OWNER/OPERATOR'S GUIDE WESTERN CANADA

Advanced Enviro-Septic® System

ESP-TS Model

Class II—Secondary Treatment Level

ESP-TSA Model

Class III—Advanced Secondary Treatment Level

CERTIFICATIONS

CAN/BNQ 3680-600
NQ 3680-910
NSF 40

PO BOX 220
ASQUITH, SK S0K 0J0

1-866-722-6246
quotes@frpmocoat.com

OWNER/OPERATOR'S GUIDE
WESTERN CANADA

INTRODUCTION

Congratulations! You have chosen System O: The Next Generation of Advanced Enviro-Septic for your septic installation. Your System was conceived to effectively treat wastewater from the septic tank of your rural property[12]. However, certain requirements must be respected in order to maintain its treatment performance so that you can make use of it for many years.

System O: The Next Generation of Advanced Enviro-Septic is a Combined Treatment & Dispersal System. It offers a high level of wastewater treatment in a similar or smaller footprint to a traditional septic system; without the need for mechanical components.

We request that you review this document and keep in on file with your home for the duration of its lifespan. This document may be useful for the reference of yourself as well as maintenance providers.

PURPOSE OF THIS DOCUMENT

This user guide explains the rules of use and the follow-up requirements for this system. It is important to follow these rules to ensure that the correct operation of the System O: The Next Generation of Advanced Enviro-Septic for the purposes of your facility.

This document includes the owner/operator's responsibilities with respect to the municipal requirements and regulations applicable to the System O: The Next Generation of Advanced Enviro -Septic system.

DESIGNATION OF THE SYSTEM

NAME: System O: The Next Generation of Advanced Enviro-Septic (Advanced Enviro-Septic)

APPLICATION: Residential & Commercial Facilities with Residential Strength Effluent

DEFINITION: System O: The Next Generation of Advanced Enviro-Septic is composed of two integral components: Advanced Enviro-Septic™ Pipes and a System Specific Filter Sand (details included within the Design Manual).

In addition to the above components; it is required that a two-compartment septic tank and a distribution device for wastewater be installed prior to the Advanced Enviro-Septic Lateral Piping System. The soil treatment component, including the Advanced Enviro-Septic Laterals are installed over natural in situ soil; where the treated effluent is dispersed and recycled back into the water cycle.

SYSTEM CAPACITY

Each Advanced Enviro-Septic (AES®) Pipe has a total capacity of 44 Imperial Gallons (200 L), with a maximum operational capacity ranging between 24.85 (113 L) and 27.7 Imperial Gallons (126 L). The number of Pipe units required is determined by the expected Peak or Daily Design Flow, and the depth of the System Sand Bed used within the design.

Single Family Residences (BC):

# of Bdrms (max. m²)	Min. Peak (Daily Design) Flow (L)	Min. # of AES® Pipes	Total Min. Length of AES® Pipes (ft)
1 (140)	700	6	60
2 (240)	1000	8	80
3 (280)	1300	11	110
4 (330)	1600	13	130
5 (420)	1900	15	150
6 (520)	2200	18	180

Single Family Residences (AB, MB, SK):

# of Bdrms	Minimum Peak (Daily Design) Flow (IG)	Minimum # of AES® Pipes	Total Minimum Length of AES® Pipes (ft)
1	150	6	60
2	300	12	120
3	337.5	14	140
4	450	18	180
5	562.5	21	210
6	675	25	250

** Additional capacities for Residences to be determined by Fixture Units and/or provided details for volume per area by Jurisdiction/Regulation.*

Non-Residential Applications (AB, BC, MB, SK):

Peak (Daily Design) Flow to be determined by Designer, Engineer, or ROWP based on values found within the SPM, V3; AB Private Sewage SOP, 2021; Saskatchewan Onsite Wastewater Disposal Guide (SOWDG), 2018; or other relevant documents and data available.

Once the Peak (Daily Design Flow) is established, the number of required AES Pipes can be easily determined.

Non-Residence w/ Residential Strength Effluent

Minimum Peak (Daily Design) Flow in IG (L)	Minimum # of AES® Pipes	Total Minimum Length of AES® Pipes (ft)
500 (2273)	18	180
1000 (4546)	36	360
1500 (6819)	54	540
2000 (9092)	72	720
2500 (11365)	90	900
3900 (17730)	142	1420

For large and complex systems, system design by a Professional may be recommended and/or required; in accordance with Jurisdictional regulations,

OPERATING INSTRUCTIONS

CONTEXT

The use and maintenance of a System O: The Next Generation of Advanced Enviro-Septic (AES) System are relatively simple. In general, the use of a reasonable quantity of water; in accordance with the design calculations; within the facility; will make it possible for you to use your installation without problems, for many years.

