

LAYOUT \_\_\_\_\_ INSP 4 \_\_\_\_\_  
INSP 2 4/23/09 INSP 5 \_\_\_\_\_  
INSP 3 5/11/09 INSP 6 \_\_\_\_\_

ISSUE DATE: 4/17/2009

APPROVAL DATE: 5/19/09

# PERMIT

*(log sent into Post-Trail)*

P 530319

A 17266

TAX ID 05-360285

## ON-SITE SEWAGE DISPOSAL SYSTEM HOWARD COUNTY HEALTH DEPARTMENT BUREAU OF ENVIRONMENTAL HEALTH

Chief Septic, Inc. IS PERMITTED TO INSTALL  ALTER

ADDRESS: PO Box 199 Mt. Airy MD 21771 PHONE NUMBER: 410-635-3237

SUBDIVISION: \_\_\_\_\_ LOT NUMBER: \_\_\_\_\_

ADDRESS: 7475 Mink Hollow Road PROPERTY OWNER: Chris Sanders

SEPTIC TANK CAPACITY (GALLONS): \_\_\_\_\_ OUTLET BAFFLE FILTER REQUIRED

PUMP CHAMBER CAPACITY (GALLONS): \_\_\_\_\_ COMPARTMENTED TANK REQUIRED

NUMBER OF BEDROOMS: \_\_\_\_\_

SQUARE FEET PER BEDROOM: \_\_\_\_\_

LINEAR FEET OF TRENCH REQUIRED: \_\_\_\_\_

TRENCHES:	Trench to be feet wide. Inlet feet below original grade. Bottom maximum depth feet below original grade. Effective area begins at feet below original grade. feet of stone below distribution pipe.
LOCATION:	This permit is for the installation of a BAT system under the BRF. Contractor will be installing an AdvanTex - AX 20 Model 3a. Only.
NOTES:	For a 5 br, 2500g total of septic tank will be utilized under this model BAT system.

PLANS APPROVED: Kevin Wolf DATE: 4/17/2009

- NOTE: PERMIT VOID AFTER 2 YEARS
- NOTE: CONTRACTOR RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION INSPECTION FOR ALL INSTALLATIONS
- NOTE: WATERTIGHT SEPTIC TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE 100 FEET FROM ANY WATER WELL
- NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS UNLESS SPECIFICALLY AUTHORIZED

**NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT CALL 410-313-2640 FOR INSPECTION OF SEPTIC SYSTEM**

NOT TO SCALE

See separate sheet for As Built

ROAD NAME

PRE-CONSTRUCTION:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

INSTALLATION: 4/23/09, Contractor finished plumbing in to new tank and into ex. drywell. Advantex AX200 model 30 sized for 5br, 2500g total S.P. size. installed. Need riser on front tank (front/rear). OK to backfill (KW) Need system start-up test. (KW) 5/11/09 Start-up test OK. Need outlet baffle filter per Advantex. before system approval (KW) 5/19/09 outlet baffle filter in place. system start-up verification received from Advantex. sys. complete. (KW)

FINAL INSPECTOR K. Way DATE OF APPROVAL 5-19-09

TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
_____	_____	_____
NUMBER OF TRENCHES _____		
TOTAL LENGTH _____		
ABSORPTION AREA _____		
DISTRIBUTION BOX LEVEL _____		
DISTRIBUTION BOX BAFFLE _____		
DISTRIBUTION BOX PORT _____		

SEPTIC TANK DATA	
SEPTIC TANK 1 LEVEL	Yes
MANUFACTURER	Advantex
CAPACITY	1500 GAL
SEAM LOC	Top
TANK LID DEPTH	2.5'-3'
BAFFLES	Front
BAFFLE FILTER	Need Rear
MANHOLE LOC	Front/Rear
6" PORT LOC	none
WATERTIGHT TEST	_____
SLOTTED	no
DATE ON LID	Yes
SEPTIC TANK 2 LEVEL	Yes
MANUFACTURER	Advantex
CAPACITY	1000 GAL
SEAM LOC	Top
TANK LID DEPTH	3'
BAFFLES	Front
BAFFLE FILTER	_____
MANHOLE LOC	Front/Rear
6" PORT LOC	none
WATERTIGHT TEST	_____
SLOTTED	no
DATE ON LID	Yes



**AGREEMENT AND EASEMENT FOR INSTALLATION  
OF BEST AVAILABLE TECHNOLOGY SYSTEMS  
WITH BAY RESTORATION FUNDS.**

THIS AGREEMENT is made this 4th day of February, among Christopher L. Sanders, hereinafter referred to as "Owner," the Howard County Health Department hereinafter collectively referred to as the "County," and the Department of the Environment, hereinafter referred to as the "Department."

WHEREAS, Owner owns a tract of land located on 7475 Mink Hollow Road, in the 5th Election District of Howard County, Maryland, and the deed to same is recorded among the Land Records of Howard County, Maryland, in Ellicott City and in Liber 11389 Folio 575.

WHEREAS, the Bay Restoration Fund (BRF) may provide a grant for the cost attributable to upgrading an onsite sewage disposal system to the Best Available Technology (BAT) for the removal of nitrogen.

WHEREAS, the BRF may also provide a grant for the cost difference between a traditional onsite sewage disposal system and a system that utilizes the BAT for the removal of nitrogen.

WHEREAS, Owner understands that participation in the Bay Restoration Fund is voluntary.

NOW, THEREFORE, the parties hereto agree as follows:

- A. Owner hereby grants to the Department and the County the right to enter upon the property at any reasonable time for access to the system to make periodic inspections and the Owner agrees to provide any information and data requested and needed by the Department to develop accurate and thorough test results.
- B. Owner acknowledges and agrees that a manufacturer-approved installer will install the BAT system.

- C. Owner acknowledges and agrees the manufacturer will provide for Operation and Maintenance of the BAT for a period of 5 years as a condition of sale of the BAT. After the 5 year period the Operation and Maintenance contract can be further extended at the behest of the property owner. The Department and County encourage the property owner to continuously maintain an Operation and Maintenance contract during the lifetime of the system.
- D. Owner acknowledges and agrees that the manufacturer appointed Operation and Maintenance provider will have access to the BAT system at all times.
- E. Owner acknowledges and agrees that the manufacturer or manufacturers designee will have access to sample the effluent of the BAT system. Owner acknowledges and agrees that the proposed installation of a BAT system funded by the BRF is voluntary. Owner agrees that there shall be no liability on the part of the County or Department to Owner if this BAT system fails, and that the County and the Department do not warrant or guarantee that the BAT system will adequately or properly function.
- F. Owner acknowledges and agrees that neither the County nor the Department nor any of its agents or employees, either officially or individually, underwrites the operation of any system approved by them.
- G. The Owner will devote such care and effort to the maintenance of the BAT system so that any malfunction is not the result of poor maintenance, faulty operation, or neglect.
- H. The Department agrees to grant \$ 14,300.00 toward the cost of installation of the BAT System, and financial responsibility is limited to this amount. Owner will present to the Department at least 3 proposals from manufacturer and County certified system installers demonstrating the total cost of installation. Operating costs will be at the Owner's expense.

- I. The Owner acknowledges that the BRF grant can only be used for that portion of the OSDS attributable to (BAT) for the removal of nitrogen.
- J. Owner acknowledges in the event the total project cost is greater than \$25,000 the proposal will have to be approved by the Maryland State Board of Public Works.
- K. The Owner agrees to contact both the Water Management Administration, On-Site Systems Division of the Wastewater Permits Program and the County at least forty-eight (48) hours prior to system installation, so that the Department has the opportunity to be present at the time of installation or thereafter for inspection.
- L. The Owner must install BAT system according to the manufacturer recommended plans and specifications approved by the Department.
- M. The Owner agrees and acknowledges that if installation deviates substantially from the approved plans or changes such that performance of the system is compromised or reduced, BRF funding will not be provided.
- N. This agreement shall run with the land and binds the Owner, his heirs, successors, assigns except that the provisions of paragraph A, C, D and E shall be binding for a period of 5 years only after installation of the system and occupation of the home. Owner further agrees that he shall inform in writing any purchaser or lessee of the property that the system may require maintenance or other attention. The Owner agrees to record this agreement in the land records of Howard County.
- O. This agreement shall not be construed to limit any authority of the Department to protect the public health, safety or comfort or to issue any other orders to take any other action that is now or may hereafter be within its authority.
- P. This agreement may be voided at the discretion of the Department if the system construction is not completed within six (6) months of the effective date of this agreement.

Q. This agreement contains the entire agreement and understanding between the County and the Owner and the Department. There are no additional terms other than as contained in this agreement. This agreement may not be modified except in writing signed by each of the parties or by their authorized representatives.

R. The laws of the State of Maryland govern the provisions of all transactions pursuant to this agreement.

IN WITNESS WHEREOF, the parties have signed and sealed this agreement on the date indicated

above.

DATE: 4/11/09

Christopher Sanders  
Owner

JoAnn Sanders  
JoAnn Sanders

DATE: 2/4/09

Jay Prager  
Jay Prager, Deputy Program Manager  
Wastewater Permits Program  
Maryland Department of the Environment

DATE: 4/14/09

Beit Nifan  
Howard County Health Department

LIBER 11685 FOLIO 463

AGREEMENT AND EASEMENT FOR INSTALLATION  
OF BEST AVAILABLE TECHNOLOGY SYSTEMS  
WITH BAY RESTORATION FUNDS.

000183

THIS AGREEMENT is made this 4th day of February, among Christopher L. Sanders, hereinafter referred to as "Owner," the Howard County Health Department hereinafter collectively referred to as the "County," and the Department of the Environment, hereinafter referred to as the "Department."

WHEREAS, Owner owns a tract of land located on 7475 Mink Hollow Road, in the 5th Election District of Howard County, Maryland, and the deed to same is recorded among the Land Records of Howard County, Maryland, in Ellicott City and in Liber 11389 Folio 575.

WHEREAS, the Bay Restoration Fund (BRF) may provide a grant for the cost attributable to upgrading an onsite sewage disposal system to the Best Available Technology (BAT) for the removal of nitrogen.

WHEREAS, the BRF may also provide a grant for the cost difference between a traditional onsite sewage disposal system and a system that utilizes the BAT for the removal of nitrogen.

WHEREAS, Owner understands that participation in the Bay Restoration Fund is voluntary

NO. OF PAGES 20.00  
RECORDING FEE 20.00  
PHOTOCOPY-A 2.00  
TOTAL 42.00  
PAGE CHRG. Rept # 47283  
MR. K.R. M.L. # 2378  
Jan 27, 2000 0342 PM

NOW, THEREFORE, the parties hereto agree as follows:

- A. Owner hereby grants to the Department and the County the right to enter upon the property at any reasonable time for access to the system to make periodic inspections and the Owner agrees to provide any information and data requested and needed by the Department to develop accurate and thorough test results.
- B. Owner acknowledges and agrees that a manufacturer-approved installer will install the BAT system.

