- H Soil pit location. Site/Soil deemed unsuitable.
- I Proposed water line. Water line must be installed 10' from any part of wastewater system (Reference 6.2.8).
- J Benchmark location.

### **PIPE SPECIFICATIONS**

House stub out to trash tank inlet: 4" Schedule 40 Pipe  
Trash tank to Aerobic Treatment Unit: 4" Schedule 40 Pipe  
Aerobic Treatment Unit to dose tank: 4" Schedule 40 Pipe  
Dose tank to Point of Discharge: 1 1/4" Schedule 40 Pipe

### **PUMP SPECIFICATION**

Zoeller BN53

### **TANK SPECIFICATION**

Manufacturer: Whitten Concrete 500 Gallon Trash Tank and 1000 Gallon Tank,  
Steele Plastics Inc. 30" x 78" Fiberglass Basin  
Float Settings: Demand Float set at 24" from bottom of tank with a 3" tether (6" draw down ~ 18 gallons/dose).  
High Water Alarm Float set at 36" from bottom of tank with 3" tether.

### **TREATMENT UNIT SPECIFICATION**

BioMicrobics Fast 0.5

### **EFFLUENT STRENGTH**

Biochemical oxygen demand < 300 mg/L  
Total suspended solids < 300 mg/L  
Fats, oil, and grease < 25 mg/L  
(Reference 9.41 and Appendix B, Footnotes)

Any changes or substitutions to the notes and specifications in this permit must be approved by the Designated Representative.



**GROUND AND INSTALLED ELEVATIONS (feet & inches)**

Component	Ground	Flow Line	Fall
Stub Out	04-10"	04-10"	0"
Trash Tank Inlet	04-10"	06-04"	18"
Trash Tank Outlet	04-10"	06-07	3"
ATU Inlet	04-10"	06-08"	1"
ATU Outlet	04-10"	06-11"	3"
Dose Tank Inlet	04-10"	07-00"	1"
Dose Tank Outlet	04-10"	06-00"	-12" (Out of Riser)
Point of Discharge	04-10"	04-10"	-16" *
Benchmark	04-10"	Corner of home (See Drawing)	

**NOTES**

\*Add 6' to pump curve elevation to accommodate for pump depth in tank.

NPDES permit required on all surface discharging wastewater systems. (*Reference 9.6 and 11.1*)

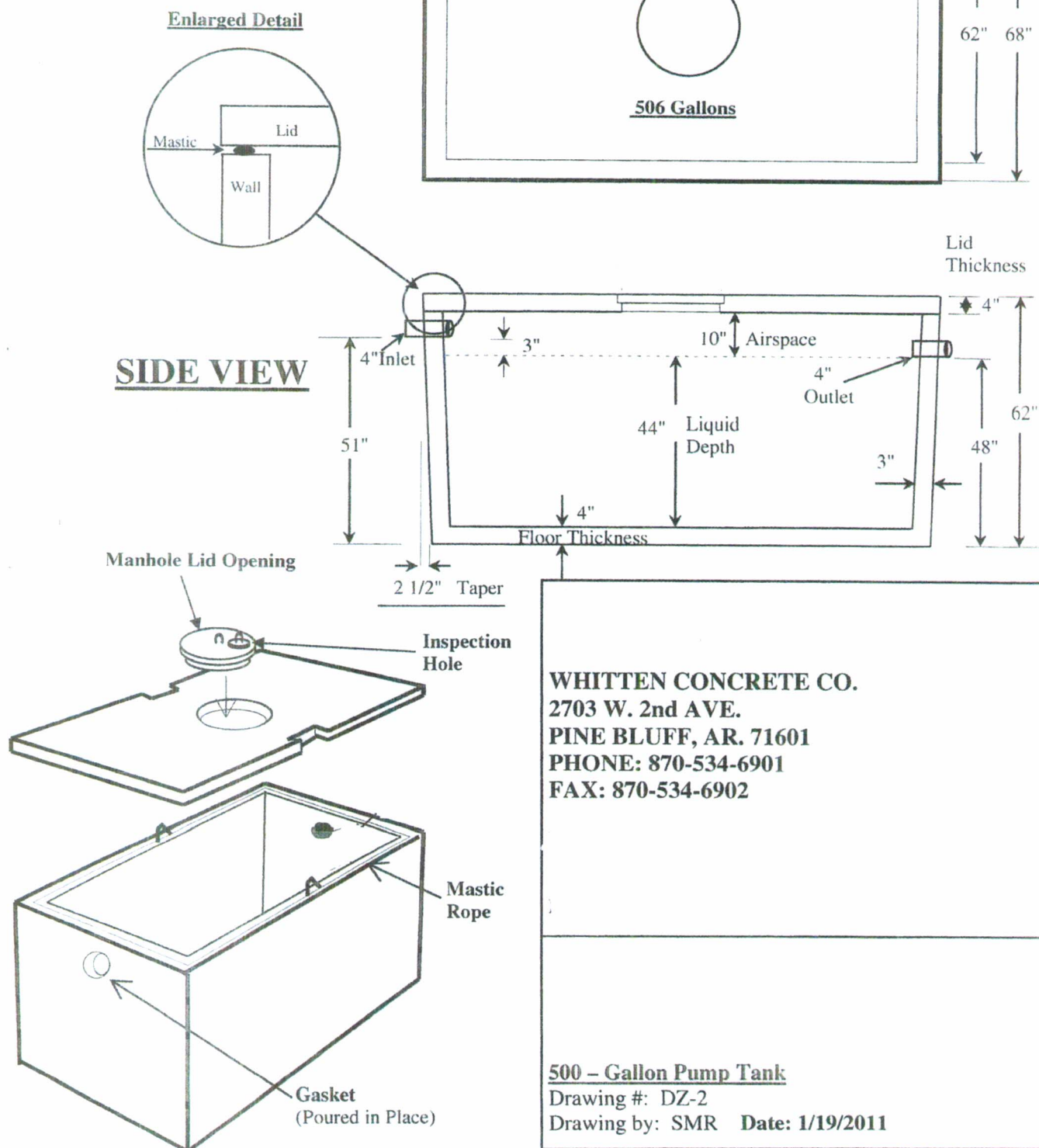
Aerobic Treatment Units must comply with the AR Department of Health's Onsite Wastewater Systems Monitoring Program. (*Reference 12*)

Any changes or substitutions to the notes and specifications in this permit must be approved by the Designated Representative.

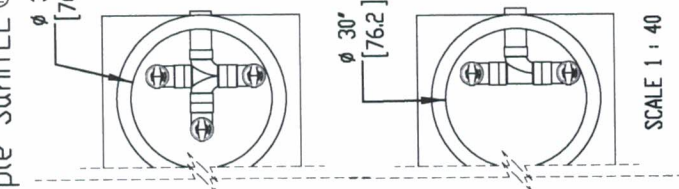
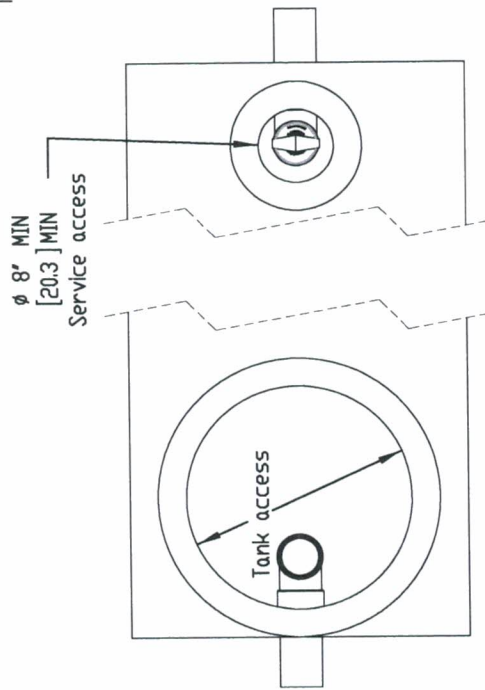
## 500 – Gallon Pump Tank

## TOP VIEW

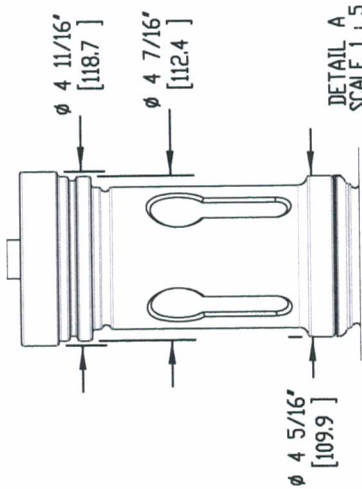
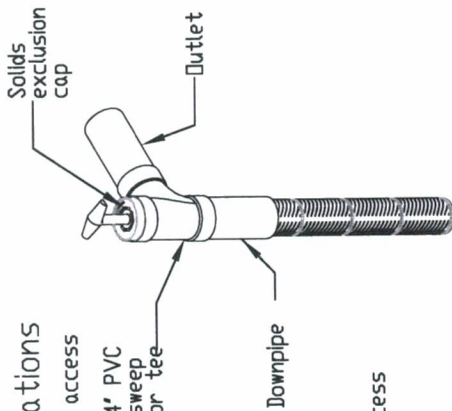
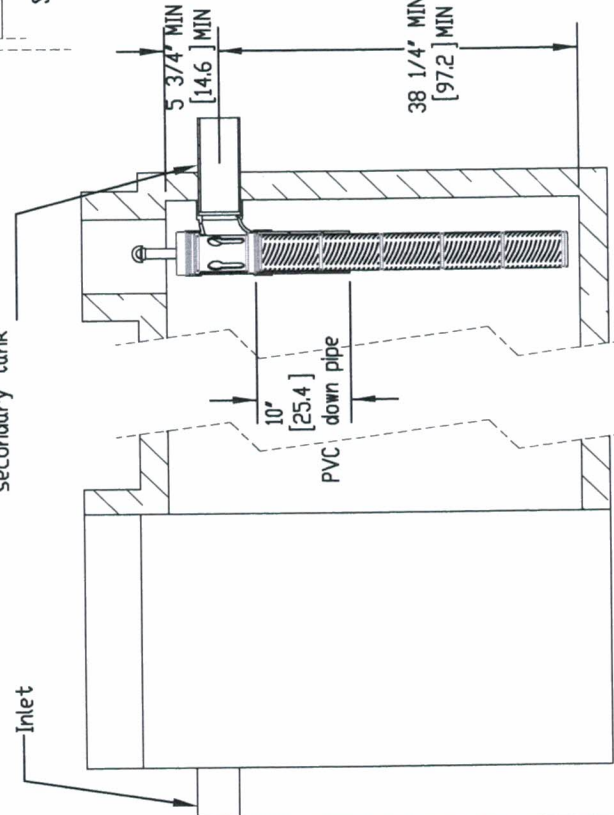
**Drawings Not To Scale**