Within the content that follows, you will find basic rules to comply with to ensure the correct operation of your AES System. The compliance with the majority of these rules is essential to the functionality of any septic installation.

WASTEWATER VOLUMES

Large quantities of water that leave the house and enter the AES System in a short lapse of time have a negative impact on the effectiveness of the treatment and the infiltration of wastewater. Large volumes of water create agitation within the septic tank. Due to this agitation; sludge and scum are prone to being put back into suspension, and can cross over the Septic (Pre) Tank Baffle and end up discharging to the AES Piping System, and into the in situ soil. Surging your tank should not be a common occurrence.

The result of this type of activity can be reduced lifespan of your pump, increased maintenance to your effluent filter, sludge buildup in your discharge lines and/or in your AES Soil Treatment System; which can impact the effectiveness and lifespan of your system.

The volume of wastewater entering the AES System should be reasonable in relation to the total daily flow used in the design.

If the facility's water usage changes; either in relation to volumes or flow patterns compared to what it was designed and installed to accommodate; you must contact a qualified person to ensure that your system is configured in a manner that will function correctly to treat and disperse the generated wastewater. If it is not adequately designed for these changes; revision of your system may be required.

OPERATING INSTRUCTIONS

IN THE BATHROOM...

Do's

- Immediately repair leaking faucets, toilets, or other fixtures (running fixtures can add a large volume of unexpected flow to your septic system.
- Use a reasonable amount of toilet paper.
- Use a septic-safe type of toilet paper (3 or 4-ply may not be the best option for your septic system)
- Use natural or septic safe cleaning products. Research suitable products as some product claims are not regulated by any authorities.

Do Not's

- Use disinfectants in tablet/puck form within the basin or the tank.
- Use anti-bacterial cleaning products.
- Throw cigarettes, cigarette butts, or any other medications down the toilet.
- Throw tissues, paper towels, napkins, "flushable" wipes, or any personal hygiene products down the toilet.
- Throw condoms or other similar products down the toilet.

IN THE KITCHEN...

Do's

- Repair any leaking faucet or water use fixtures (running fixtures can add a large volume of unexpected flow to your septic system).
- Use low phosphate hand soap, dish soap, and dishwasher soap (aim for <5%).
- Use a reasonable amount of soap to complete a task. Note that the necessary quantity is often less than what is suggested by the manufacturer.
- Dispose of unprocessed vegetables, meats, coffee beans, and other food wastes to a waste receptacle or compost. Do not drain them into the septic system.

Do Not's

- Use a garburator/waste disposal attached to your septic system unless it has been included within the system design.
- Drain fats, oils, and greases (FOGs) into your septic system. FOGs can cause a huge amount of damage to septic system components; including the System Sand.
- Use anti-bacterial cleaning products.

OPERATING INSTRUCTIONS

IN THE LAUNDRY...

Do's

- Use phosphate-free detergent, preferably in liquid form. If liquid is not available or possible, use biodegradable powder detergent.
- Use the necessary quantity of soap to do the work. Take note that the necessary quantity is often less than that suggested by the manufacturer.
- Minimize the volume of water used for the laundry according to the quantity of clothing to wash.
- Periodically do a warm water wash during the winter months to increase the temperature of your septic system.

Do Not's

- Launder fabrics or products that have substantial oil, grease, or chemicals spilled on them.

OPERATING INSTRUCTIONS

ELSEWHERE IN & AROUND THE FACILITY...

Do's

- Divert drainage water away from the area where the AES Pipes are installed.
- Mow the area where the AES pipes are installed periodically to keep the area tidy and to inspect the condition of the area.
- Check the AES System Vent Ports periodically to ensure that they are clear of any blockages.