10  
10  
R  
Copy

- C. Owner acknowledges and agrees the manufacturer will provide for Operation and Maintenance of the BAT for a period of 5 years as a condition of sale of the BAT. After the 5 year period the Operation and Maintenance contract can be further extended at the behest of the property owner. The Department and County encourage the property owner to continuously maintain an Operation and Maintenance contract during the lifetime of the system.
- D. Owner acknowledges and agrees that the manufacturer appointed Operation and Maintenance provider will have access to the BAT system at all times.
- E. Owner acknowledges and agrees that the manufacturer or manufacturers designee will have access to sample the effluent of the BAT system. Owner acknowledges and agrees that the proposed installation of a BAT system funded by the BRF is voluntary. Owner agrees that there shall be no liability on the part of the County or Department to Owner if this BAT system fails, and that the County and the Department do not warrant or guarantee that the BAT system will adequately or properly function.
- F. Owner acknowledges and agrees that neither the County nor the Department nor any of its agents or employees, either officially or individually, underwrites the operation of any system approved by them.
- G. The Owner will devote such care and effort to the maintenance of the BAT system so that any malfunction is not the result of poor maintenance, faulty operation, or neglect.
- H. The Department agrees to grant \$ 14,300.00 toward the cost of installation of the BAT System, and financial responsibility is limited to this amount. Owner will present to the Department at least 3 proposals from manufacturer and County certified system installers demonstrating the total cost of installation. Operating costs will be at the


- I. The Owner acknowledges that the BRF grant can only be used for that portion of the OSDS attributable to (BAT) for the removal of nitrogen.
- J. Owner acknowledges in the event the total project cost is greater than \$25,000 the proposal will have to be approved by the Maryland State Board of Public Works.
- K. The Owner agrees to contact both the Water Management Administration, On-Site Systems Division of the Wastewater Permits Program and the County at least forty-eight (48) hours prior to system installation, so that the Department has the opportunity to be present at the time of installation or thereafter for inspection.
- L. The Owner must install BAT system according to the manufacturer recommended plans and specifications approved by the Department.
- M. The Owner agrees and acknowledges that if installation deviates substantially from the approved plans or changes such that performance of the system is compromised or reduced, BRF funding will not be provided.
- N. This agreement shall run with the land and binds the Owner, his heirs, successors, assigns except that the provisions of paragraph A, C, D and E shall be binding for a period of 5 years only after installation of the system and occupation of the home. Owner further agrees that he shall inform in writing any purchaser or lessee of the property that the system may require maintenance or other attention. The Owner agrees to record this agreement in the land records of Howard County.
- O. This agreement shall not be construed to limit any authority of the Department to protect the public health, safety or comfort or to issue any other orders to take any other action that is now or may hereafter be within its authority.
- P. This agreement may be voided at the discretion of the Department if the system construction is not completed within six (6) months of the effective date of this agreement.

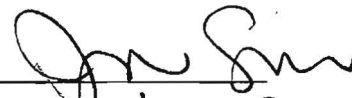
- Q. This agreement contains the entire agreement and understanding between the County and the Owner and the Department. There are no additional terms other than as contained in this agreement. This agreement may not be modified except in writing signed by each of the parties or by their authorized representatives.
- R. The laws of the State of Maryland govern the provisions of all transactions pursuant to this agreement.

IN WITNESS WHEREOF, the parties have signed and sealed this agreement on the date indicated

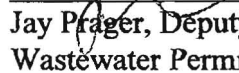
above.

DATE: 4/11/09


  
 Owner  
 CHRISTOPHER L SANDERS

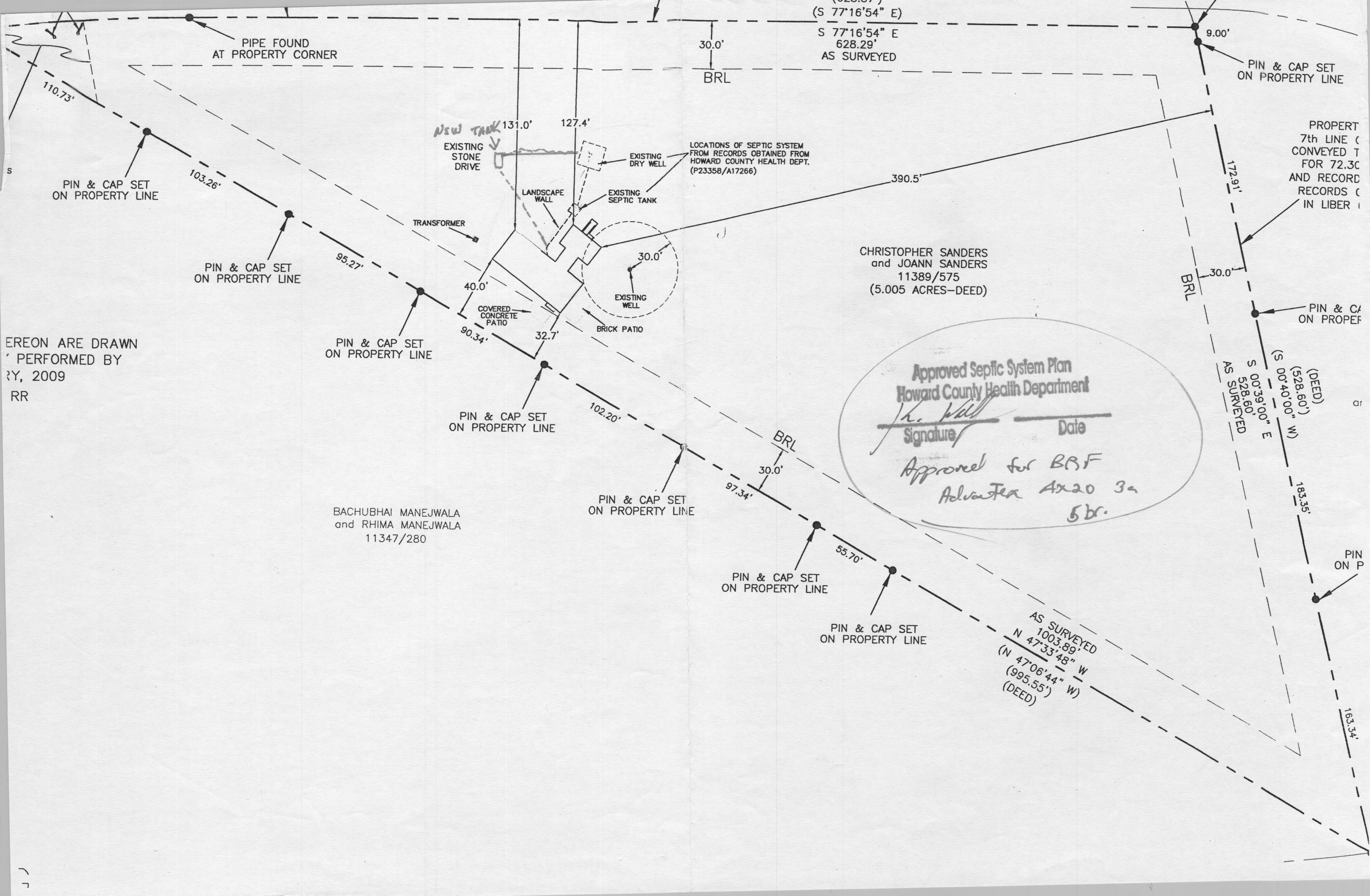
  
 JoAnn Sanders

DATE: 2/4/09

  
 Jay Prager, Deputy Program Manager  
 Wastewater Permits Program  
 Maryland Department of the Environment

DATE: 4/14/09

  
 Bert Nifan  
 Howard County Health Department



HEREON ARE DRAWN  
 PERFORMED BY  
 Y, 2009  
 RR



\* Keep w/ File !!

# Advantex® Field Maintenance Report Start-Up Summary Report

Atlantic Solutions, MD  
(401) 293-0176

Property Owner/Tracking # Chris Sanders		Operator Owen Townley		Installed Date 4/23/2009	
Site Address 7475 Mink Hollow Road, Highland MD 20777				Start-Up Date 4/23/2009	
Phone Number (301) 560-1835	Parcel #	Model 3A	Bedrooms 3	Occupants 4	Occupancy Date
Designer/Engineer Phone		Authorized Installer Chief Septics		Phone 410-635-3237	
Advantex Dealer Atlantic Solutions		Phone 401-293-0176		Electrician Phone	

### Primary Treatment

If using a single Processing Tank, complete the following:

Processing Tank

Septic Volume ( 1000 gal.)    Recirc Volume ( 500 gal.)

Construction     Concrete     Fiberglass     Other

Manufacturer: Baystar

If using a separate Septic Tank and Recirc Tank, complete the following:

Septic Tank ( \_\_\_\_\_ gal.)

Construction     Concrete     Fiberglass     Other

Manufacturer: \_\_\_\_\_

Recirc Tank ( \_\_\_\_\_ gal.)

Construction     Concrete     Fiberglass     Other

Manufacturer: \_\_\_\_\_

Pump Model: PF300S11

Floats set properly at 11 -in. 13 -in. 24 -in.

### Secondary Treatment

RSV setting: 14 -in.

Residual head measurement:

Pod #1 4'0" -in. Pod #2 \_\_\_\_\_ -in. Pod #3 \_\_\_\_\_ -in.

Discharge Tank/Basin ( \_\_\_\_\_ gal.)

Construction     Concrete     Fiberglass     PVC (Basin)

Manufacturer: \_\_\_\_\_

Pump Model: \_\_\_\_\_

Floats set properly at \_\_\_\_\_ -in. \_\_\_\_\_ -in. \_\_\_\_\_ -in.

Discharge pump flow rate (drawdown test): ( \_\_\_\_\_ gpm)

Discharge pump dose volume: ( \_\_\_\_\_ gal./dose)

Comments \_\_\_\_\_

### Control Panel

Panel ID (RTU or UL #) 116414	"On" Timer Setting 0.3	"Off" Timer Setting 19.7
----------------------------------	---------------------------	-----------------------------

### Filter Pods

Pod #1 Serial No. 408082	Pod #2 Serial No.	Pod #3 Serial No.
-----------------------------	-------------------	-------------------

### Other System Components

Disinfection equipment (manufacturer): \_\_\_\_\_

Dispersal system (type of): Gravity

**Declarations (Initial)**

OT Oranco's Start-Up Procedure was followed.

OT All lids are secured.

OT Circuit breakers are on and control panel is latched.

OT "For Service Call" label with phone # was affixed to panel.