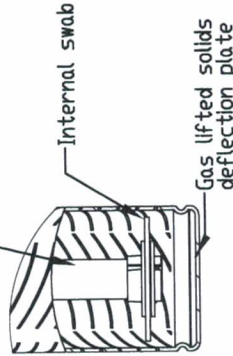
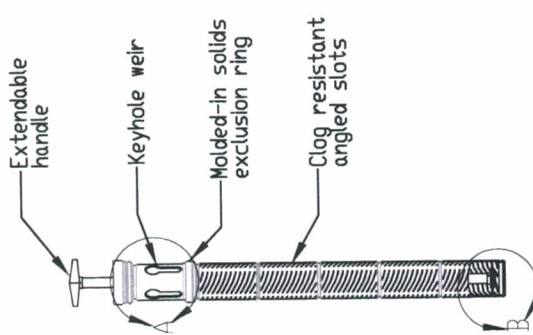
# Multiple SanITEE® Installations



Outlet  
4\"/>



DETAIL A  
SCALE 1 : 5



DETAIL B  
SCALE 1 : 5

- Notes:
- SNT 416 is a 1/16" [1.6mm] Effluent Screen capable of screening up to 1,000 GPD [3.8 cubic meters per day].
  - SNT 418 is a 1/8" [3.2 mm] effluent screen capable of screening up to 2,000 GPD [7.6 cubic meters per day].
  - Down pipe, outlet pipe, and tee or sweep not included.
  - All appurtenances to SanITEE® (e.g. septic tank, access risers, etc) must conform to all applicable codes.

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.®

4 Inch SanITEE

NAME	DATE	WEIGHT	SIZE	DRAWING NUMBER	SHEET
DRAWN	CTC 3/21/2005	lb	A	SanITEE®416 & 418	1 OF 1
CHECKED	PF 10/11/2013			REVISED 10/11/2013	
				REV. JMI-01-V	

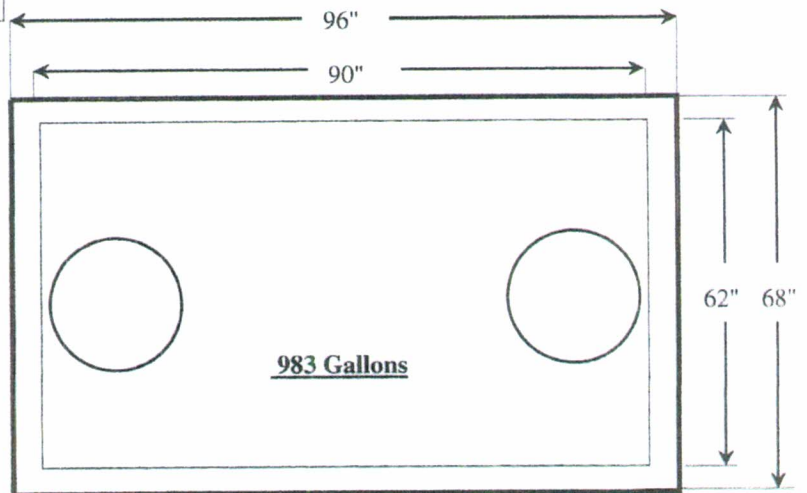
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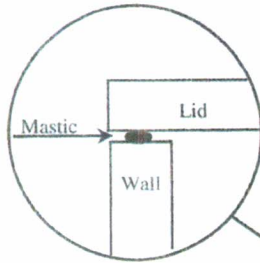
# 1000 – Gallon Single Compartment Septic Tank

## TOP VIEW

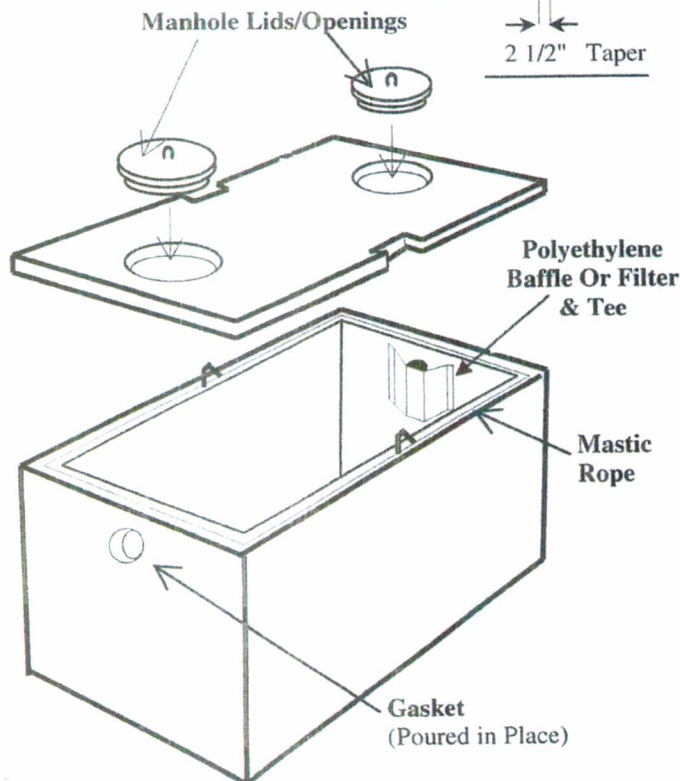
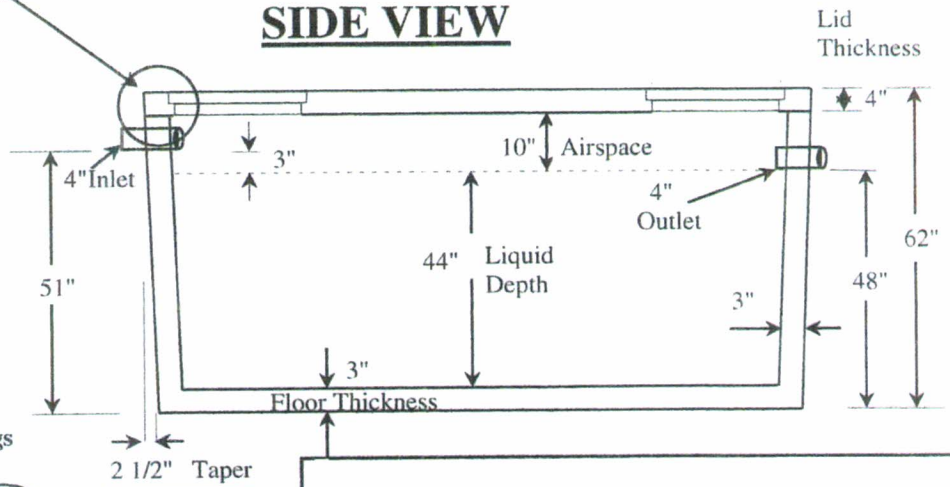
Drawings Not To Scale



### Enlarged Detail



## SIDE VIEW



**WHITTEN CONCRETE CO.**  
2703 W. 2nd AVE.  
PINE BLUFF, AR. 71601  
PHONE: 870-534-6901  
FAX: 870-534-6902

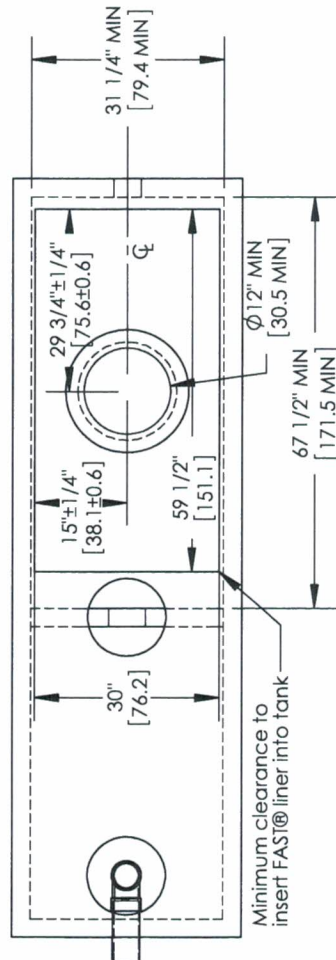
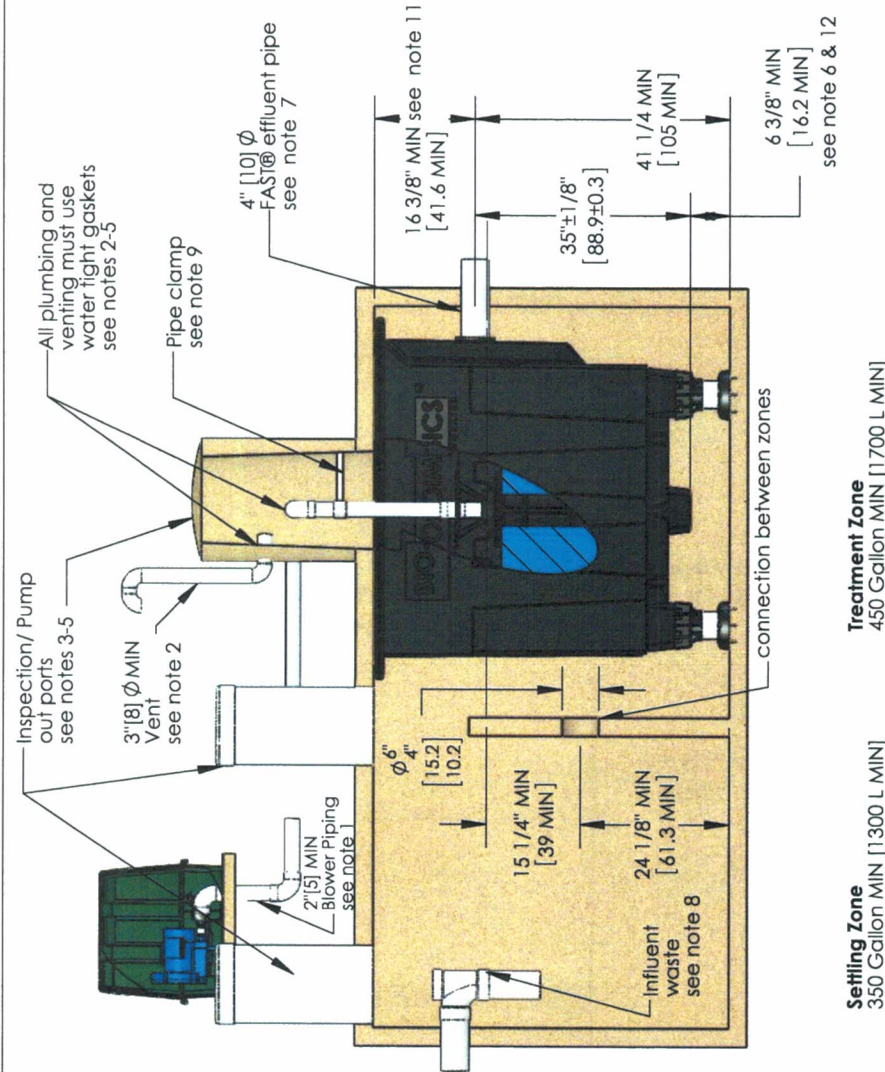
**1000 – Gallon Single Compartment Septic Tank**