Do Not's

- Do not use the area where the AES Pipes are installed as a recreational area. Try to minimize activity in the area.
- Do not discharge Hot Tub or Pool Water into the septic tank or drain adjacent to the area where the AES Pipes are installed. These are problematic due to both the volume of water and the chemicals used in the water.
- Discharge water softener backwash into your septic installation, unless designed to accommodate those flows.
- Let water from sump pumps, roof drains & gutters, or drainage pipes discharge into or onto the septic installation.
- Dispose of solvents, paints, anti-freeze, engine oil or other chemicals into the septic installation. This includes water used to wash brushes or rollers that were used in latex paint (Water-based, latex, and oil-based paints contain elements that are harmful to septic installations.)
- Dispose of animal litter into the septic installation.

OTHER CONSIDERATIONS

New Builds—New Homes

For new homes, it is recommended that the septic tank be vacuumed out prior to the first discharge to a septic system. During the building process, products such as chemicals, paints, drywall dust, sawdust, and more can be rinsed down the drains into the septic tank. To protect the longevity of your system; having the septic tank cleaned out prior to commissioning the soil treatment component is beneficial.

OPERATING INSTRUCTIONS

OTHER CONSIDERATIONS

Chemicals for Septic Installations
Your AES System does not require any starting chemical, cleaning or other additives. The bacteria that carry out the treatment are naturally present in the wastewater of all facilities. Any chemicals or additives added to the AES System could possibly kill the beneficial bacteria.

Aeration
It is very important to ensure that good aeration occurs so that the septic installation functions correctly. The vent (or vents) installed at the end of the AES Piping System encourages this aeration. It is important to make sure that the opening is not blocked and that air can circulate freely at all times.

Heavy Machinery & Motorized Vehicle Traffic
Compaction is very detrimental to all soil-based septic treatment systems. It prevents the movement of both oxygen and moisture through the soil. As such, no heavy machinery may be driven on a septic installation, whether it is before, during, or after its construction. The same stands for any motorized vehicle. The effectiveness of the drainage in the ground depends on the presence or a non-compacted in situ soil that is unsaturated with water. Heavy machinery or motorized vehicle traffic closes the natural pores of the soil, which favors the accumulation of water.

Vegetation
The surface of the soil treatment component of the AES System must be seeded or sodded during the finish landscaping. This will prevent erosion of the soil materials; it also offers the benefit of reducing nitrogen and phosphorus.

The grass should be cut regularly in order to encourage growth without the addition of fertilizers. Irrigation systems should not be installed over or around the AES Piping System.

It is also important not to plant trees, shrubs, or other plants with invasive roots within a close proximity of the soil treatment component. A minimum of 6.5 feet (2m) should be allowed as a suitable distance.

SYSTEM COMPONENTS

Your septic installation includes several elements other than System O: The Next Generation of Advanced Enviro-Septic (AES). All of these components form a part of the treatment process of your installation. The following table presents a list of these elements. It should be noted that not all of these components will be relevant to every installation.

Component of the Septic Installation	Function	Follow-Up Owner/Operator	Follow-up Qualified Person	Occasional / Regular Maintenance Qualified Person
Septic (Pre) Tank	Primary Wastewater Treatment	Yes	No, unless regulated within Jurisdiction	• Empty according to need and/or regional regs.
Effluent Filter	Retention of Solids within Tank	According to Mfg's instructions	According to Mfg's instructions	• Rinse filter 1-2 times per year into working chamber of septic tank. • Replace parts as required.
Distribution Box w/ Flow Equalizers	Distributes effluent to the front of AES rows/ laterals	No	Yes, depending on water levels in piezometer/ inspection ports	• Adjust Equalizers to level flow, as required. • Ensure D-Box Lid is secure.
Low Pressure Distributon (Header only)	Distributes effluent to the front of AES rows/ laterals	No	Yes, check orifices to ensure even distribution across manifold.	• Clear orifices, as required. • Ensure that covers are secure.
Low Pressure Distribution (Pipe in Pipe)	Distributes effluent down the length of the AES rows/laterals	No	Yes, check pressure at system ends to ensure even flow down length of lateral	• Jet lines to ensure even distribution, as required.
Advanced Enviro-Septic Pipes	Treat & distribute effluent	No	Periodic check of water level in laterals through piezome-ter/inspection ports	• Steps to be decided based upon water level and duration of conditions.
Piezometer/ Inspection Ports	To check the water level in each row of AES Pipes	Yes, to assess volume in laterals prior to pumping out tank	Yes, to be inspected during any follow-up visits	• Check that cap is in good condition, change as required. • Ensure that cap is secure.