OT Homeowner Package was reviewed with:

Builder on (date) 4/23/2009

Resident on (date) \_\_\_\_\_

The system is ready for use  Yes  No (explain)

\_\_\_\_\_

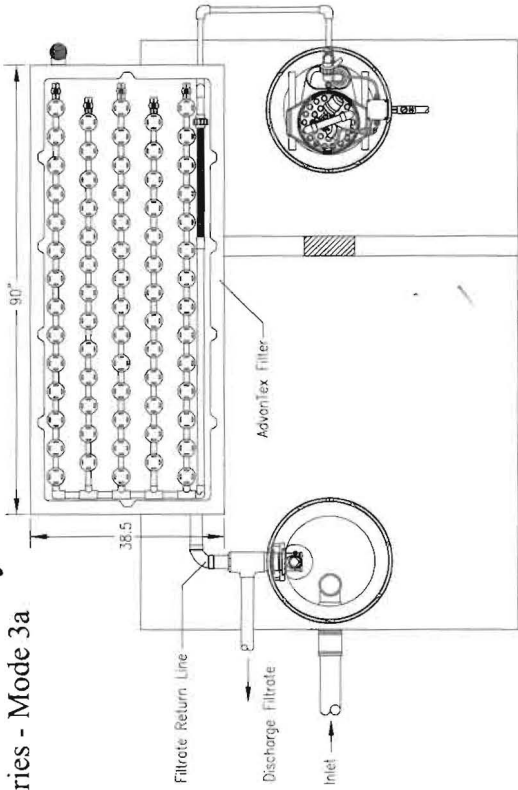
\_\_\_\_\_

\_\_\_\_\_

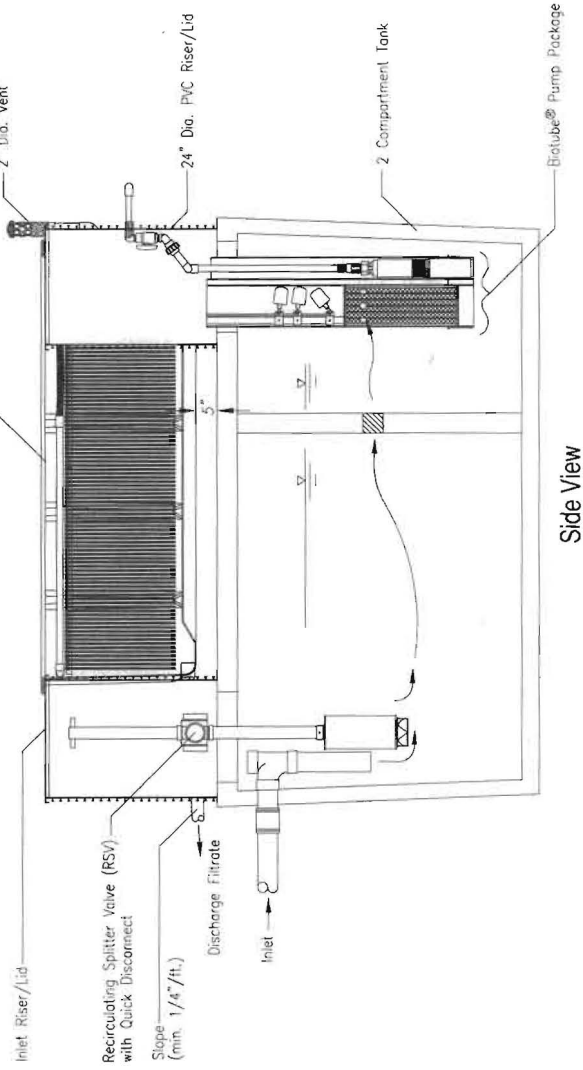
Signature [Signature] Date 4/23/2009

Fax completed form to 1-866-384-7404

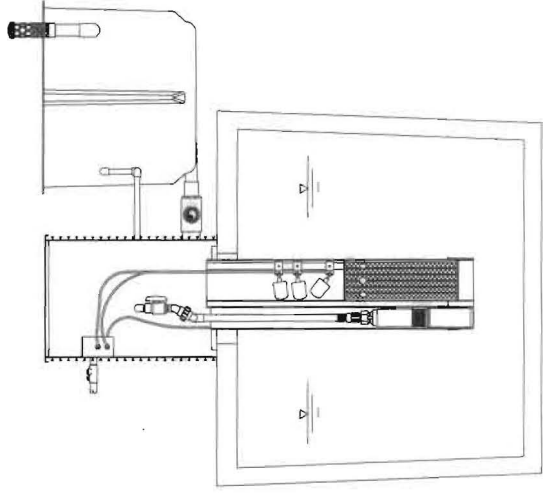
**AdvanTex™ Treatment System**  
**AX 20 Series - Mode 3a**



Top View



Side View



End View

U.S. Patents 5,331,894 and 5,480,561 4,439,323 and 5,492,635 © 2001 Orenco Systems, Inc. Other Patents Pending		Designed By: <b>ENGINEERING</b> Drawn By: <b>CHRIS JORDAN</b>	Title: <b>AdvanTex™ - AX 20 Mode 3A</b>
Date Approved:	Revision: <b>2.0</b>	Date: <b>1/15/04</b>	Scale: <b>1" = 2'-0"</b>
Approved By:	Drawing: <b>1 OF 1</b>	Drawing No. <b>NDW-ATX-AX20-3A</b>	



# MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230

410-537-3000 • 1-800-633-6101

Martin O'Malley  
Governor

Shari T. Wilson  
Secretary

Anthony G. Brown  
Lieutenant Governor

Robert M. Summers, Ph.D.  
Deputy Secretary

February 4, 2009

Christopher Sanders  
7475 Mink Hollow Road  
Highland, MD 20777

RE: Tax Map 40, Grid 7, Parcel 391

Dear Mr. Sanders:

Your bid package for the Bay Restoration Fund (BRF) Onsite Sewage Disposal System (OSDS) Program has been approved for the use of funds totaling not more than \$14,300.00. The accepted bid amount is for the installation of an Orenco Andvantex by Chief Septic for your property located at 7475 Mink Hollow Road. You may choose to deviate from the selected unit, however the grant award for acceptable reimbursable expenses may not exceed \$ 14,300.00. All grants awarded through the Maryland Department of the Environment (MDE) are reimbursable. This means that all work done prior to this letter cannot be considered for reimbursement. In order to be eligible for reimbursement you must sign and record a copy in the land records of Howard County the Agreement and Easement for Installation of Best Available Technology Systems with Bay Restoration Funds. You must provide MDE with the following:

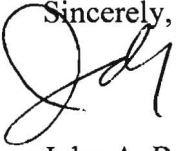
- The contractor's and manufacturer's invoice. These invoices should include everything quoted in the bid. All expenditures greater than the bid amount will not be covered.
- A copy of the installation inspection performed by the Howard County Environmental Health program.
- A completed State Grant or Loan Payment Disbursement Request Form
- A copy of the Agreement and Easement for Installation of Best Available Technology Systems with Bay Restoration that shows that it has been recorded in the land records of Howard County.

All submitted documentation would be reviewed for compliance. Once all documentation is submitted, you will receive a payment directly from the State Comptroller's office.

Page Two

The Maryland Department of the Environment thanks you for participating in this important program. If you have any further questions, please feel free to contact me at 410-537-3678 or 800-633-6101 ext 3678 or email at [jboris@mde.state.md.us](mailto:jboris@mde.state.md.us).

Sincerely,

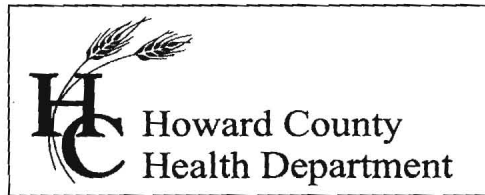


John A. Boris, Jr., R.S.  
Bay Restoration Fund Project Manager

Enclosure

cc: Jay Prager  
Steven R. Krieg, Regional Consultant  
Howard County Health Department

2009 DEC 10 6:10:51



7178 Columbia Gateway Drive, Columbia MD 21046  
(410) 313-2640 Fax (410) 313-2648  
TDD (410) 313-2323 Toll Free 1-866-313-6300  
website: [www.hchealth.org](http://www.hchealth.org)

Peter L. Beilenson, M.D., M.P.H., Health Officer

February 26, 2009

Chris Sanders  
7475 Mink Hollow Road  
Highland, MD 20777

RE: BRF OSDS approval  
7475 Mink Hollow Rd.  
*Sanders property, M. 40, G.7, P.391*

Dear Chris Sanders:

Your approval from the Bay Restoration Fund Onsite Sewage Disposal System Program for the installation of an Orenco Advantex is under review from our office. In a follow-up conversation with you on February 24<sup>th</sup>, 2009, the Health Department will need the following information prior to septic permit release:

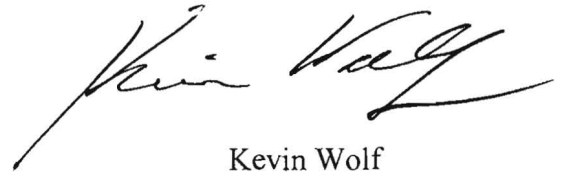
- This department needs to know what kind of AdvanTex Orenco system is to be installed. The contractor or the manufacturer needs to send a detailed cross-sectional/spec sheet of what Orenco is proposing to be installed at your property (i.e. new tank, can be used with existing tank, etc...).
- If a new Tank is to be used, an engineered drawing showing the new, detailed tank along with a profile showing the depth and amount of earth cover shall be submitted to this office along with the location survey plan. If you are using the existing tank, a structural analysis (water tightness, mid or top seam, cosmetic or physical damage, slotted, etc.) needs to take place and reviewed by Advantex and approved.
- If you have a building location survey plan showing the exact locations of the well and septic components (septic tank and dry well), please submit a copy to this department for review. It should be scaled showing the existing well location and existing septic components.
- BAT systems may be subject to Howard County Health Department Code and the Annotated Code of Maryland Regulations (COMAR) (i.e. setback to dwelling, existing drive, existing well, slopes, etc...).

- The existing septic tank and dry well along with the well need to be located on the plan.
- Contact information of the contractor that is to install the system, including phone number.

Once these comments have been addressed and allocated by the Health Department for completion in its entirety, the septic permit can then be released. A fee of \$396.00 is required to receive this septic permit for the above referenced property.

If you have any questions or comments please feel free to contact me at 410-313-2645 or by email at [kwolf@howardcountymd.gov](mailto:kwolf@howardcountymd.gov).

Sincerely,



Kevin Wolf  
Environmental Sanitarian  
Howard County Health Department

KW  
C.C. File  
Bob Johnson  
Chief Septic



# MARYLAND DEPARTMENT OF THE ENVIRONMENT

# MDE

1800 Washington Boulevard • Baltimore MD 21230

410-537-3000 • 1-800-633-6101

Martin O'Malley  
Governor

Shari T. Wilson  
Secretary

Anthony G. Brown  
Lieutenant Governor

Robert M. Summers, Ph.D.  
Deputy Secretary

December 12, 2008

Chris Sanders  
7475 Kink Hollow Rd.  
Highland, MD 20777

*A17266-123358*

RE: 7475 Mink Hollow Rd., Highland, MD 20777, Tax Map 40, Grid 7, Parcel 391

Dear Chris Sanders:

Thank you for completing an application for the Bay Restoration Fund (BRF) Onsite Sewage Disposal System (OSDS) Program. The pre-application submitted is for your property located at 7475 Mink Hollow Rd., Highland, MD 20777 and shown on Tax Map 40, Grid 7, Parcel 391. A review of the application indicates a high priority for funding. This letter is to notify you of preliminary approval for funding from the BRF for the installation of best available technology (BAT) for removing nitrogen as part of your on-site sewage disposal system.