Drawing #: DZ-2

Drawing by: SMR Date: 1/19/2011

# NOTES

- 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 24" X 20" X 2" [65 X 50 X 5cm] min.
- 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).
- 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.
- All inspection, viewing and pump out ports must be secured to prevent accidental or unauthorized access.
- Tank, piping, conduit, etc. are provided by others. Blower control system by Bio-Microbics, Inc. See Installation Manual.
- If less than the specified minimums are considered necessary, consult factory for guidance.
- All piping and ancillary equipment installed after FAST must not impede or restrict free flow of effluent.
- 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.
- 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.
- Specialized treatment levels may require specific features to be incorporated into the design. Consult factory for guidance.
- Min. height may be reduced, consult factor and reference "Low Profile Module Procedure.pdf"
- Refer to sheet 4 of 4 for leg extensions requirements.



DO NOT SCALE		ID		SIZE		DRAWING NUMBER		SHEET	
UNLESS NOTED DIMENSIONS ARE IN INCHES [CENTIMETERS]		NAME		DATE		A		2 OF 4	
TOLERANCES ± 0.02 IN/IN [± 0.05 CM/CM]		DRAWN		CTC		12/18/2006		MicroFAST® 0.50 with feet	
WEIGHT		CHECKED		PF		9/18/2013		REV. IN-05-V	

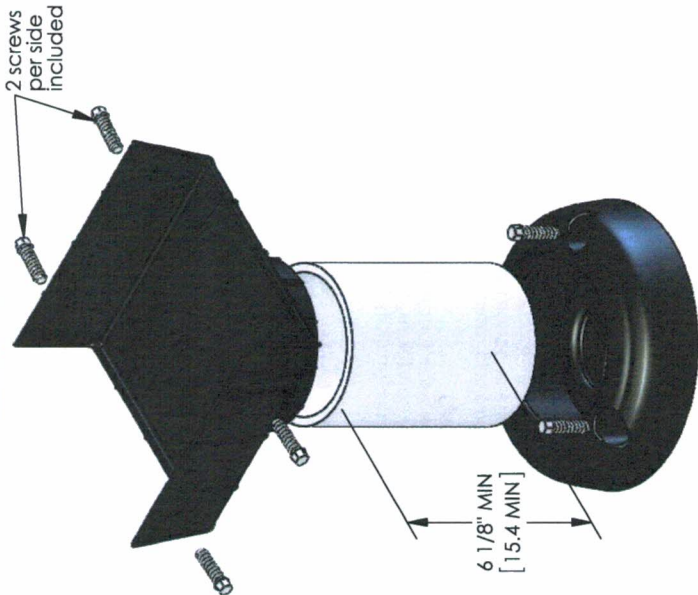


MicroFAST 0.50 FAST Unit

BIO-MICROBICS © 2014

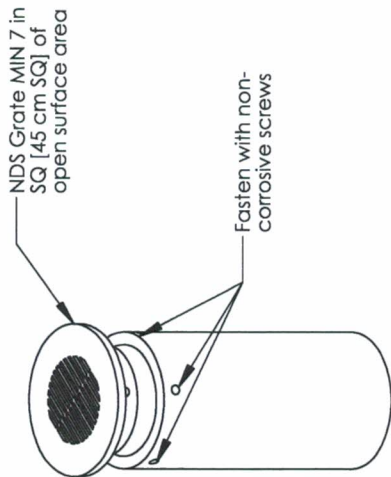
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# Minimum leg extension assembly see note 1-4

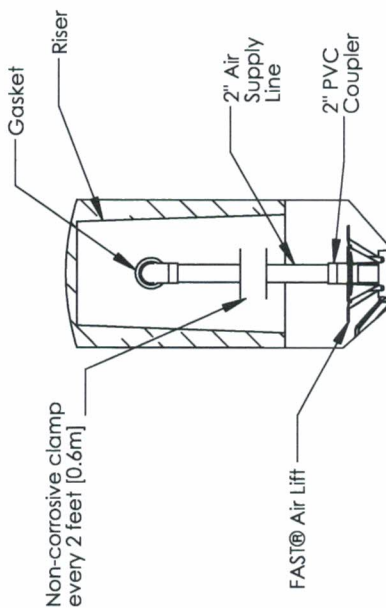
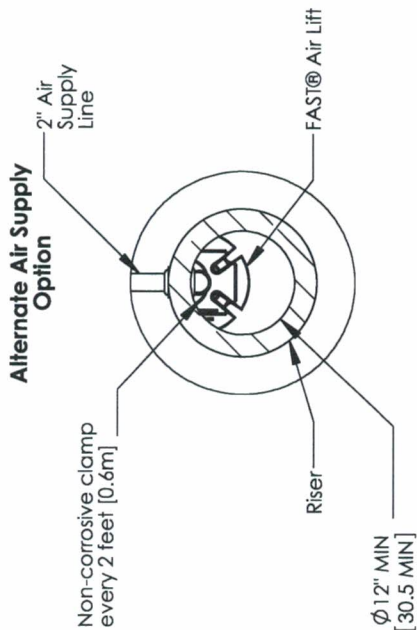


DETAIL  
SCALE 1 : 5

## FAST® Vent Option



DETAIL  
SCALE 1 : 4



- 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.

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



MicroFAST 0.50 FAST Unit

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

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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, 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.

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



MicroFAST 0.50 FAST Unit

WEIGHT lb  
DATE 12/18/2006  
DRAWN CTC  
CHECKED PF 9/18/2013

DRAWING NUMBER  
A

MicroFAST® 0.50 Specifications

REV. 9/18/2013  
REV. 01-05-V

SHEET  
3 OF 4

# JET Model 952

## ILLUMI-JET UV DISINFECTION UNIT®

### Installation Instructions

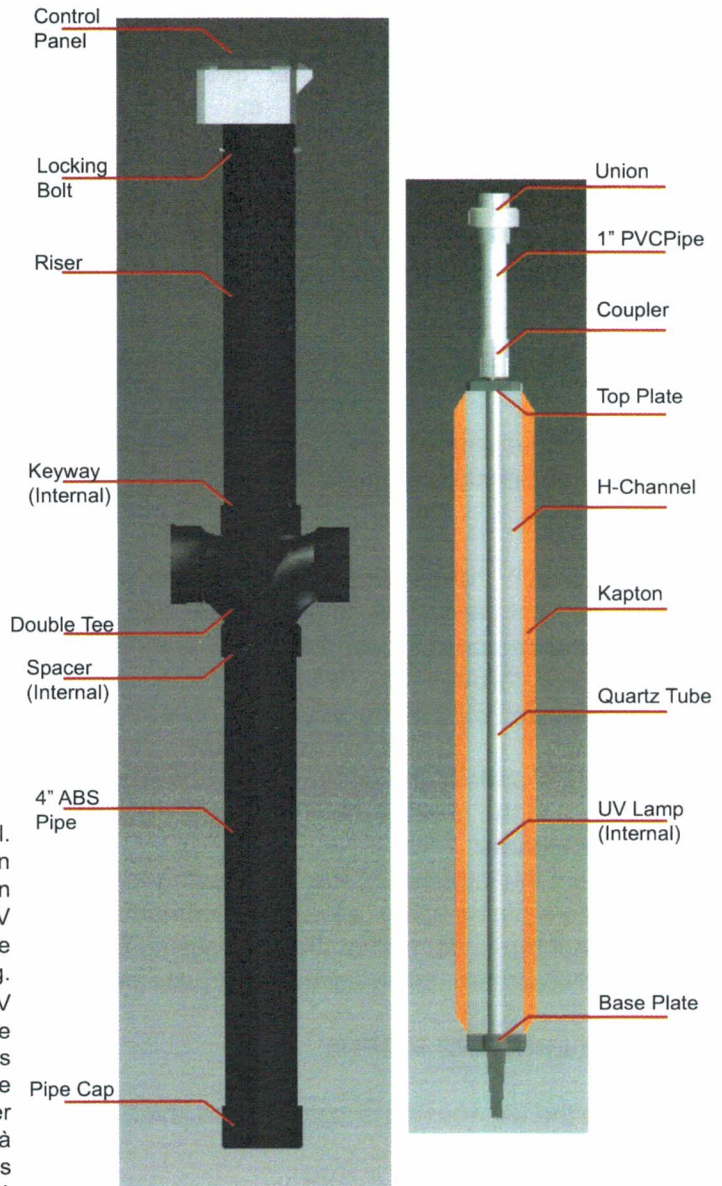
#### COMPONENTS

The following components are supplied in the disinfection system:

1. Control Panel
2. 4" ABS riser pipe
3. UV Housing with 4" ABS cap, 4" ABS pipe, 4" double sanitary tee, spacer insert and keyway
4. UV Insert with top and bottom plates, H-Channel risers, quartz tube and lifting handle
5. UV lamp - 37 Watts

The following components should be supplied by the installer:

1. All-purpose cement
2. Clear cleaner for plastics
3. Drill with universal bit
4. Clean soft cloth
5. Isopropyl alcohol
6. Small slotted screwdriver
7. Wire strippers
8. Phillips screwdriver
9. Water tight conduit connectors
10. Conduit and wiring



**WARNING:** Exposure to UV light is harmful. Immediate or prolonged exposure to UV light can result in painful eye injury, skin burn, premature skin aging, or skin cancer. Do not remove an active UV lamp from the UV housing or attempt to activate lamps which are not installed within the UV housing.