SYSTEM COMPONENTS

Component of the Septic Installation	Function	Follow-Up Owner/Operator	Follow-up Qualified Person	Occasional / Regular Maintenance Qualified Person
Sampling Device	To verify the treatment performance of the AES System	Optional	Optional	• Samples to be taken and tested as required by regulations.
Vent(s)	To allow circulation of air into the AES System, creating an aerobic environment	Yes, Ensure that the vent ports are not blocked.	Yes, Ensure that the vent ports are not block.	• Confirm that vent is drawing oxygen through by use of smoke. • Check condition of caps and ensure that they are secure.
Filter (System) Sand	To complete the effluent treatment process and assist with dispersal of the treated wastewater.	No	No	No
Pump (Optional)	To lift effluent from Septic Tank to Pump Station or AES System	No	Yes	• Check function of pump • Adjust float levels/ volumes, as required.
Pump Station (Optional)	To lift effluent from the Septic Tank to the AES System	Yes	Yes	• Check pump function • Have tank pumped out as necessary, or per regional regs.
Control Panel (Optional)	To control timing and volume of doses, as well as provide a High Level Alarm	No	Yes	• Adjust timer settings as required. • Adjust dose volumes as required. • Test Visual and Audible Alarms.
High Level Alarm	To alert Owner/ Operator of high water level in Septic Tank	Yes	Yes	• Assess tank conditions when Alarm is activated. • Determine steps required to resolve.

MAINTENANCE

Septic Tank

The septic tank must be pumped out as required. Tank capacity is generally designed to accommodate between 1 and 3 years of Sludge & Scum retention. It is necessary to be aware of the volume allowed to schedule appropriate service.

Both liquids and solids will be removed when pumping out the septic tank. The septic tank may be filled with clean water after it has been emptied.

The Owner/Operator is responsible for ensuring that their septic tank is pumped out in accordance with the design criteria and the regulations in effect in the installation region.

It is imperative to understand that only a professional, using the proper equipment must carry out the pumping out of a septic tank. In addition, any service completed on a septic tank; especially requiring entering the tank; must be done by a qualified person or person(s) with proper PPE and safety training. Confined space entry, in addition to the dangerous gases with a Septic Tank makes Tank maintenance very dangerous.

ATTENTION:
ALL SEPTIC TANKS ARE REQUIRED TO HAVE A SECONDARY SAFETY LID/GRATE INSTALLED WITHIN THE MANWAY ACCESS AS OF JANUARY 2023. THIS COVER IS REQUIRED TO BE INSTALLED PROPERLY AND RE-INSTALLED AFTER MAINTENANCE. IT IS ALSO IMPERATIVE THAT ALL TANK LIDS/COVERS BE INSTALLED AND SECURED CORRECTLY. INCORRECT INSTALLATION OF SAFETY DEVICES AND COVERS MAY BE HARMFUL TO THE OPERATION OF THE AES SYSTEM, AS WELL AS, PEOPLE, PETS, AND WILDLIFE IN THE AREA OF THE SYSTEM.

Effluent Filter

An effluent filter is a strainer that is used with a septic system to prevent the distribution of Suspended Solids (fine particles) into the soil treatment component. Some types of filters are in place prior to the pump; and in this situation, they may also protect the pump from solids entering and damaging the pump. Some filters also include a sensor that will go into alarm if the filter is plugged up. Filter maintenance will be required depending on the usage of the facility; and should be completed using manufacturer approved products and processes.

Distribution Box and Flow Equalizers

Normal use of your septic installation should not require the adjustment of the distribution box and the flow Equalizers. The initial adjustment and the self-leveling capacity (natural adjustment) of the flow equalizers are normally enough to maintain a good distribution of water among the rows of AES Pipe. However, a different of more than 4" between the lowest and highest water level in the piezometers for two consecutive measurements indicates that the Equalizers should be adjusted. A qualified person must measure and adjust the Equalizers, as required.

MAINTENANCE

AES Pipes (Rows/Laterals)
Under normal usage, the rows of AES Pipe do not require maintenance. It is normal to find the water level fluctuating a moderate amount within the pipes. On the other hand, if the water level(s) reaches 10", a rejuvenation of the AES System must be considered. A qualified person should contact that Distributor to confirm appropriate methods; and complete the procedure.