This notification letter is intended to assist you through the process of obtaining proper BAT installation bids and invoicing procedures to obtain funding from the BRF. The following sections outline the requirements necessary for proceeding with the project.

*no top up electrical adjustment*

### Submission of Bids

The applicant must acquire bids from at least three separate manufacturers and at least 2 different installers for a minimum total of 3 bids to MDE for review. The installer can act as agent on behalf of the applicant but still must also supply a separate installer bid. A list of manufacturers is included in this letter. If you need additional participating installer information please contact your designated Project Manager or go to [http://www.mde.state.md.us/Water/CBWRF/osds/bat\\_installers.asp](http://www.mde.state.md.us/Water/CBWRF/osds/bat_installers.asp) for a list of installers. Bids must include the following:

- The installer, whether they are a manufacturer representative or one chosen by the property owner, must submit a separate installation quote with each manufacturer bid on a separate piece of paper from the manufacturer quote or the bid will be considered incomplete.
- Bids must be itemized. The manufacturer bid is to include the purchase cost of the unit and all other MDE requirements while the installation cost of the unit is to include the unit installation, components, and labor (including electrical connections) directly related to upgrading an onsite sewage disposal system to the best available technology for removing nitrogen are eligible for funding.

Issuance of Funds from the BRF

After review of the submitted invoice and associated documents, the Office of the Comptroller of the State of Maryland will issue a check to the property owner.

Once again the Department thanks you for participating in this important program. If you have any questions, please feel free to contact me at 410-537-3678 or by email at [jboris@mde.state.md.us](mailto:jboris@mde.state.md.us).

Sincerely,



John Boris  
Bay Restoration Fund Project Manager

Enclosure

cc: Jay Prager, Deputy Program Manager  
Steven Krieg, Regional Consultant  
Howard County Health Department

2018 01 08 11

The following BAT Technologies have undergone MDE review and are eligible for BRF grants:

Model Name

**AdvanTex AX**

Manufacturer: **Orenco Systems, Inc.** www.orenco.com  
 Distributor: Robert Johnson 1-877-214-92837 bjohnson@septicssystems.net

**Amphidrome**

Manufacturer: **F.R. Mahony & Associates, Inc.** www.frmahony.com  
 Distributor: David Kershner (610) 351-0963 d.kershner@ketllc.com

**Bioclere**

Manufacturer: **Aquapoint, Inc.** www.aquapoint.com  
 Robbie Tippet (240) 298-7572 rtipp4@aol.com  
 Sam Seymour (585) 473-3300 sseymour@aquapoint.com

**Ecoflex**

Manufacturer: **Premier Tech Environment**  
 Allison Blodig (785) 250-3215 bloa@premiertech.com

**Hoot H-Series, BNR & ANR**

Manufacturer: **Hoot Aerobic Systems, Inc.** www.hootsystems.com  
 Distributor: Nancy Mayer (410) 796-1434 mayerbro@connex.net

**MicroFAST & RetroFAST**

Manufacturer: **Bio-Microbics, Inc.** www.biomicrobics.com  
 Distributor: Freemire & Associates (410) 768-8500 www.freemire.com  
 rsf@freemire.com

**Nitrex**

Manufacturer: **Lombardo Associates, Inc** www.lombardoassociates.com  
 Pio Lombardo (617) 964-2924 pio@lombardoassociates.com

**ReCip RTS**

Manufacturer: **Bio-Concepts, Inc.** www.bioconceptsinc.com  
 Al Privette (252) 249-7040 alprivette@coastal.net

**SeptiTech**

Manufacturer: **SeptiTech, Inc.** www.septitech.com  
 Distributor: Bruce Melton (410) 878-2952 rbmelton@progressiveseptic.com  
 Western MD, Scott Everhart (304) 676-3823 www.cseenterprises.net

**Singulair Model TNT**

Manufacturer: **Norweco, Inc.** www.norweco.com  
 Distributor: Eastern Shore - Randy Clark (800) 773-9128 ranjodan@yahoo.com  
 Western Shore - Jeff Earnshaw (301) 274-3772 superiortank@olg.com

**Waterloo Biofilter**

Manufacturer: **Waterloo BioFilter Systems, Inc.** www.waterloo-biofilter.com  
 Distributor: Jones Pump Service (410) 836-9206 manager@jonespumpservice.com



# MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230  
410-537-3000 • 1-800-633-6101

Martin O'Malley  
Governor

Shari T. Wilson  
Secretary

Anthony G. Brown  
Lieutenant Governor

Robert M. Summers, Ph.D.  
Deputy Secretary

December 12, 2008

Chris Sanders  
7475 Kink Hollow Rd.  
Highland, MD 20777

*A17266-123358*

RE: 7475 Mink Hollow Rd., Highland, MD 20777, Tax Map 40, Grid 7, Parcel 391

Dear Chris Sanders:

Thank you for completing an application for the Bay Restoration Fund (BRF) Onsite Sewage Disposal System (OSDS) Program. The pre-application submitted is for your property located at 7475 Mink Hollow Rd., Highland, MD 20777 and shown on Tax Map 40, Grid 7, Parcel 391. A review of the application indicates a high priority for funding. This letter is to notify you of preliminary approval for funding from the BRF for the installation of best available technology (BAT) for removing nitrogen as part of your on-site sewage disposal system.

This notification letter is intended to assist you through the process of obtaining proper BAT installation bids and invoicing procedures to obtain funding from the BRF. The following sections outline the requirements necessary for proceeding with the project.

*No typo  
updates  
of subject*

## Submission of Bids

The applicant must acquire bids from at least three separate manufacturers and at least 2 different installers for a minimum total of 3 bids to MDE for review. The installer can act as agent on behalf of the applicant but still must also supply a separate installer bid. A list of manufacturers is included in this letter. If you need additional participating installer information please contact your designated Project Manager or go to [http://www.mde.state.md.us/Water/CBWRF/osds/bat\\_installers.asp](http://www.mde.state.md.us/Water/CBWRF/osds/bat_installers.asp) for a list of installers. Bids must include the following:

- The installer, whether they are a manufacturer representative or one chosen by the property owner, must submit a separate installation quote with each manufacturer bid on a separate piece of paper from the manufacturer quote or the bid will be considered incomplete.
- Bids must be itemized. The manufacturer bid is to include the purchase cost of the unit and all other MDE requirements while the installation cost of the unit is to include the unit installation, components, and labor (including electrical connections) directly related to upgrading an onsite sewage disposal system to the best available technology for removing nitrogen are eligible for funding.

### Conditions of Financial Assistance

By reading and signing this form, you agree to the limitations and conditions set forth in this document. This form must be returned with your submission of bids. Your bid submission will be not be processed if this form does not accompany the bids when you submit them.

### Award of Grant

- MDE will review the bids. The grant award will be obligated based on the lowest acceptable bid, however the applicant may pay the cost difference of a more expensive bid.
- The applicant will be notified by MDE as to the amount of the grant obligation and with further instructions as to how to pursue reimbursement of obligated funds.
- For awards greater than \$25,000 MDE must present a proposal to the Board Public Works for approval.
- No change orders will be accepted by MDE.
- The award amount is available for reimbursement within 6 months of Department signature on the Agreement and Easement document. Upon request of the applicant, the original 6-month period may be extended at the discretion of the Department.

### Agreement and Easement

An Agreement and Easement must be completed, signed by all parties and recorded in the Land Records of Howard County Maryland. A draft copy of the Agreement and Easement is provided to you in this letter for your review. A completed Agreement will be provided to you after bids are submitted to MDE when you are notified of the grant approval amount. The purpose of this Agreement is to accomplish the following:

- To establish your voluntary participation in this program.
- To ensure that a minimum of five years operation and maintenance is performed by an approved provider (included in the upfront cost of the system).
- Allows access for State, County and the Manufacturer designee's to inspect and collect samples from the system.
- Establishes the amount of the grant award.

### Local Permitting Requirements

- All required local permits must be obtained.
- Permit fees are not eligible for BRF funding.
- Contact Howard County Health Department for more information.

Issuance of Funds from the BRF

After review of the submitted invoice and associated documents, the Office of the Comptroller of the State of Maryland will issue a check to the property owner.

Once again the Department thanks you for participating in this important program. If you have any questions, please feel free to contact me at 410-537-3678 or by email at [jboris@mde.state.md.us](mailto:jboris@mde.state.md.us).

Sincerely,



John Boris  
Bay Restoration Fund Project Manager

Enclosure

cc: Jay Prager, Deputy Program Manager  
Steven Krieg, Regional Consultant  
Howard County Health Department

2008 DEC 18 AM 8:11

# AdvanTex<sup>®</sup> Treatment Systems



AdvanTex<sup>®</sup> is one of the most sustainable wastewater treatment systems available for homes. The filter unit is flush to the ground and blends into landscaping.

## Reliable, Sustainable Treatment for Residential Wastewater



*Bob Johnson*

NSF/ANSI • STANDARD 40 • CLASS I



Oreco Systems<sup>®</sup>  
Incorporated  
*Changing the Way the World Does Wastewater<sup>®</sup>*

1-800-348-9843  
oreco.com  
vericomm.net

## Finally! Residential Wastewater Treatment – That Works!

Orenco's AdvanTex® Treatment Systems are the ideal solution for environmentally sustainable treatment of residential wastewater flows.

### Outstanding Wastewater Treatment

Unlike other onsite wastewater treatment technologies, AdvanTex provides consistent, reliable treatment under real-world conditions. Other systems work OK in a controlled testing environment, but don't hold up to normal household use. AdvanTex does. AdvanTex Treatment Systems process and discharge small amounts of treated wastewater throughout the day. Water so clean it can be reused for drip or subsurface irrigation, or discharged to shallow, inconspicuous trenches.