**Avertissement:** L'exposition à la lumière UV sont nocifs. Exposition immédiate ou prolongée aux rayons UV peut entraîner des blessures douloureuses de l'œil, de brûlure de la peau, le vieillissement prématuré de la peau, ou cancer de la peau. Ne retirez pas une lampe UV active à partir du boîtier UV ou de tenter d'activer les lampes qui ne sont pas installés dans le logement UV.

This product conforms to the applicable provisions of the Code of Federal Regulations (CFR) requirements including, Title 21, Chapter 1, Subchapter J, Radiological Health.

# JET Model 952 ILLUMI-JET DISINFECTION UNIT<sup>®</sup>

## Installation Instructions

### INSTALLATION INSTRUCTIONS

#### EXCAVATION

1. Excavation should be made as close as possible to the effluent end of the treatment plant.
2. Excavation(s) should be as minimal as possible to reduce settling of backfill.
3. Verify the horizontal hubs of the double sanitary tee are able to line up with the treatment plant outlet and effluent line.
4. The UV disinfection device must be level upon installation.

#### CONNECTING THE INLET & OUTLET LINES

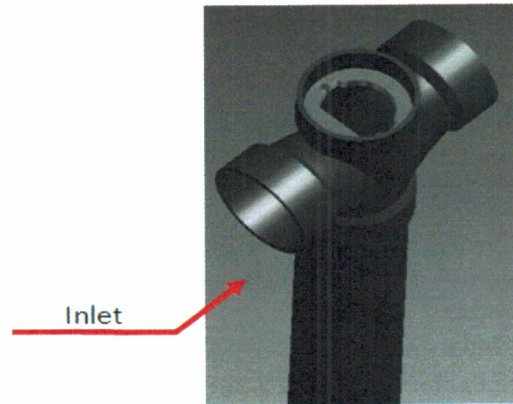
1. Carefully unpack the UV disinfection device. Verify all pieces are present and in good condition.

**NOTE:** The UV housing has to be installed so that the flat edge of the keyway is on the inlet side. If this is not installed correctly, the treatment plant effluent will not flow through the device correctly and the UV disinfection will not be effective. See Figure 1.

2. Clean the ends of the upstream and downstream piping and the hubs of the UV tee with clear plastic cleaner.
3. Connect the inlet end of the UV housing to the upstream piping using all-purpose cement.
4. Connect the outlet end of the UV housing to the downstream piping using all-purpose cement.

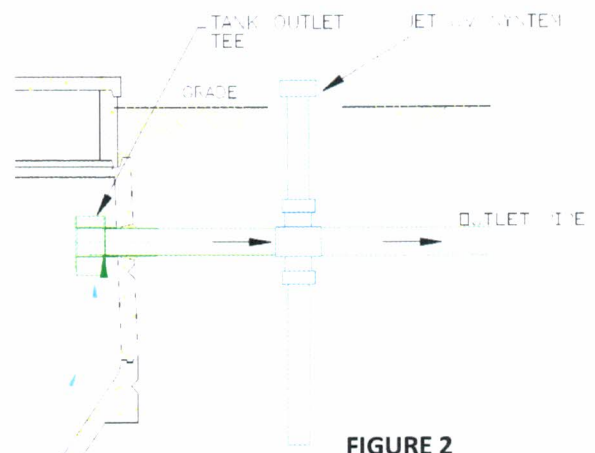
#### BACKFILLING AND RISERS

1. Once the UV housing is installed and level, backfill



**FIGURE 1**

- up to the bottom of the inlet and outlet hubs.
2. Fit the 4" ABS riser pipe into the top hub of the UV housing. The recommended height for the top of the riser is no more than 6" above the final grade. The riser may need to be cut to fit properly.
3. Once the riser pipe has been cut, and both the pipe and hub have been cleaned, glue them together using all-purpose cement.
4. **Note: The end of the riser pipe with the locking bolt must be located at the top of the unit after installation.**



**FIGURE 2**

# JET Model 952

## ILLUMI-JET UV DISINFECTION UNIT®

### Installation Instructions

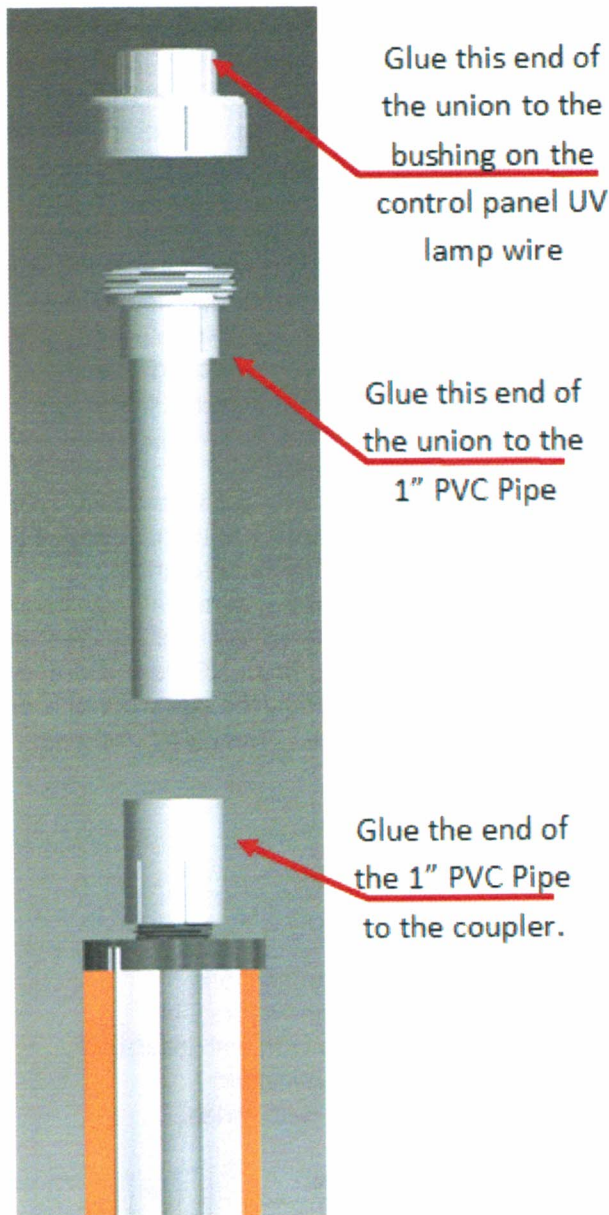


FIGURE 3

#### UV INSERT INSTALLATION

1. Place the 1" Schedule 40 PVC pipe in the coupler of the UV insert to help determine where the 1" pipe should be trimmed so that it is easily reached when in the riser.
2. Remove the 1" Schedule 40 PVC pipe from the coupler and trim it.
3. Glue the bottom side of the union to one end of the 1" PVC pipe. See Figure 3. Glue the opposite end of the union to the bushing on the control panel UV lamp wire.
4. Glue the other end of the 1" PVC pipe into the coupler that is on the UV insert.
5. Using a soft clean cloth moistened with isopropyl alcohol wipe off the quartz tube.
6. Gently set the UV insert in the UV housing using the lifting handle. Be sure that the Kapton edges curl into the openings in the key-way shown in Figure 4.

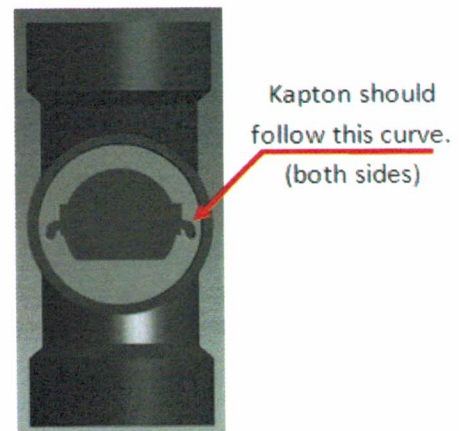


FIGURE 4

# JET Model 952

## ILLUMI-JET UV DISINFECTION UNIT®

### Installation Instructions

#### WIRE THE CONTROL PANEL

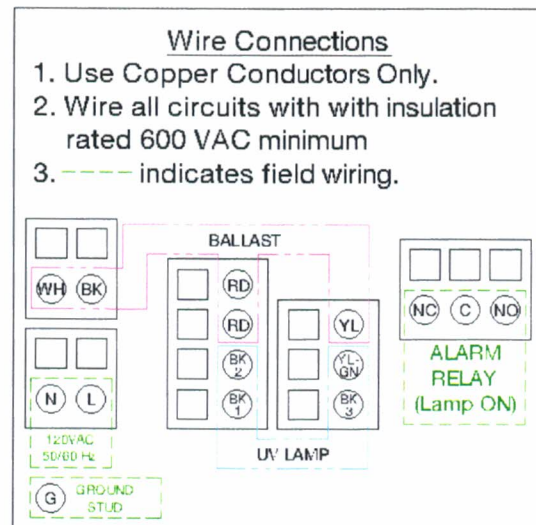
1. The UV unit operates on 120 VAC single-phase power (optional 110-240VAC single phase power available). A 15 amp circuit breaker on the main electrical panel should be used for the UV disinfection device. Make sure the breaker is "OFF" before continuing.
2. Install at least a #14 AWG copper wire cable from the specified breaker in the main electrical panel to the UV control panel.
3. Remove locking bolt from control panel. **\*\*Do not discard locking bolt\*\***
4. The UV control panel is not equipped with knockouts for electrical conduit connections. Drill a properly sized hole in the UV control panel enclosure for the conduit. ONLY UL LISTED CONDUIT MAY BE USED. Ideally, the conduit should enter from the bottom of the enclosure to increase protection against water infiltration into the panel. The maximum allowable size of the conduit is 3/4 inch.
5. Attach all conduit and cable connectors to the control panel. Follow the conduit manufacturer's instructions for proper connection installation.