TROUBLESHOOTING IF WATER LEVEL IS TOO HIGH
With time, the water level can increase in the AES Pipes. It is normal to find a certain water level in the rows of AES Pipes. A high level represents and unusual case. Fortunately, the AES System has the capacity to rejuvenate itself ,ie. It is possible to practically recreate the original conditions of the water treatment of the AES System even if this situation should appear. If the level of water in the piezometers exceeds 10 inches, a DBO Expert Inc. technician (or representative) will inform you of what needs to be done. As a general rule, we will suggest one of the following rejuvenating procedures.

There are three rejuvenating procedures possible.

- The natural rejuvenation that occurs following a reduction or stoppage of use of the septic installation for a period of a few days or weeks (ie. During a vacation).
- The forced rejuvenation that consists of pumping out the septic tank and removing water from the AES Pipes at the same time.
- The forced rejuvenation with cleaning that consists of draining the septic tank and removing water and the inorganic matter that could have accumulated in the pipes over the years.

A qualified person must carry out the forced rejuvenation procedures.

Occasionally, at the time of a forced rejuvenation, the septic tank is not filled with clear water as in the case of a normal draining. This procedure must then be made at the time when groundwater is low and that there is no danger that hydrostatic pressure is exerted on the septic tank.

As a preventative measure, it is recommended to check the water level in the piezometers a few days before performing a regular pumping out of the septic tank. If the water level is too high, the pumping out of the septic tank could be done at the same time a forced regeneration procedure occurs.

MAINTENANCE

Procedure for Measure Water Level in Piezometers

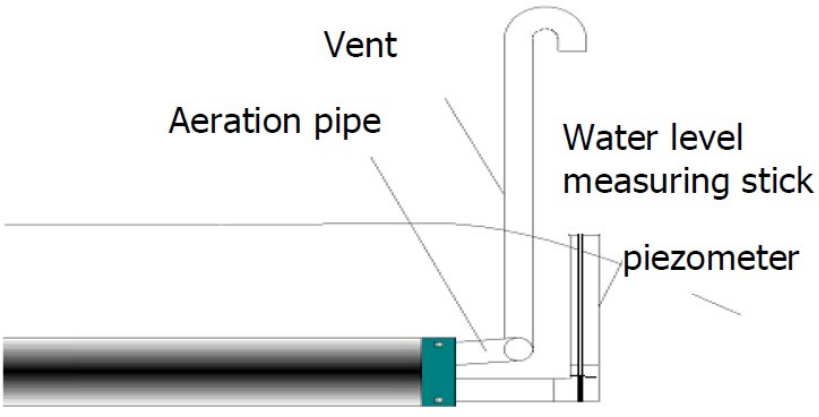
The procedure for measuring the water level takes place where the piezometer/ inspection ports are located at the far end of the AES System.

ATTN: Water present in the piezometers is wastewater. It is important to take the necessary precautions while taking the water level measurements. The person(s) taking the measurement must wear protective gloves. The use of disposable protective gloves is recommend per adequate PPE measures. In order to avoid possible contamination, avoid direct contact with the wastewater.

Water Level Measuring Sequence

- Remove the cap from the Piezometer/Inspection Port.
- Insert a wooden stick or Yardstick (measuring instrument) into the piezometer so that it comes in contact with the water that may be present. Normally a device with a length of 1m in length will be sufficient. Drop the measuring implement to the bottom of the piezometer.
- Record the water level in the pipe, using a ruler (or the yard stick directly), based upon the height of the wet area. If the reading is difficult to discern add some fine sand on the wet area before lowering it. Most of the sand will be removed from the area that is submerged, making the reading more clear.
- Replace the cap on the piezometer.
- Dry the wet area on the measuring device, using disposable rags.
- Repeat all the steps for each piezometer.
- Clean all re-usable materials and tools.
- Record the results obtained in the table provided.