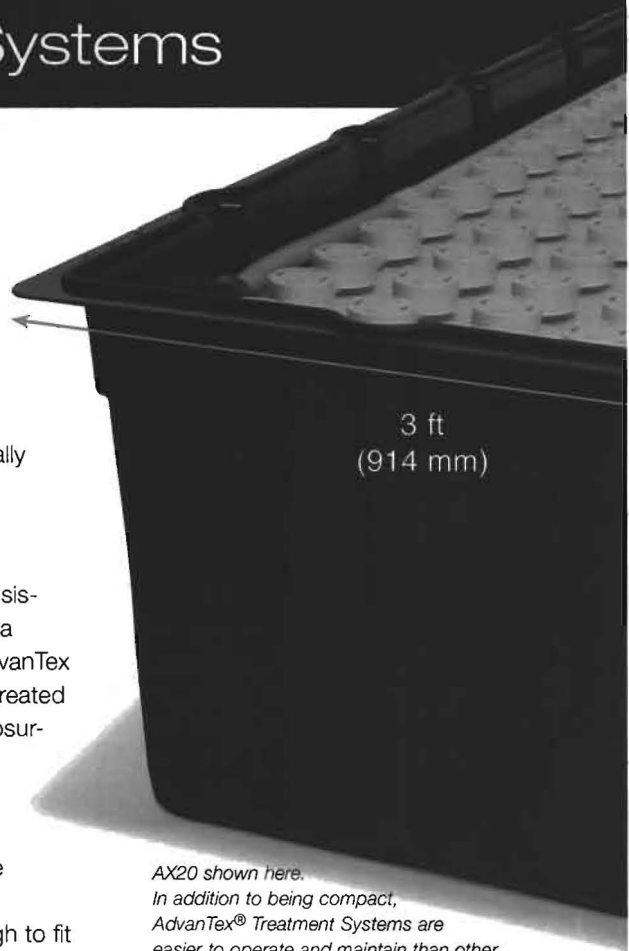
### Fits Small Yards

AdvanTex Treatment Systems require very little space. The filter unit is 7.5 ft x 3 ft x 2.5 ft (2286 mm x 914 mm x 762 mm), small enough to fit under a deck or on top of the processing tank. And some jurisdictions allow a reduction in drainfield area with AdvanTex. So AdvanTex is ideal for small sites, or for homeowners who simply want more use of their yard.

### Low Lifetime Cost

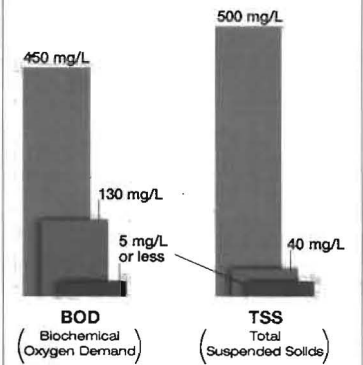
AdvanTex Treatment Systems may cost a little more up front than other systems, but, thanks to low maintenance requirements, they cost much, much less over time. Power costs, pumping costs, and equipment replacement costs are a fraction of those for other technologies. Plus, AdvanTex filters protect your drainfield.

AdvanTex turns household wastewater into clear, odorless effluent you can reuse for subsurface irrigation.



AX20 shown here. In addition to being compact, AdvanTex® Treatment Systems are easier to operate and maintain than other wastewater technologies. No odors. No power-hungry, noisy blowers. No activated sludge to manage or pump. No discharge of untreated sewage during peak flows or emergencies.

**AdvanTex®** Treatment Systems make raw wastewater up to 98% cleaner ... consistently producing effluent in the 5/5 mg/L range



Typical Household Raw Wastewater<sup>1</sup>  
 Typical Filtered Septic Tank Effluent<sup>1</sup>  
 Typical AdvanTex® Effluent<sup>2</sup>

<sup>1</sup> Source: Derived from *Small and Decentralized Wastewater Management Systems*, Crites & Tchobanoglous, McGraw-Hill, 1998, p. 183.

<sup>2</sup> Actual performance results, based on a six-month accumulative average from NSF (National Sanitation Foundation) testing on the AX20N at 500 gpd (1900 L/d), using composite sampling.

# AdvanTex® – Treatment Systems

## A Sustainable Technology

In the patented\* AdvanTex Treatment System, household sewage flows into the processing tank, where it separates into scum, sludge, and liquid effluent. Filtered effluent is dosed to the AdvanTex filter pod, where it trickles through sheets of a synthetic textile. There, naturally occurring microorganisms remove impurities from the effluent. After recirculating between the tank and the AdvanTex filter, the effluent is discharged to the soil via irrigation or a drainfield.

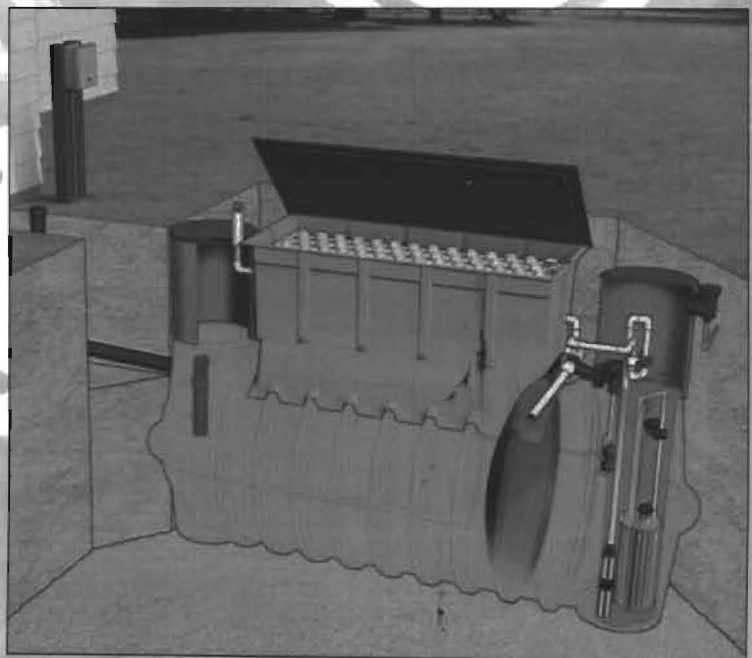
The system's pump runs only a few minutes an hour, using just a few cents worth of electricity a day. Because solids decompose in the tank, the tank requires pumping only every 8–12 years, under normal use. Using little energy, generating a minimum of sludge, and purifying wastewater for beneficial reuse, AdvanTex Systems are one of the most environmentally sustainable technologies for home wastewater treatment.

More than 15,000 of Orenco's textile filters have been installed at homes, businesses, and community treatment systems throughout the United States, Canada, Europe, and Australasia. Third-party testing shows that AdvanTex Treatment Systems do a better job of treating wastewater than most municipal sewers. And field testing shows that AdvanTex Treatment Systems work under real-world conditions.

*"The effluent from the filter units typically was clear with no odor . . . the increased loading rate allows for a decrease in the footprint required by filter units (compared to sand and gravel filters) . . . in an onsite treatment scenario, textile filter effluent could be utilized for landscape irrigation . . ."*

Leverenz, Darby, and Tchobanoglous,  
"Evaluation of Textile Filters for the  
Treatment of Septic Tank Effluent,"  
University of California at Davis,  
October 2000.

*Typical backyard configuration of an  
AdvanTex® Treatment System.*



NOTE: \* Covered by U.S. patent numbers  
6,372,137; 5,980,748; 5,531,894; 5,480,561; 5,360,556;  
5,492,635; 4,439,323; D461,870; and D445,476.  
Additional patents pending.

**AdvanTex®** – Sustainable, Reliable

2.5 ft  
(762 mm)

7.5 ft  
(2286 mm)

## **AdvanTex®** **Gives You Peace of Mind**

Orenco's AdvanTex Treatment Systems are not just a product. They are part of a comprehensive program, for homeowners' peace of mind.

### **Authorized Dealers and Installers**

AdvanTex Treatment Systems are sold by trained Dealers, who provide ongoing support and warranty service. Dealers ensure that AdvanTex Treatment Systems are set in place by trained, authorized installers, following Orenco's instructions.

### **Authorized Service Providers**

Like any onsite technology, your AdvanTex Treatment System benefits from management and maintenance. AdvanTex Dealers ensure that systems are routinely maintained by a trained and authorized service provider, following Orenco's instructions. Field maintenance report forms are digitally archived for future reference.

### **Complete, Carefully Engineered Package**

Your AdvanTex Treatment System comes as a totally pre-manufactured package, including AdvanTex textile filter, Biotube® pumping package, and "smart" control panel. AdvanTex can be installed on most lots in less than a day.

### **Low Routine Maintenance Costs**

AdvanTex Treatment Systems are easy to service, easy to clean, and generate no troublesome activated sludge. Since maintenance is minimal, so are the long-term costs. Each system comes with a Homeowner's Manual, with tips for preventive maintenance.

### **Low Power Costs**

AdvanTex uses very little power . . . an average of \$1.25–\$2.50 per month (based on the national average of eight cents per kilowatt hour). Compare that to power costs ranging from \$10–50 per month for many "activated sludge" aerobic treatment units!

### **Safe in Emergencies**

AdvanTex Treatment Systems equipped with VeriComm® Control Panels automatically notify service providers of irregular conditions. And systems are sized to allow for a minimum of 24 hours of wastewater storage, at average daily flows. So operators can provide service during normal working hours, keeping service costs down.

### **Child-Proof**

The lid of the AdvanTex filter is affixed with recessed bolts, making it very tamper-resistant.

### **Warrantied**

Orenco Systems®, Inc. provides a limited, multi-year warranty on all materials and workmanship. Length of warranty varies by region but is at least three years.

### **Round-the-Clock Monitoring**

Your AdvanTex Treatment System will include a remote telemetry unit with a round-the-clock, Web-based monitoring system, supervised by your service provider. You'll have even more peace of mind, knowing that the VeriComm® Monitoring System is continually and automatically verifying the operation of your system. For more information, go to [www.orenco.com](http://www.orenco.com) or [www.vericomm.net](http://www.vericomm.net) and click on the icon for VeriComm's "On-Line Demo."



# le, Onsite Treatment of Residential Wastewater

## For Every Residential Site

There's a standard AdvanTex Treatment System model for every site condition, design flow, and regulatory requirement.

AdvanTex Treatment Systems are particularly well suited for . . .

- small sites
- failing systems
- poor soils
- nitrogen reduction
- environmentally sensitive sites
- stringent treatment standards
- pretreatment of moderately high-strength waste



### Deschutes County, Oregon

*"I specified an AdvanTex Treatment System for a cluster of 12 luxury homes in the Metolius River Resort, along a premier trout stream in eastern Oregon. AdvanTex worked well because the site has an extremely small footprint and the system was easy to install. Also, the treatment unit is right in front of the Resort's office, so it was super important that there be absolutely no smell, and there isn't. Plus, we didn't have to search for the right treatment media, since it's all included. I would use AdvanTex any place you'd use a conventional recirculating filter."*

Steve Wert, CPSS, WWS  
Wert & Associates, Bend, Oregon

### Tucson, Arizona

*"Over 750 AdvanTex Treatment Systems have been installed in Arizona, primarily due to poor soils, seasonal high water tables and/or nitrogen in the groundwater. In Tucson, homeowners and their treatment system designers have also had to deal with limiting site constraints, shallow rock shelves, and small building envelopes. The AdvanTex system, followed by a subsurface drip system, was the answer. Plus, the installed systems go almost unnoticed in yards and landscaping."*

Todd Christianson,  
Premier Environmental  
Products, LLC



### Alberta, Canada

*"We've installed about 400 AdvanTex Treatment Systems for all sizes of homes, and, typically, the treated wastewater looks just like water. Our winter temperatures can be as low as -38° F (-39° C). In the middle of December, we started up an AdvanTex Treatment System on a 13,000 ft<sup>2</sup> (1200 m<sup>2</sup>) home that averages 1200 gpd (4500 L/d). Two weeks after start-up, the owners entertained 30 family members and guests for a full week. It worked great!"*

Bruce Silvester, Onsite Specialties, Inc.