**NOTE:** ONLY UL APPROVED WATERTIGHT HUB AND FITTINGS CAN BE USED WHEN ATTACHING CONDUIT AND WIRING TO THE CONTROL PANEL.

Jet recommends using Carlon or T&B liquid tight non-metallic conduit and fittings for field installations.

6. Verify all connections are properly installed and watertight.
7. Pull all cables and wiring through the conduit and connectors into the control panel. Allow sufficient wiring to make all connections in the control panel.

8. Use the wiring diagram schematic on the inside of the control panel cover to help wire the panel. The incoming power wires are outlined in green on the wiring diagram. Attach the incoming hot (black) lead to the terminal block corresponding to "L" in the UV control panel. Attach the neutral (white) lead to the terminal block corresponding to "N" in the control panel. The ground (green) lead is to be attached to the grounding jumper in the corner of the control panel.
  - a. The terminals are spring loaded. Insert a small flat head screw driver into the square opening of the terminal and use to lever terminal open (pry away from round opening) while inserting wire into round opening.
  - b. Once wire is seated in round opening release terminal by removing screwdriver from square opening.
9. Seal all incoming wires with a UL listed RTV sealant to the inside of the conduit for both the inbound power conduit hub and the UV lamp cord grip.
10. OPTIONAL: The Alarm Relay terminals can be used if desired. Connect one alarm lead to either the normally open (NO) or normally closed (NC) terminal based on the type of signal required by the alarm panel. Connect the remaining lead to the common (C) terminal.



# JET Model 952

## ILLUMI-JET UV DISINFECTION UNIT<sup>®</sup>

### Installation Instructions



**WARNING:** Exposure to UV light is harmful. Immediate or prolonged exposure to UV light can result in painful eye injury, skin burn, premature skin aging, or skin cancer. Do not remove an active UV lamp from the UV housing or attempt to activate lamps which are not installed within the UV housing.

**Avertissement:** L'exposition à la lumière UV sont nocifs. Exposition immédiate ou prolongée aux rayons UV peut entraîner des blessures douloureuses de l'œil, de brûlure de la peau, le vieillissement prématuré de la peau, ou cancer de la peau. Ne retirez pas une lampe UV active à partir du boîtier UV ou de tenter d'activer les lampes qui ne sont pas installés dans le logement UV.

#### UV LAMP INSTALLATION

1. Apply provided dielectric grease onto the face of the four pin connector of the power cable to protect against moisture and corrosion.
2. Do Not touch the UV lamp surface with your hands. Use a clean, soft cloth to hold the UV lamp and insert it into the four pin connector. Be sure to align the two red prongs on the UV lamp with the two red holes on the four pin connector.
3. Use supplied heat shrink tubing to completely seal lamp and connector.
4. Carefully insert the UV lamp into the quartz tube of the UV subassembly.

**NOTE: Both the quartz tube and UV lamp are very fragile. HANDLE WITH CARE.**

5. After verifying the UV lamp is seated properly in the UV insert and the cord is the correct length, tighten the cord grip that is attached to the bushing. This must be done to ensure a watertight enclosure.
6. Verify the union on the lifting handle has been fastened.
7. Fill the UV housing with water up to the outlet piping. Be careful not to get water in the UV insert.
8. Place excess UV lamp cable in the riser.
9. **The control panel fitting should not be glued inside the riser.**
10. Insert the locking bolt through the riser and ABS fitting and secure with wing nut.
11. Continue to backfill around the disinfection chamber and riser until even, with the final grade being no more than 6" below the bottom of the

control panel.

12. Turn the UV disinfection device on at the main electrical panel.
13. The "Lamp Active" light should be illuminated to indicate the system is operating.

#### SERVICE PROCEDURES

Jet recommends servicing the UV system a minimum of every six months.

1. Inspect condition of UV and note that "Lamp Active" indicator light is lit.
  - a. If "Lamp Active" light is not lit and alarms are not working, refer to Troubleshooting Guide.
2. Turn off main power from alarm panel (indicator light should now be off.) Those units equipped with the 952 power switch will automatically eliminate power to the UV lamp when the control panel lid is opened.
3. Remove control panel assembly and UV Insert.
4. Clean quartz tube with soft cloth and alcohol wipe.
5. Inspect UV insert assembly for any damage, water infiltration, or worn components.
6. Re-install UV insert and control panel assembly.
7. Turn on main power and observe that "Lamp Active" indicator light is lit and system is functioning.
  - a. If "Lamp Active" light is not lit or if alarms activate after service, refer to Troubleshooting Guide.
8. Replace the UV lamp every other year. Refer to UV lamp installation section for instructions on replacing lamp.

## Troubleshooting Guide for Jet Model 952 UV Disinfection Unit

Problem	Probable Cause	Solution
Excess Wire Tension On Union	<ul style="list-style-type: none"> <li>Excess wire between cord grip and UV lamp connector</li> </ul>	<ul style="list-style-type: none"> <li>Loosen cord grip and adjust length of wire to match Lamp Insert handle</li> </ul>
Control Panel Not Seating	<ul style="list-style-type: none"> <li>Excess wire not stored in UV housing</li> <li>Lamp Insert handle too long</li> </ul>	<ul style="list-style-type: none"> <li>Reposition wire in UV housing</li> <li>Trim and reconnect Lamp Insert handle</li> </ul>
Lamp Insert Not Seating	<ul style="list-style-type: none"> <li>Check alignment of keyway and top plate</li> <li>Check for debris in UV housing</li> </ul>	<ul style="list-style-type: none"> <li>Re-position top plate</li> <li>Flush debris from UV housing with hose</li> </ul>
Water in Enclosure	<ul style="list-style-type: none"> <li>Enclosure cover not secure</li> <li>Conduit hub not secure</li> </ul>	<ul style="list-style-type: none"> <li>Align and tighten enclosure cover</li> <li>Tighten conduit hub</li> </ul>
"Lamp Active" Light Not Lit	<ul style="list-style-type: none"> <li>No power from main breaker panel</li> <li>No power to UV Lamp</li> <li>The "Lamp Active" bulb has burned out</li> </ul>	<ul style="list-style-type: none"> <li>Check wiring and main breaker panel</li> <li>Check internal wiring to UV Lamp</li> <li>Check orientation of control panel cover</li> </ul>
UV Lamp Not Lit	<ul style="list-style-type: none"> <li>Inbound power inactive</li> <li>UV Lamp burned out</li> </ul>	<ul style="list-style-type: none"> <li>Check wiring to UV Lamp</li> <li>Check UV Lamp</li> </ul>
Auxiliary Alarm After Start Up	<ul style="list-style-type: none"> <li>Alarm settings incorrect</li> <li>Alarm condition is active</li> </ul>	<ul style="list-style-type: none"> <li>Check alarm setting jumpers for proper NO/NC</li> <li>Check external devices</li> </ul>

## 24- MONTH LIMITED WARRANTY

Jet, Inc. ("Jet") warrants that newly manufactured the Jet Model 952 ILLUMI-JET UV DISINFECTION UNIT® shall be free from defects in materials and workmanship. This warranty will remain in effect for a period (the "warranty period") of 24 months from the date of original installation in cases where the purchaser has installer documentation showing the installation date. In all other instances, the warranty period shall be a period of 24 months from the date of shipment of the applicable Jet Product from the Jet factory.

The purchaser's sole and exclusive remedy for breach of the foregoing warranty shall be limited, at Jet's option, to the repair or replacement of the defective goods or refund of the purchase price, and in no event shall Jet's liability exceed the purchase price paid by purchaser for the goods. Purchaser claims shall otherwise be subject to and conditioned upon purchaser promptly notifying either (1) the distributor from which the purchaser purchased the applicable Jet products ("Jet Distributor") or (2) Jet's Customer Service Department, 750 Alpha Drive, Cleveland, Ohio 44143, on or before the termination of the applicable warranty period via certified mail, return receipt requested.

Jet Model 952 units must be removed and returned to the Jet factory via the Jet Distributor. If any repairs or replacements covered by the warranty are needed for Model 952 units, the applicable Model 952 assemblies will be repaired or replaced with no charge to purchaser for labor and materials provided, that, under no circumstances shall Jet be responsible for, any labor costs incurred for removal and/or installation of a Model 952 unit in the case of replacement. Further, in all instances, purchaser shall assume all responsibility for shipping and handling charges to and from the Jet factory in connection with any repairs or replacements covered by this Limited Warranty. If any Jet Product returned to Jet or the Jet Distributor have any missing parts, an additional charge will be made to the purchaser to replace such missing parts.

This Limited Warranty does not cover any Jet Model 952 units that have been damaged by water or damaged due to (1) disassembly or alteration by unauthorized persons, (2) improper installation or maintenance, (3) misuse (including use outside of the normal intended purpose), (4) lightning or other acts of god, (5) acts of any third party, (6) improper or altered wiring, (7) improper overload protection, (8) failure to follow the instructions in the Owner's Manual, (9) failure to maintain a service or maintenance policy after any applicable free initial service or maintenance policy of Jet or a Jet Distributor expires, and/or (10) any negligence or intentional misconduct of purchaser or any third party.

This Limited Warranty applies only to Jet Model 952 units and does not apply to any house wiring, plumbing, drainage, or any other part of the disposal system. For any goods sold or manufactured by Jet which are not covered by this Limited Warranty, please refer to the warranties, if any, expressly covering such goods.

**EXCEPT FOR THE REPAIR OR REPLACEMENT OF JET PRODUCTS AS PROVIDED FOR IN THIS LIMITED WARRANTY, JET SHALL NOT BE HELD RESPONSIBLE FOR ANY DAMAGES CAUSED BY ANY DEFECT IN MATERIALS OR WORKMANSHIP, OR FOR LOSS INCURRED BECAUSE OF THE INTERRUPTION OF SERVICE, OR ANY OTHER SPECIAL, CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES, LOST PROFITS OR EXPENSES ARISING FROM THE MANUFACTURE, SALE, USE, MISUSE, REPAIR OR REPLACEMENT OF ANY JET PRODUCT (INCLUDING PENALTIES, TAXES OR FILING FEES) REGARDLESS OF WHETHER SUCH LIABILITY IS BASED ON BREACH OF CONTRACT, TORT, STRICT LIABILITY OR OTHERWISE, AND EVEN IF ADVISED OF THE LIKELIHOOD OF SUCH DAMAGES. THE WARRANTY PROVIDED FOR IN THIS LIMITED WARRANTY ARE IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE (IF APPLICABLE).**

Jet reserves the right to revise, change, or modify the construction and design of any Jet Product and any component part or parts thereof, without incurring any obligation to make such changes or modifications in prior Jet Product.

Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.

MAIL TO: P.O. BOX 16347 • Louisville, KY 40256-0347  
SHIP TO: 3649 Cane Run Road • Louisville, KY 40211-1961  
1 (800) 928-PUMP

Visit our website:  
zoellerpumps.com

## APAK® ALARM SYSTEMS

The compact and easy to install APak® Alarm system sounds a horn when a potentially threatening liquid level condition occurs. The horn can be silenced, but the alarm light remains on until the condition is remedied.

A green "POWER ON" light indicates 120 V primary power to the alarm. A low battery chirp feature indicates when the battery should be replaced. A red "INPUT" light and audible horn indicates a high-level condition. During the high water condition, the horn can be silenced by pressing the "SILENCE" button. Once the situation is remedied, the LED can be reset by holding the "SILENCE" button for 3 seconds.

NOTE: It is always recommended to power the alarm from a separate circuit than the pump to avoid losing power to both during a tripped breaker scenario.

### Indoor Alarms

#### 10-4012 APak® Alarm

- NEMA 1 enclosure (INDOOR USE ONLY)
- Automatic alarm reset
- Horn is rated 87 decibels at 10'
- 2 AA battery backup (batteries not included)
- 15' alarm (12 V) tethered switch
- 6' power cord
- cCSAus approved



### Z Control® Models

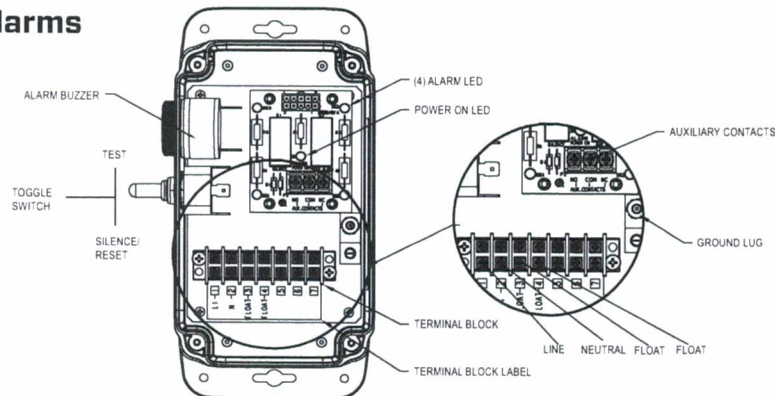
- 10-4013 comes with reed sensor
- 10-4014 comes with mechanical float switch
- All the standard features plus:
- Second input for additional monitoring ability
- Dry contacts for connection to SCADA, automation, or security systems.
- Z Control® enabled
  - Wifi equipped
  - Simple setup with no additional monthly cost
  - Receive free text, email, and push alerts on:
    - Power outage
    - Low battery
    - Input 1 or 2 triggers
    - Loss of contact with Z Control®
  - Remotely silence, reset alarm.
  - Free Z Control® app and web interfaces
  - Free Z Control® account

#### 10-4011 APak® Alarm

Same standard features of our 10-4012 with:

- 15' alarm (12 V) alarm reed sensor

### Outdoor/Indoor Alarms



#### 91104-0001 INDOOR / OUTDOOR Alarm System

- NEMA enclosure 4X (9"X4.5"X3")
- Green "POWER ON" indicator
- Red perimeter LEDs indicate alarm
- Automatic alarm reset, horn silence switch and alarm test switch
- Horn is rated 85 decibels at 10'
- Terminal block provides junction box versatility for the pump and float switch
- 15' Alarm (12V) tethered float switch (for alarm ONLY with no float, please use 91104-0003)
- Auxiliary dry contacts (5A max)
- Power connections are field wired
- UL / CSA listed

Model 91104-0001



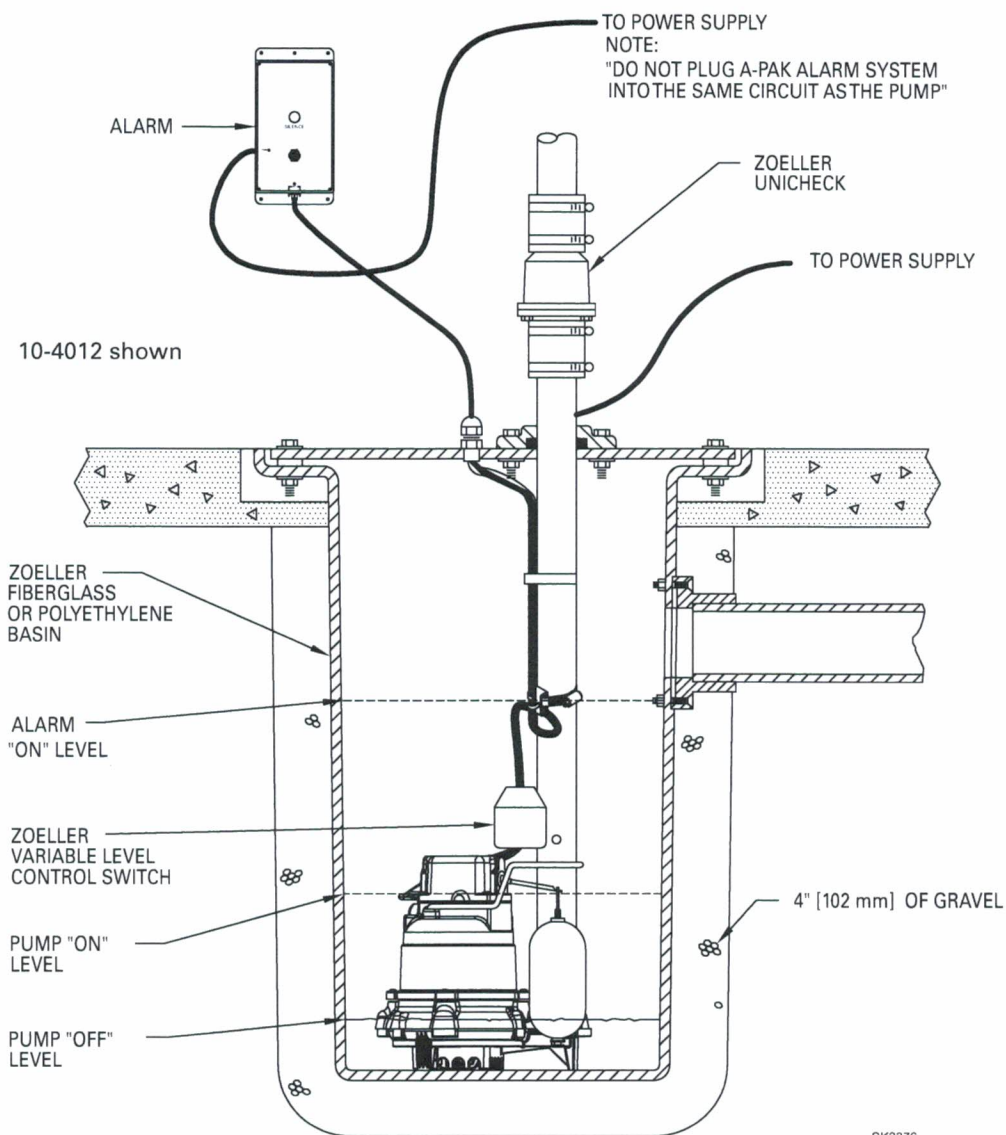
#### 91104-0002 Alarm System includes same features of our 91104-0001 with:

- Pre-wired 20' alarm (12 V) tethered switch
- Pre-wired 6' 115 V power cord with water-tight cord connectors

High water alarms provide the owner with early notification that the water level is continuing to rise in the application. This could be due to a pump failure or power outage, or the pump is simply overwhelmed in the application.

Zoeller recommends that ALL systems be installed with a high water alarm whether it is a small sump pump, sewage system, or a large outdoor lift station. Small alarms can be used on systems like water heaters or drain sinks. For a low upfront cost, a high water alarm can save the headache and stress of cleaning up a catastrophe after the fact.

A high water alarm is designed to operate independently from the pump and can be used with any manufacturer's model. It is recommended that all alarms are wired to a circuit breaker that is different than the pump. This protects the alarm from being without power if the pump trips the circuit breaker. During a power failure, the Indoor APak alarms include a battery backup.



SK2376

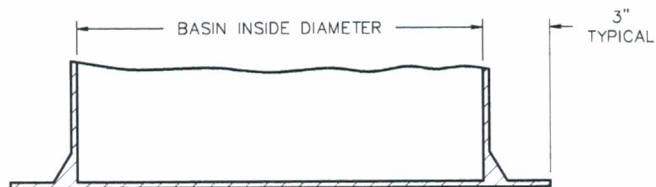
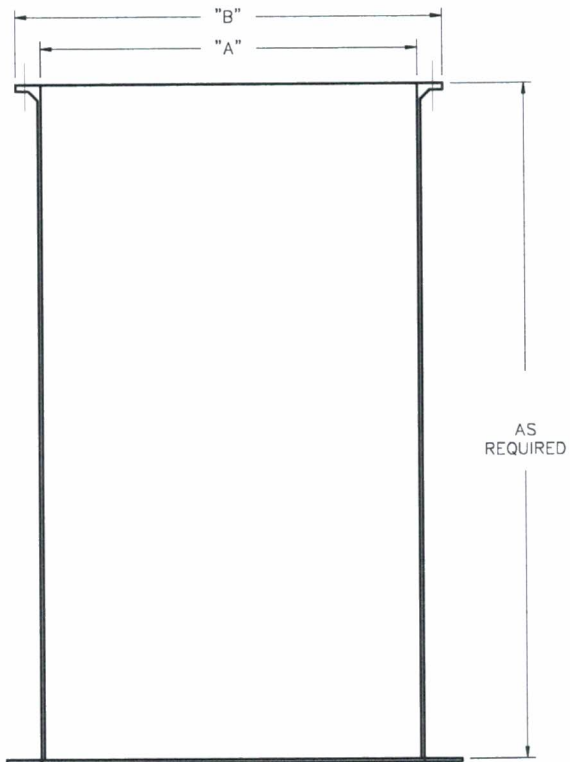
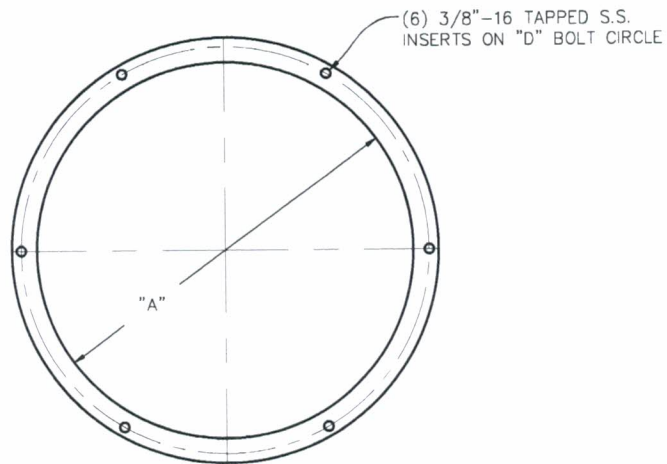