Diagram of water level measurement



MAINTENANCE

Piezometer Record

Date & Time		Date & Time		Date & Time	
Piezometer	Water Level, select units (in, cm, mm)	Piezometer	Water Level, select units (in, cm, mm)	Piezometer	Water Level, select units (in, cm, mm)
Piezometer 1		Piezometer 1		Piezometer 1	
Piezometer 2		Piezometer 2		Piezometer 2	
Piezometer 3		Piezometer 3		Piezometer 3	
Piezometer 4		Piezometer 4		Piezometer 4	
Piezometer 5		Piezometer 5		Piezometer 5	
Piezometer 6		Piezometer 6		Piezometer 6	
Piezometer 7		Piezometer 7		Piezometer 7	
Piezometer 8		Piezometer 8		Piezometer 8	
Piezometer 9		Piezometer 9		Piezometer 9	
Piezometer 10		Piezometer 10		Piezometer 10	
Piezometer 11		Piezometer 11		Piezometer 11	
Piezometer 12		Piezometer 12		Piezometer 12	
Piezometer 13		Piezometer 13		Piezometer 13	
Piezometer 14		Piezometer 14		Piezometer 14	
Piezometer 15		Piezometer 15		Piezometer 15	
Piezometer 16		Piezometer 16		Piezometer 16	
Piezometer 17		Piezometer 17		Piezometer 17	
Piezometer 18		Piezometer 18		Piezometer 18	
Piezometer 19		Piezometer 19		Piezometer 19	
Piezometer 20		Piezometer 20		Piezometer 20	
Piezometer 21		Piezometer 21		Piezometer 21	
Piezometer 22		Piezometer 22		Piezometer 22	
Piezometer 23		Piezometer 23		Piezometer 23	
Piezometer 24		Piezometer 24		Piezometer 24	
Piezometer 25		Piezometer 25		Piezometer 25	
Piezometer 26		Piezometer 26		Piezometer 26	
Piezometer 27		Piezometer 27		Piezometer 27	
Piezometer 28		Piezometer 28		Piezometer 28	
Piezometer 29		Piezometer 29		Piezometer 29	
Piezometer 30		Piezometer 30		Piezometer 30	

MAINTENANCE

Piezometer/Inspection Ports
No general maintenance is required on the piezometers/inspection ports; aside from ensuring that the caps are in good condition, and installed securely.

Sampling Device
Your AES System may have a Sampling Device. The Standpipe must be installed with the cap at/above-grade, located adjacent to the rows of AES pipes.

If installed, the Owner/Operator must make sure that the cap is always on the Sampling Device. This device may be used on occasion by a technician to inspect the performance of the AES System according to requirements set by the Owner, Regional Authority, and/or Provincial or Federal Authority.

Vent
The vent(s) do not generally require much maintenance. The most important thing for the Owner/Operator/Service Provider to do, is to ensure that there are no blockages in the vent piping or in the vent caps. In the winter, the opening of the vent must be sufficiently elevated so that the snow does not block the passage of air through the system. There must always be a minimum elevation difference of 10 feet (3m) between the high and low vent.

Filter (System) Sand
There is no maintenance to be done on the filtering (System) Sand during normal use of the AES System.

Pump Station or Low Pressure Distribution System
In certain situations, site constraints may require the use of a Pump Station or a Low Pressure Distribution System to evenly distribute the effluent. The Owner/Operator is responsible to ensure that these components are maintained.

Pump Stations should be checked to ensure that the pump is functioning properly, floats are set correctly, and that the water level is reasonable. Effluent within this component should be mainly free of Suspended Solids (fine particles); as these may have a negative impact on the soil treatment component.

Low Pressure Distribution Systems should have the orifices checked on a regular basis to ensure that they are not plugged and that each row of the AES Pipes are receiving the same volume of flow. If orifices are plugged, the manifold can be scoured or orifices cleaned out to improve equalization.

MAINTENANCE

Cover over the AES System

The surface of the overburden on the AES System shall be gently sloped to encourage drainage of precipitation and runoff. It must then be covered with herbaceous vegetation such as grass to encourage uptake of moisture and prevent erosion. The grass must be cut regularly. Any settling after installation should be adjusted with loamy fill to ensure that low spots do not create opportunities for water to pool over the system.

Other Maintenance

For other maintenance or usage questions, please contact FRP Mocoat Fiberglass Ltd. For more information.

quotes@frpmocoat.com
1-866-722-6246

OWNER/OPERATOR'S RESPONSIBILITIES

The Owner/Operator is responsible to:

- Use the System O: The Next Generation of Advanced Enviro-Septic (AES) System according to both the instructions presented in this User Guide; as well as the design as approved and installed.
- Pump out the septic tank according to demand, and the regulations in effect at any given time.
- Record the information regarding pump-out of the septic tank and keep on file.
- Maintain the effluent filter (if installed), the pumping station (if installed), and the distribution system according to the manufacturer's specifications; and record the information.
- Ensure the vent openings are clear of any blockages.
- Respect the requirements of the applicable rules and regulations, in particular with regards of the discharge standards of the system and the environment as well as any other public organization, or Provincial and/or Federal Agency

Qualified Person(s)
Qualified persons are required to provide much of the service necessary on a septic system, inclusive of the AES System. The installer of your system is a Qualified Person. If you are in need of the information for additional Qualified Persons, please contact our Sales Team.