***"It worked great!"***

### Newport, Rhode Island

*"I spent six years looking for the right wastewater system for my second home, which is on a small island. Even with seasonal flows, our AdvanTex Treatment System is working great . . . so great, I decided to become a dealer! We entertain often, so we use a lot of water, but we've never had a problem. And the system was easy to transport and install."*

Peter Kent, Atlantic Solutions, Ltd.



# AdvanTex® – Treatment Systems



Orenco Systems is owned and managed by engineers who develop wastewater systems that work — systems based on sound science.

Clockwise from left:  
Eric Ball, P.E., Jeff Ball, P.E., Hal Ball, P.E., (front) Terry Bounds, P.E.



AdvanTex® Treatment System AXN Models meet the requirements of NSF-ANSI Standard 40 for Class I Systems.



Orenco Systems<sup>®</sup>  
Incorporated

*Changing the Way the  
World Does Wastewater<sup>®</sup>*

814 Airway Avenue  
Sutherlin, OR 97479

T • 541-459-4449  
800-348-8843

F • 541-459-2884

[www.orenco.com](http://www.orenco.com)  
[www.verlcomm.net](http://www.verlcomm.net)

ABR-ATX-1  
Rev. 3.1, © 04/08  
Orenco Systems<sup>®</sup>, Inc.

## Carefully Engineered by Orenco

Orenco Systems has been researching, designing, manufacturing, and selling leading-edge products for small-scale wastewater treatment systems since 1981. The company has grown to become an industry leader, with nearly 300 employees and with more than 100 distributors and dealers representing most of the United States, Canada, Australia, New Zealand,



Your health is our priority. At Orenco Systems, we are committed to "Changing the Way the World Does Wastewater<sup>®</sup>."

and parts of Europe. Our products and technologies have been installed in 50 countries all over the world.



Orenco maintains an environmental lab and employs dozens of scientists and engineers. Orenco's systems are based on sound scientific principles of chemistry, biology, mechanical structure, and hydraulics. As a result, our research appears in numerous publications, and our engineers are regularly asked to give workshops and offer trainings.

Distributed by:

9/3/76  
2nd

# PERMIT

SEWAGE DISPOSAL SYSTEM

MARYLAND STATE DEPARTMENT OF HEALTH

HOWARD COUNTY

ELLICOTT CITY

DISTRICT 5th

DATE 6/8/76

216 to Highland  
INDEXED  
APR 11 9-3-76

P 23358  
A 17266

Edwin G. Willson Builder, Inc.

IS PERMITTED TO INSTALL  ALTER

ADDRESS P. O. Box 32, Ashton, Maryland 20702 PHONE 774-9698

A SEWAGE DISPOSAL SYSTEM LOCATED AT

SUBDIVISION Country Lane S/D ROAD 7475 Mink Hollow Road LOT 7, Soc. 1

PROPERTY OWNER Edwin G. Willson Jerry Walker

ADDRESS 14507 Gilpin Road, Silver Spring, Md. Phone: 774-9698  
6000 George Washington Drive, Tolbert, Md. 774-2597

SPECIFICATIONS 4 bedrooms

DRAIN FIELD DEPTH FEET, BOTTOM AREA SQ. FT.

SEEPAGE PITS ABSORBENT SIDE-WALL AREA SQ. FT.

SEPTIC TANK CAPACITY 1250 GALLONS

FOR GARBAGE GRINDER, INCREASE DISPOSAL AREA 22% & TANK CAPACITY 50%.

OTHER DRY WELL - 400 sq. ft. sidewall area. Dry well inlet to be 4 ft. deep and dry well bottom to be 11 ft. deep maximum. Place the dry well 160 ft. from the right side of the lot as seen when facing the lot from Country Farm Lane and 50 ft. from the lot line which runs along Country Farm Lane.

NOTE: ALL PIPE FROM HOUSE TO DISPOSAL AREA MUST BE CAST IRON.  
PERMIT VOID AFTER THREE YEARS.

NOTE: INSTALL STAND PIPE ON SEPTIC TANK AND DRY WELL. STAND PIPES MUST BE 6 INCHES MINIMUM IN DIAMETER. CAST IRON, CONCRETE OR TERRA COTTA ACCEPTED.

PLANS APPROVED BY Raymond Hodges DATE 6/21/73

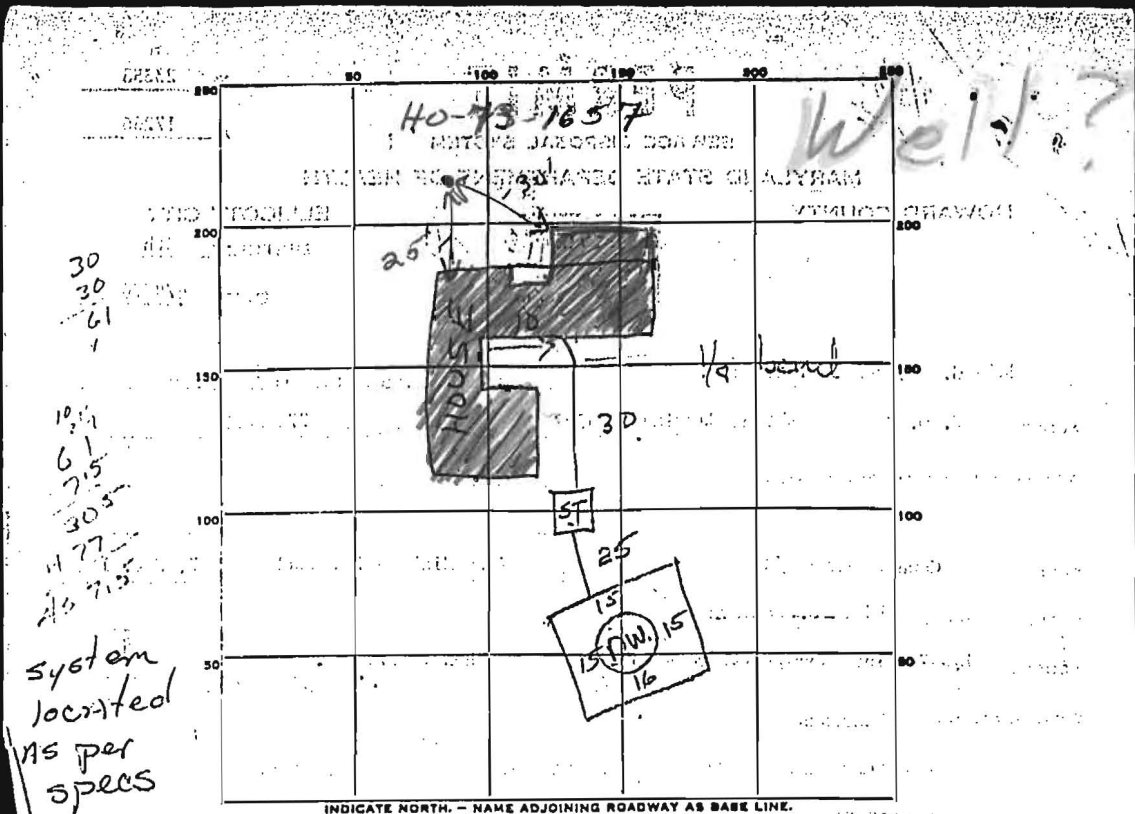
FILL SEPTIC TANK AND DISTRIBUTION BOX WITH WATER BEFORE CALLING FOR AN INSPECTION. COVER NO WORK UNTIL INSPECTED AND APPROVED.

NEITHER THE HOWARD COUNTY COMMISSIONERS NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.

Mink Hollow Rd.  
Just land on left before front Co. line

ROBINSON JAN 25-E-P

A 17266



30  
 30  
 61  
 1  
  
 19 1/4  
 61  
 75  
 30 5'  
 11 7 1/2  
 43 7 1/2  
  
 system located  
 as per  
 specs

INDICATE NORTH. - NAME ADJOINING ROADWAY AS BASE LINE.

PERMIT CARD \_\_\_\_\_ DW | ST  
 SEPTIC TANK, LEVEL 1258 CLEANOUTS    /   /     
 DISTRIBUTION BOX, LEVEL \_\_\_\_\_  
 TILE FIELD, DEPTH \_\_\_\_\_ FT. TRENCH WIDTH \_\_\_\_\_ FT.  
 GRAVEL DEPTH \_\_\_\_\_ IN. TOTAL LENGTH \_\_\_\_\_ FT.  
 NUMBER OF TRENCHES \_\_\_\_\_ TOTAL BOTTOM AREA \_\_\_\_\_  
 SEEPAGE PITS, PERIMETER 61 FT. DEPTH BELOW INLET 7 1/2 FT.  
 ABSORBENT AREA 457.5 SQ. FT.

REMARKS \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

DATE SYSTEM APPROVED 9-3-76 INSPECTOR hal benson

## Oswald, Hank

---

**From:** Christopher Sanders [csanders@biocerna.com]  
**Sent:** Thursday, September 11, 2014 1:53 PM  
**To:** Oswald, Hank  
**Subject:** RE: Floor Plan  
**Attachments:** 7475 Mink Hollow Current Floor Plan.pdf

Hi Hank,

I talked to my architect and he didn't create plans for the spaces that we weren't going to be remodeling. Also, I couldn't find a professional-looking copy in any of my files. So, I took the liberty of drawing one a full floor plan with some notes. I also numbered the bedrooms and bathrooms. We currently have 2.5 bathrooms and will not be adding any more. We have 3 bedrooms and will be turning bedroom #3 (as labeled on the attached pdf) into a linen closet, a storage closet and a hallway to the new addition over the garage. We will be adding two bedrooms in a second story to be built over the garage space. So, we will have a total of 4 bedrooms.

Please take a look at the attached pdfs and let me know if you have any questions.

Also, I have asked for a copy of a letter from Atlantic Solutions who was out to inspect my system earlier this week stating that the system is in good working order.

Thanks!  
Chris

**CHRISTOPHER SANDERS**  
*Founder and CEO*

Biocerna, LLC  
401 Professional Dr Suite 220  
Gaithersburg, MD 20879  
301-955-6055  
[csanders@biocerna.com](mailto:csanders@biocerna.com)

---

**From:** Oswald, Hank [mailto:hoswald@howardcountymd.gov]  
**Sent:** Tuesday, September 9, 2014 11:10 AM  
**To:** Christopher Sanders  
**Subject:** RE: Floor Plan

Hi Chris:

Thanks for the information regarding the septic system. If you'd like, you may have Atlantic Solutions email those documents directly to me. With regard to the partial floor plans, a total of 4 bedrooms are shown. However, there may be other rooms in the house defined as bedrooms under Subtitle 8, Sec. 3.801 of the Howard County Code but I won't be able to determine this information unless I have set of floor plans for the entire house. Moreover, this information is needed to ensure the onsite septic system is capable of handling existing and proposed changes to the home.