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30" x 78"



BOTTOM ANTI-FLOATATION FLANGE

DIMENSIONAL DATA

"A"	"B"	"D"
24"	28"	26 1/2"
30"	34"	32 1/2"
36"	40"	38 1/2"
42"	48"	44 1/2"
48"	54"	51"
54"	60"	57"
60"	66"	63"
72"	78"	75"



STEELE PLASTICS, INC.  
1280 Sturgis Rd.  
Conway, AR 72033  
(501) 327-5122 Fax (501) 327-0807

TITLE FIBERGLASS STRAIGHT WALL BASIN

PROJECT

CUSTOMER

JOB NO.

P.O. NO.

DWG. NO. 404S

Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.



**PUMP COMPANY**

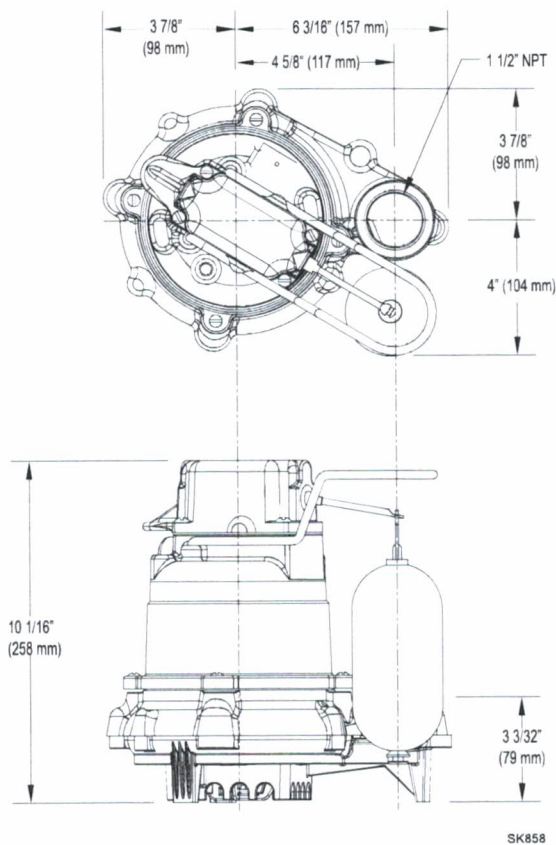
*Zoeller Family of Water Solutions*

## TECHNICAL DATA SHEET MIGHTY-MATE SERIES

*Cast Iron Models 53, 57 and Bronze Models 55, 59  
Submersible Effluent / Dewatering Pumps*

### PRODUCT SPECIFICATIONS

<b>MOTOR</b>	Horse Power	3/10
	Voltage	115 or 230
	Phase	1 Ph
	Hertz	60 Hz
	RPM	1550
	Type	Shaded pole
	Insulation	Class B
	Amps	4.8 - 9.7
<b>PUMP</b>	Operation	Automatic or nonautomatic
	Auto On/Off Points	7-1/4" (18.4 cm) / 3" (7.6 cm)
	Discharge Size	1-1/2" NPT
	Solids Handling	1/2" (12 mm) spherical solids
	Cord Length	9' (3 m) automatic, 15' (5 m) nonautomatic
	Cord Type	UL listed, 3-wire, grounded plug
	Max. Head	19.25' (5.9 m)
	Max. Flow Rate	43 GPM (163 LPM)
	Max. Operating Temp.	130° F (54° C)
	Cooling	Oil filled
	Motor Protection	Auto reset thermal overload
<b>MATERIALS</b>	Cap	Cast iron or bronze
	Motor Housing	Cast iron or bronze
	Pump Housing	Cast iron or bronze
	Base	Cast iron, bronze or engineered thermoplastic
	Upper Bearing	Sleeve bearing
	Lower Bearing	Sleeve bearing
	Mechanical Seals	Carbon and ceramic
	Impeller Type	Non-clogging vortex
	Impeller	Plastic, cast iron or bronze
	Hardware	Stainless steel
	Motor Shaft	AISI 1215 cold rolled steel
	Gasket	Neoprene



SK858

NOTE: See model comparison chart for specific details.

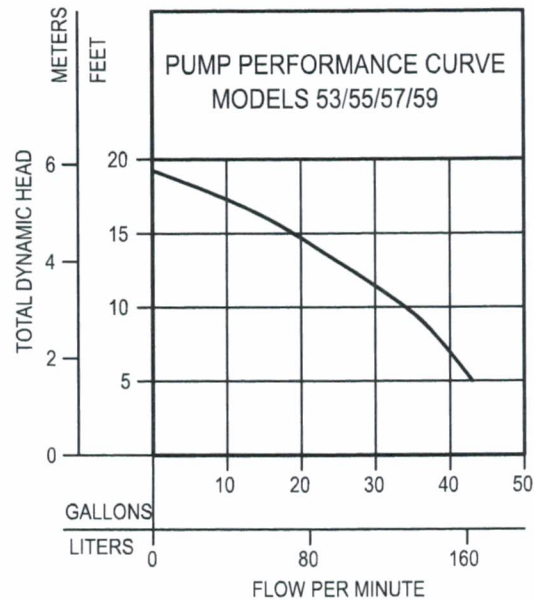


Tested to Standard UL 778 and  
Certified to CSA  
Standard C22.2 No. 108



## TOTAL DYNAMIC HEAD FLOW PER MINUTE

MODEL		53/55/57/59	
Feet	Meters	Gal.	Liters
5	1.5	43	163
10	3.0	34	129
15	4.6	19	72
Shut-off Head:		19.25 ft.(5.9m)	



009897

Model	MODEL COMPARISON										
	Seal	Mode	Volts	Ph	Amps	HP	Hz	Lbs	Kg	Simplex	Duplex
M53/M55	Single	Auto	115	1	9.7	3/10	60	23	10	1	---
N53/N55	Single	Non	115	1	9.7	3/10	60	23	10	2	3 & 4
* BN53	Single	Auto	115	1	9.7	3/10	60	25	11	*	---
* BE53/BE57	Single	Auto	230	1	4.8	3/10	60	24 / 30	11 / 13	*	---
D53	Single	Auto	230	1	4.8	3/10	60	23	10	1	---
E53/E55	Single	Non	230	1	4.8	3/10	60	22	10	2	3 & 4
M57/M59	Single	Auto	115	1	9.7	3/10	60	29 / 33	13 / 15	1	---
N57/N59	Single	Non	115	1	9.7	3/10	60	28 / 29	12 / 13	2	3 & 4
* BN57	Single	Auto	115	1	9.7	3/10	60	30	13	*	---
D57/D59	Single	Auto	230	1	4.8	3/10	60	30 / 33	13 / 15	1	---
E57/E59	Single	Non	230	1	4.8	3/10	60	28 / 29	12 / 13	2	3 & 4
E59	Single	Non	230	1	4.8	3/10	60	29	13	2	3 & 4

\* Single piggyback switch included.

## SPECIAL MODEL FEATURES

Additional cord lengths are available in 15' (5 m), 25' (8 m) and 35' (11 m). 50' (15 m) cord lengths available for 230 V units only.

BE and BN models include a piggyback variable level pump switch.

Model 53: cast iron switch case, motor and pump housing, a plastic impeller and base. Model 57: all cast iron construction with a cast iron impeller. Model 55: bronze switch case, motor and pump housing, a plastic impeller and base. Model 59: bronze construction with a bronze impeller.

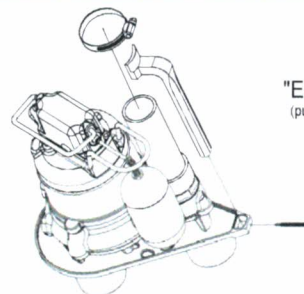
Optional pump stand (P/N 10-2421).

## SELECTION GUIDE

1. Integral float-operated mechanical switch, no external control required.
2. Single piggyback variable level float switch or double piggyback variable level float switch. Refer to FM0477.
3. See FM0712 for correct model of Electrical Alternator.
4. Variable level control switch 10-0743 used as a control activator with electrical alternator (3) or (4) float system.

### OPTIONAL PUMP STAND P/N 10-2421

- Reduces potential clogging by debris
  - Replaces rocks or bricks under the pump
  - Made of durable, noncorrosive ABS
  - Raises pump 2" (5 cm) off bottom of basin
  - Provides the ability to raise intake by adding sections of 1½" or 2" (DN40 or DN50) PVC piping
  - Attaches securely to pump
  - Accommodates sump, dewatering and effluent applications
- NOTE: Make sure float is free from obstruction.



**"Easy assembly"**  
(pump & discharge pipe  
not included.)

**CAUTION** All installation of controls, protection devices and wiring should be done by a qualified licensed electrician. All electrical and safety codes should be followed including the most recent National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA).