Please contact me with any questions or concerns.

Thanks,

Hank

Hank Oswald, L.E.H.S.  
Howard County Health Department  
Well & Septic Program  
8930 Stanford BLVD  
Columbia, MD 21045  
410-313-1786  
410-313-2648 (Fax)

---

**From:** Christopher Sanders [<mailto:csanders@biocerna.com>]  
**Sent:** Monday, September 08, 2014 5:59 PM  
**To:** Oswald, Hank  
**Cc:** [jody@jmkremodel.com](mailto:jody@jmkremodel.com)  
**Subject:** RE: Floor Plan

Hank,

Thank you for the information that you provided on the phone today.

As requested, I had Atlantic Solutions go out to the house today and look over the septic system. It appears as though it needed a reset and it is now working fine. I will request a letter from them stating the working condition of the system. I also renewed my maintenance Agreement with them and will request a copy of this as well for your records.

Also, please find attached, copies of the existing and planned floor plans. As I mentioned, we currently have three bedrooms and will be at four once the addition is complete. To achieve this, we will be building a hallway through an existing bedroom and using the remainder as a linen/storage closet. We will be adding space over the garage which will be the two additional bedrooms. We are turning the current garage space into a playroom for the kids. Please let me know if you have any questions on this.

I'll send along the maintenance Agreement and a letter on the working condition of the septic as soon as I get it back from Atlantic Solutions.

Thanks,  
Chris

---

**From:** [jody@jmkremodel.com](mailto:jody@jmkremodel.com) [<mailto:jody@jmkremodel.com>]  
**Sent:** Friday, September 5, 2014 12:41 PM  
**To:** Christopher Sanders  
**Subject:** Floor Plan

Chris - We're batting 500 on this one. They've got the data on the septic system upgrade, but don't have a floor plan from the original house. Can you dig one up?

Jody

Jody Michael Kenote - *Owner & Team Leader*  
JMK Remodeling, LLC  
4216 Round Hill Road  
Silver Spring, MD 20906

301-802-8027  
[jody@jmkremodel.com](mailto:jody@jmkremodel.com)

9/18/14  
Spoke to Chris Sanders  
about sending FP's,  
checking w/ Advantage  
about the systems status,  
and OPM agreement.

C.S. #  
301.955.6055

---

[jmkremodel.com](http://jmkremodel.com)

Licensed, Bonded & Insured  
MHIC #106429

----- Original Message -----

Subject: RE: BP14003033

From: "Oswald, Hank" <[hoswald@howardcountymd.gov](mailto:hoswald@howardcountymd.gov)>

Date: Fri, September 05, 2014 9:22 am

To: "[jody@jmkremodel.com](mailto:jody@jmkremodel.com)" <[jody@jmkremodel.com](mailto:jody@jmkremodel.com)>

Jody:

I don't have a copy of the floor plans for the existing house but I did locate a septic record regarding the upgrade to the septic tank in 2009.

Thanks,

Hank

---

**From:** [jody@jmkremodel.com](mailto:jody@jmkremodel.com) [<mailto:jody@jmkremodel.com>]

**Sent:** Friday, September 05, 2014 11:30 AM

**To:** Oswald, Hank

**Cc:** Christopher Sanders

**Subject:** RE: BP14003033

Hank - Regarding your letter on the Sanders permit (in the subject line of this email):

\* The septic system was upgraded three (3) years ago. There was a permit issued for this upgrade, which you should be able to locate in the Howard County data base.

\* The floor plans for the original house should also be in your data base, as the house was built in 1976, and there were permits issued for that as well.

Please let me (or the home owner, Chris Sanders) know if you have any additional questions. Chris can be reached at 301-955-6055, and he is also copied on this email.

Thank you.

Jody

Jody Michael Kenote - *Owner & Team Leader*  
JMK Remodeling, LLC  
4216 Round Hill Road  
Silver Spring, MD 20906

301-802-8027

[jody@jmkremodel.com](mailto:jody@jmkremodel.com)

[jmkremodel.com](http://jmkremodel.com)

Licensed, Bonded & Insured  
MHIC #106429

----- Original Message -----

Subject: BP14003033

From: "Oswald, Hank" <hoswald@howardcountymd.gov>

Date: Fri, September 05, 2014 5:19 am

To: "JODY@JMKREMODEL.COM" <JODY@JMKREMODEL.COM>

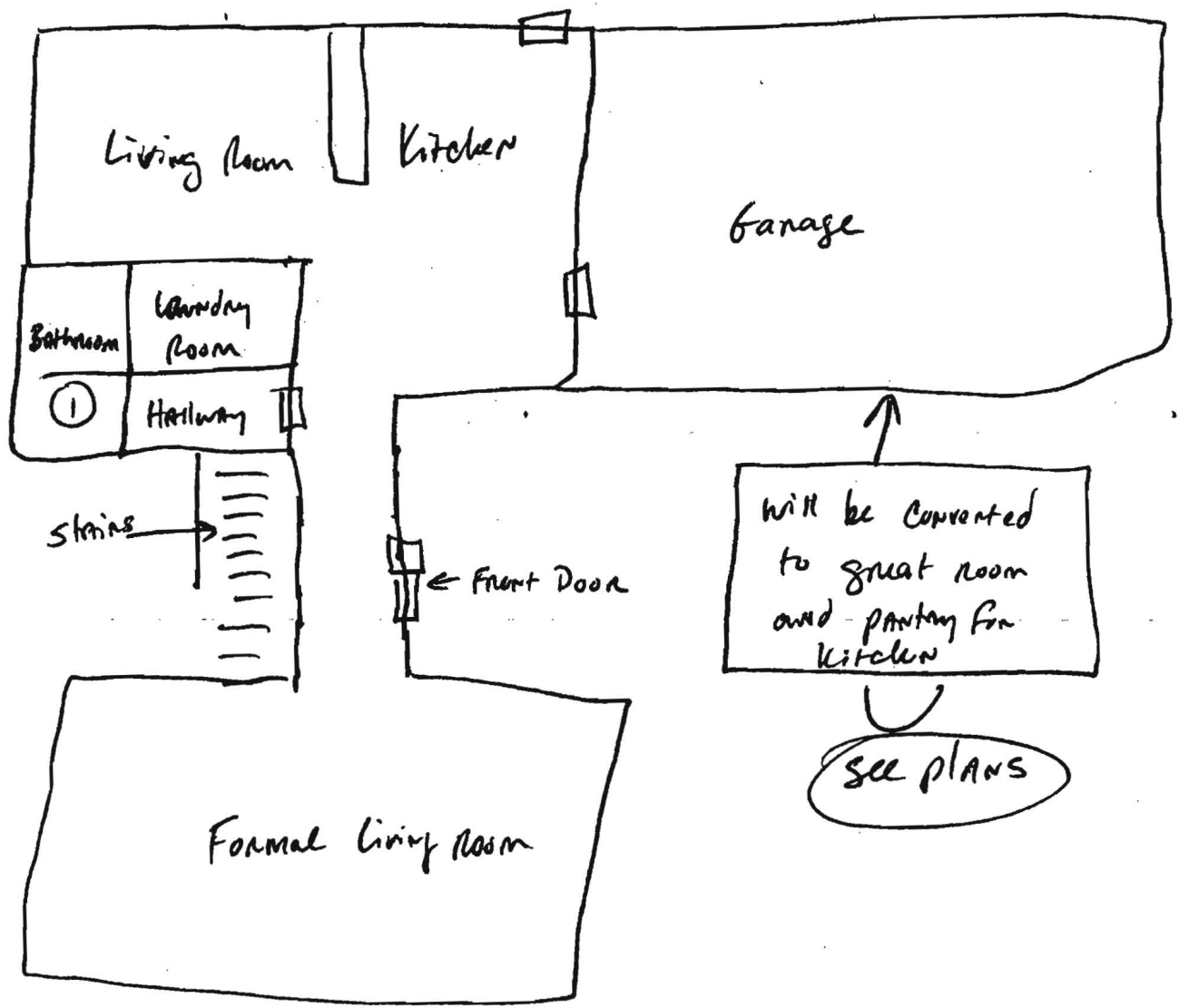
JODY KENOTE:

Please see attached letter regarding B14003033.

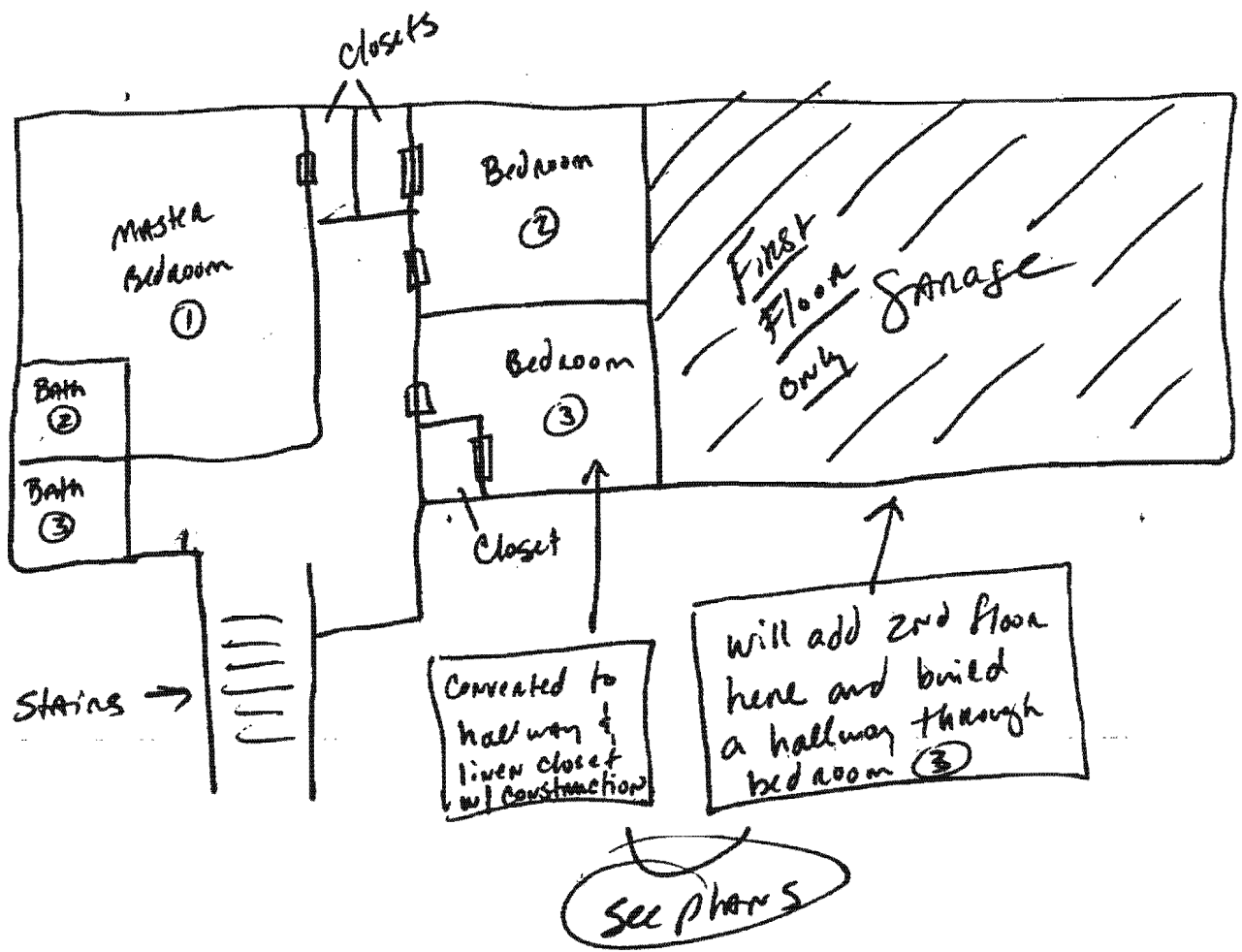
Hank Oswald, L.E.H.S.  
Howard County Health Department  
Well & Septic Program  
8930 Stanford BLVD  
Columbia, MD 21045  
410-313-1786  
410-313-2648 (Fax)

Sanders  
7475 Mink Hollow Road  
Highland, MD 20777

1st Floor



# 2nd Floor



## Oswald, Hank

---

**From:** Tiffanie Clauer-Janelle [tclauer@atlanticsolutionsltd.com]  
**Sent:** Tuesday, September 16, 2014 4:03 PM  
**To:** Oswald, Hank; csanders@biocerna.com  
**Subject:** 7475 Mink Hollow Rd.  
**Attachments:** 20140916154605097.pdf

Good Afternoon,

I have attached the new 2 year maintenance agreement. The system was serviced on Monday, September 8th and the system is performing as designed.

Please let me know if you have any questions.

Best,  
Tiffanie

Tiffanie Clauer-Janelle  
Effluential Technologies  
401-293-0946



Atlantic Solutions, Ltd  
512 Shaw Ct., Suite 103  
Severn, MD 21144

Phone: (877)814-8426  
Fax: (401)293-0178  
Email: sales@septicssystems.net

## Operations & Maintenance Agreement AdvanTex Treatment System

This Agreement made between the System Owner (hereinafter "Customer") and Effluent Technologies, Inc. (hereinafter "Effluent"), for the Operations & Maintenance (hereinafter "O&M") services rendered by Effluent. This agreement covers the O&M services that will be performed by Effluent on the wastewater treatment equipment for the Customer and installed at the property listed below.

Customer: Christopher Sanders Home: 301-955-6055  
System Address: 7475 Wink Hollow RD Work: SAME  
City: HIGHLAND State: MD Zip: 20777 Cell: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_ Email: CSANDERS@BJDCENNA.COM  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Permit #: \_\_\_\_\_

### 1.0 Term of Agreement

This agreement shall be for a period of two (2) years from the date of the contract and provides for one (1) scheduled service visits per year, unless otherwise terminated or canceled by either Party as provided herein. The routine service will be invoiced after each inspection for a total annual fee of two hundred twenty five dollars (\$225.00).

### 2.0 Certification of System

Customer shall permit Effluent to inspect the System to determine if it is in good working order. Based on such inspection, Effluent may, either (i) require the Customer to perform such Maintenance on the System or (ii) perform such Maintenance on the System themselves. Any such Maintenance services provided by Effluent shall be billed to Customer at Effluent standard rates for materials, and reduced rate for time and travel.

### 3.0 Responsibilities of System Owner

The system owner is responsible for providing and/or performing the following services:

- Provide access to an outdoor hose bib within 100 feet of the treatment system components.
  - Notify Effluent of any and all alarms as they occur.
  - Provide access to the control panel for the scheduled inspection, including removing of locks, trimming of shrubbery, etc.
  - If applicable, install and maintain an analog telephone line to the control panel. It is the sole responsibility of the property owner to maintain and repair the phone line as notified and required. Digital phone service will require customer to purchase a converter to continue with system monitoring.
  - Ensure the household practices as detailed in the "Homeowner's Manual" are strictly adhered to.
  - Prevent all rain and ground water from sump pumps and down spouts from entering the system.
  - Perform any additional services recommended by Effluent in a timely manner to ensure proper operation.
  - Record agreement as required by state and/or local jurisdictions.
- In the event the customer does not continuously provide and/or perform the services outlined above, Effluent shall have the right to cease performance of all service to the customer without liability to the system owner.

### 4.0 Services to be performed

Effluent will perform the following services at each scheduled visit:

- Measure the scum and sludge of the dosing tanks as applicable,
- Inspect and clean pump package,
- Inspect control panel, record pump amperage, confirm dial tone (if applicable), and visual and audible alarms,
- Confirm operation of complete discharge basin,
- Monitor disposal area for obvious signs of failure and flush laterals as applicable.

### 5.0 Reporting

Effluent will report the findings of the inspection to the customer in a report summarizing the system status, including any recommendations and/or requirements. If required by local regulations, the date and status of the system after the inspection will be entered into an online database. Any other requirements by the local jurisdiction will be the responsibility of the customer.

### 6.0 Telephone Support

Effluent will provide telephone support, at no additional charge, for system questions and alarm conditions for the duration of this agreement. Telephone support will be available Monday thru Friday from 8:00 a.m. to 6:00 p.m., excluding holidays.

### 7.0 Emergency Service Calls

Effluent will provide emergency and non-routine maintenance services, not covered under this contract, to the customer at the current discounted contract rate per man-hour plus one-way travel to the system identified under this agreement. In most cases, an emergency answering service will be available seven (7) days a week from 8:00 a.m. to 7:00 p.m. Technicians will be available for dispatch seven (7) days a week from 8:00 a.m. to 4:00 p.m.

### 8.0 Services not Covered by this Agreement

Additional services not covered by this agreement include:

- Pumping of the tanks
- Effluent sample, collection and analysis
- Corrective action to ensure system performance, nor costs of additional equipment required to perform such corrective action
- Monitoring of system to verify communication, customer shall be solely responsible for maintaining the phone system and ensuring communication.
- Emergency response or unscheduled service call to the system identified under this agreement

These services can be performed by Effluent at the customer's request for an additional charge. All additional services requested by the customer will be billed at Effluent's standard rate for materials and the reduced rate for time and travel.

### 9.0 Charges

The charges which the Customer shall pay Effluent for the performance of services shall be as described at the beginning of this agreement, subject to the following conditions:

- Effluent may increase all or any of the charges for those Services described above by giving the Customer written notice at least thirty (30) days before each yearly anniversary of the Effective Date of this Agreement.
- All charges shall be due and payable within thirty (30) days of the date on the invoice. Customer shall pay a late payment charge of 1.5% per month (18% per annum).
- Customer shall be responsible for any and all reasonable attorney and collection fees for past due invoices sent for collection.

### 10.0 Limitation of Liability

The sole liability of Effluent under this agreement shall be to correct any errors, malfunctions, or defects in the system directly caused by Effluent's failure to perform any services in a good and workmanlike manner; provided, however, in no event shall Effluent's liability exceed the total of the amounts paid to Effluent hereunder by the Customer. In no event shall Effluent be liable to the Customer or any third-party claimant for any indirect, special, punitive, consequential, or incidental damages or lost profits arising out of or related to this Agreement or the performance or breach thereof, whether based upon a claim or action of contract, warranty, negligence, or strict liability or other tort, breach of any statutory duty, indemnity, or contribution or otherwise, even if Effluent has been advised of the possibility of such damages.

11.0 Indemnity

Customer agrees to indemnify and hold Effluentia free and harmless from and against any and all claims, demands, liabilities, actions, losses, and damages of whatsoever kind or nature arising out of or relating to Effluentia's performance under this Agreement.

12.0 Termination/Cancellation

In the event of any termination or cancellation of this Service Contract by Effluentia or Customer, Effluentia shall have the right to:

- Declare all amounts owed to Effluentia to be immediately due and payable;
- Enter Customer's premises and repossess all materials, parts, and all other items owned by Effluentia;
- Cease performance of all services and additional services without liability to the Customer.

Customer shall have the right to:

- Deny Effluentia access to its premises and to the system, except that Effluentia shall have the right to enter the Customer's premises to repossess all materials, parts and other items owned by Effluentia;
- Discontinue utilizing Effluentia for the performance of services and additional services.

13.0 Miscellaneous Provisions

- This Service Contract terminates and supersedes all other agreements between the parties and constitutes the entire understanding between them. This Agreement cannot be changed, modified, or varied except by written instrument duly executed by both parties, except that Effluentia may increase the charges for

Services without execution of a written instrument as provided in this agreement.

- The failure of either Party to insist on strict performance of this agreement by the other shall not be construed as a waiver of the right to insist on such performance and no waiver by either party to any breach by the other of any provision hereof shall be deemed a waiver of any other prior or subsequent breach.
- The laws of the State of Rhode Island shall govern this agreement.
- If any suit or action is filed by either party to enforce this agreement or otherwise with respect to the subject matter of this agreement, the prevailing party shall be entitled to recover reasonable attorney fees incurred in preparation or in prosecution or defense of such suit or action as fixed by the trial court, and if any appeal is taken from the decision of the trial court, reasonable attorney fees as fixed by the appellate court.
- This agreement shall be binding upon and inure to the benefit of the successors and assigns of Effluentia and Customer.
- Time is of the essence for each and every provision of this agreement.
- Any notice or other communication required or permitted to be given under this agreement shall be in writing and shall be mailed by certified mail, return receipt requested, postage prepaid, addressed to the Parties at the addresses shown on the first page of this Service Contract. Any notice or other communication shall be deemed given at the expiration of the second day after the date of deposit in the United States mail. The addresses to which notice or other communications shall be mailed may be changed from time to time by giving written notice to the other party.

By signing below, I/We understand and agree the terms and conditions of this agreement as detailed above; and if applicable agree to the terms and conditions of any warranty provided by the system manufacturer, including, but not limited to maintaining a service contract during this warranty period by an authorized service provider. Also, I/We have received a copy of the homeowner's Manual and are obligated to pass this information on along with a copy of this agreement to any subsequent property owners.

This agreement is only valid if signed by both the Customer and a representative of Effluentia Technologies, Inc.

Sign: Christopher L Sanders  
Print: Christopher L Sanders  
Customer

Sign: \_\_\_\_\_  
Print: \_\_\_\_\_  
Customer

Date: 9/15/2014

Date: \_\_\_\_\_

Sign: Tiffany Clark  
Print: Tiffany Clark  
Atlantic Solutions, Ltd.  
Date: 9/16/14