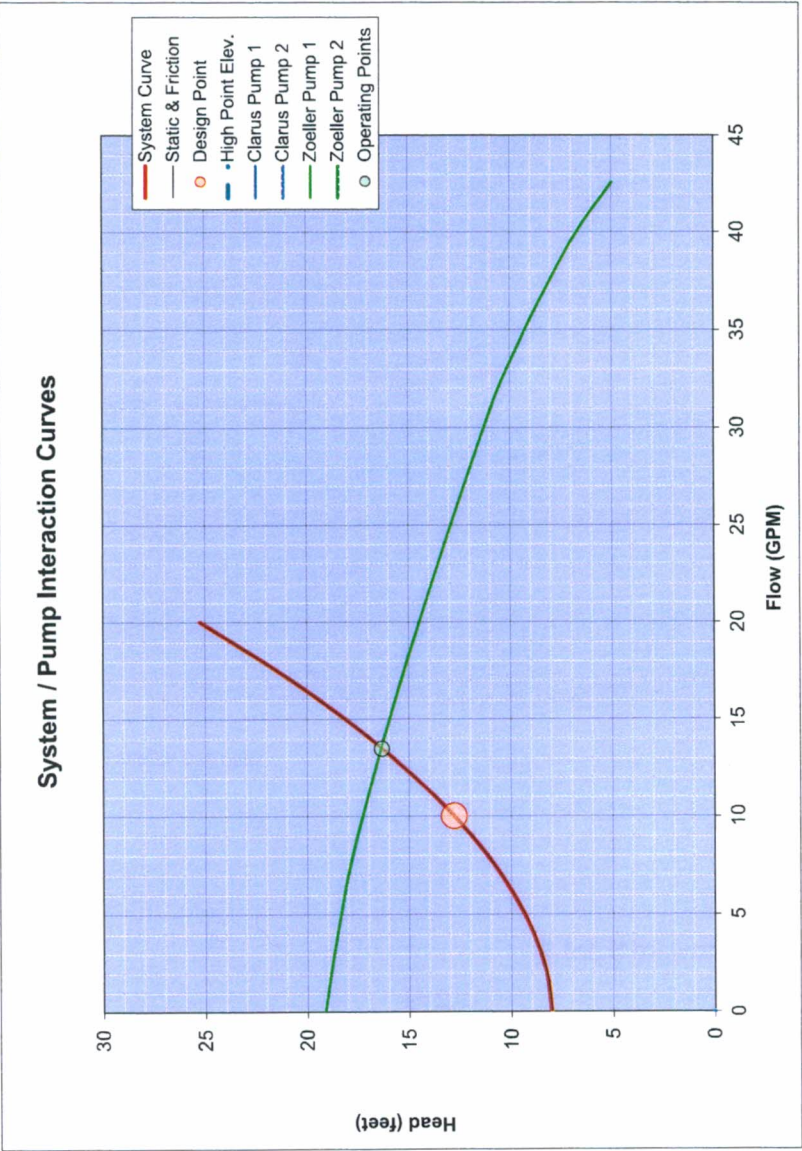
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# Zoeller Company

## System Head Curve and Pump Selection Tool

<b>Static Head Information</b>	
Static Head - elevation difference from low water to outfall	8.0 feet
System high point above outfall?	No
<b>Friction Head Information</b>	
Pipe	1
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?	No
How many laterals connected to mainline?	
Length of lateral (feet)	
Size of lateral (inches)	
Class of lateral	
<b>Fittings &amp; Discharge Assemblies</b>	
Type	Discharge Assembly
Size	1 1/4 inches
Quantity	
<b>Special Friction Considerations</b>	
Weep Hole	Yes
Add-In Friction	15 % of Pipe Loss
Automatic Multizone Valve?	No
Pressure Filter?	No
<b>Operating Head Information</b>	
System Type	Non-Pressurized
Specify Flow Requirement?	Yes
Number of Pumps	
Number of Pumps in Parallel	
Number of Pumps in Series	
Spolder Valve Offset (feet)	
Spolder Valve Offset (feet)	
Spolder Valve Offset (feet)	
<b>Factors and Coefficients</b>	
Hazen-Williams C Factor	130
Discharge Coefficient (Cd)	0.61
Lateral Design Mode	Off



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

Design Point  
10.0 GPM  
@ 12.8' TDH

Curve Zoom Range  
20 GPM

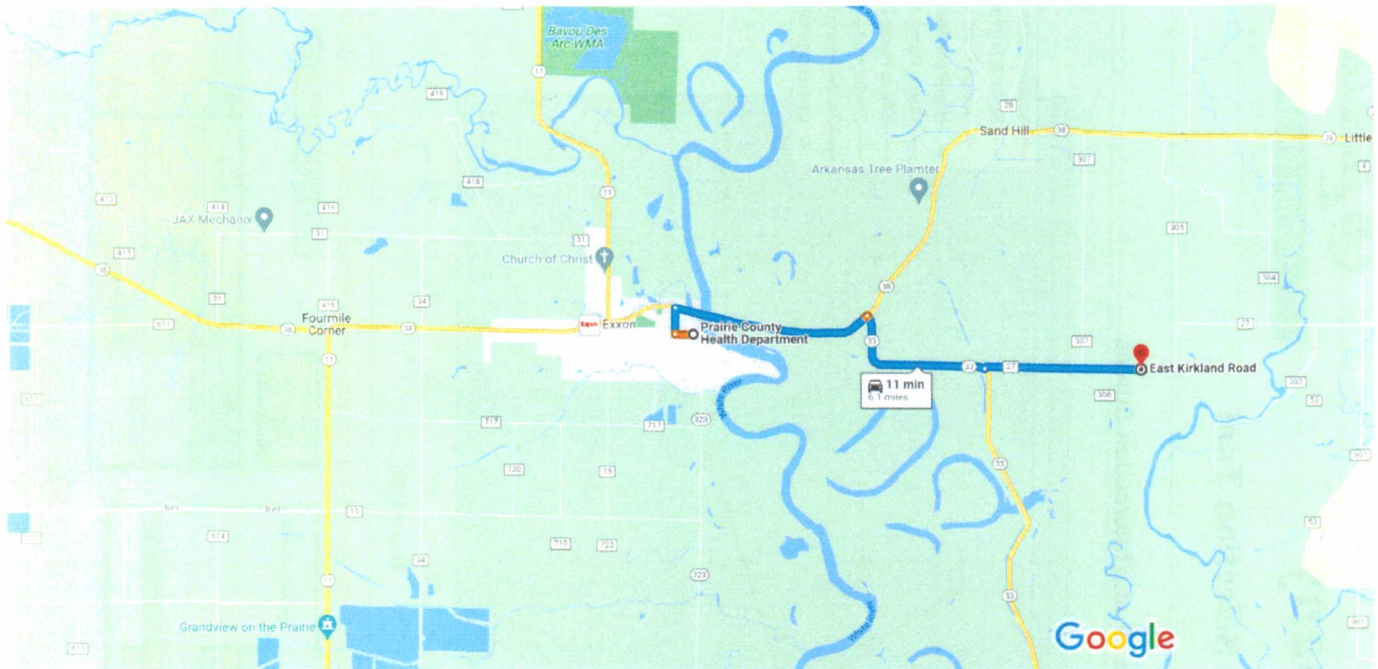
Pump Selection	Clarus Environmental Pumps	Operating Points
Clarus Pump 1		
Clarus Pump 2		
Zoeller Pump Company Pumps		
Zoeller Pump 1	53/55/57/59, 0.3hp, 60Hz	13.5 GPM @ 16.3'
Zoeller Pump 2		

Project Data	Cathy Harrison	Notes:
Project Name:	9551 Kirkland Road	Transport line 1-1/4"
Project Address	Des Arc, AR 72040	
Contact Info	Meinco, Inc.	
	501-421-3837	



Prairie County Health Department, 204 Main St, Des Arc, AR 72040 to E Kirkland Rd, Des Arc, AR 72040

Drive 6.1 miles, 11 min



Map data ©2023 Google 1 mi

Prairie County Health Department  
204 Main St, Des Arc, AR 72040

- ↑ 1. Head west on W Main St toward S 3rd St  
0.2 mi
- ➔ 2. Turn right at the 3rd cross street onto N 5th St  
0.3 mi
- ➔ 3. Turn right onto AR-38 E  
2.2 mi
- ➔ 4. Turn right onto AR-33 S  
1.7 mi
- ➔ 5. Turn left onto E Kirkland Rd/Watson Rd  
1.7 mi

E Kirkland Rd  
Des Arc, AR 72040

# SERVICE AND MAINTENANCE CONTRACT

1. **Parties.** This contract ("Agreement" or "Contract") is between Meinco Septic Systems, Inc., ("Meinco") and Cathy Harrison, ("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 9551 Kirkland Road, Des Arc, AR 72040, hereinafter referred to as the "Service Site."
3. **Service Fees.** Client agrees to pay Meinco One Hundred Fifty Dollars (\$150.00) 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 \$150.00 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 370 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.

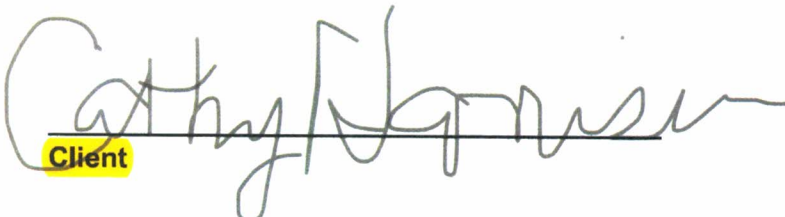
By signing this Agreement below, I indicate that I have read this Agreement and its terms, consisting of two (2) pages, excluding any Addendum or Addenda, and that these express terms are both acceptable and agreeable to me. I further declare that these terms do not represent an undue hardship, are not 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).

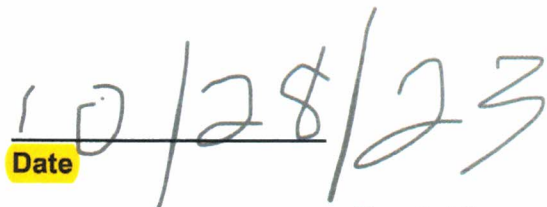


Meinco Septic Systems, Inc.

10/27/2023

Date

  
Client

  
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  $\geq 3000$  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:**

*Cathy Harrison*  
(Property Owner)

SIGNED: \_\_\_\_\_

(Health Department)

**DATE:**

**10/28/2023**

DATE: \_\_\_\_\_

# Harrison Residence

9551 Kirkland Road  
Des Arc, Ar 72040

Legend

POE

27

POD