For maintenance on parts not directly associated with the AES System; the Owner/ Operator may need to consult their supplier of those components. These types of items may include Pumps, Controllers, Alarms, Tanks, etc… as the manufacturers of these items may have specific requirements.

Pumping out a septic tank must be performed by a company specializing in that field. Check with your municipality to find out what companies are qualified to do this type of work in your area.

FOLLOW-UP AGREEMENT

Context
According to NSF-40 Certification, all Certified System are required to come with an Initial Service Policy. This service policy shall furnish a two (2) year initial service agreement between the Owner/Operator and the System Installer or other Qualified Person(s).

Inclusions in Agreement
The following services must be included in the follow-up Agreement for a System O: Next Generation of Advanced Enviro-Septic (AES) System.

Annual Follow-up Visit (beginning the following calendar year after installation):

- Check Septic Tank and/or Pump Station condition & water levels
    - Determine whether pump out is required.
    - Check Pump Functionality, if installed.
    - Check Float Settings.
    - Pull data from Control Panel, if applicable.
- Check and record water levels in the piezometers.
- Check D-Box & adjust Equalizers, if required.
- Visually inspect ground conditions around Septic Tank & AES Piping System. Look for:
    - Resurgence of water.
    - Surface Water Runoff
    - Settling of backfill material. Is additional material required?
    - Condition of the Vent
    - Piezometer Water Levels and Condition
    - Sampling Device Levels and Condition
        - Complete sampling if required by Owner/Operator, Regional, Provincial, or Federal Authority.
- Ensure that all caps and covers are in good condition and properly secured.
- Make recommendations to the Owner/Operator for any changes or repairs required, as necessary.
- If the customer is present, you may show them how to complete the measuring procedure.

NOTE: The cost of pumping out the Septic Tank/Pump Station is not included in the follow-up contract. It is the same for the costs of draining or cleaning the AES Pipes during the time of a regeneration procedure.

INFORMATION ON YOUR SYSTEM

INSTALLATION DATE: _____

DESIGNER/ROWP/ENGINEER: _____

INSTALLER: _____

INSPECTOR (IF APPLICABLE): _____

PERMIT NUMBER: _____

PEAK/DAILY DESIGN FLOW: _____

SOIL EFFLUENT LOADING RATE: _____ **LINEAR LOADING RATE:** _____

TOTAL NUMBER OF PIPES: _____ **# OF PIPES PER ROW:** _____

 # OF ROWS OF PIPES: _____

DISTRIBUTION MECHANISM:

- ☐ DISTRIBUTION BOX
- ☐ PUMP STATION W/ LOW PRESSURE MANIFOLD
- ☐ PUMP STATION W/ PIPE IN PIPE DISTRIBUTION
- ☐ LOW PRESSURE MANIFOLD (PRESSURE TO GRAVITY)
- ☐ PRESSURE DISTRIBUTION (PIPE IN PIPE)

SEPTIC (PRE) TANK WORKING CAPACITY: _____

DOSE CHAMBER/TANK CAPACITY: _____

NOTES: _____

_____

_____

_____

_____

INFORMATION ON YOUR SYSTEM

ATTACH THE FOLLOWING DOCUMENTS TO THIS OWNER/OPERATOR MANUAL.

- **SITE & SOIL ANALYSIS & REPORT**
- **FLOW CALCULATIONS**
- **TANK SIZING CALCULATIONS**
- **AES WORKSHEET**
- **SYSTEM SAND APPROVAL**
- **SITE PLAN**
- **SYSTEM DRAWINGS**
- **COPY OF PERMIT**
- **INSTALLATION, OWNER MANUALS, AND WARRANTIES FOR ALL ADDITIONAL COMPONENTS, IE.**
    - **SEPTIC TANK/PUMP STATION**
    - **PUMP**
    - **CONTROL PANEL/HIGH LEVEL ALARM**
    - **FLOATS/SWITCHES**

INSPECTION CHECKLIST

DATE OF INSPECTION/SERVICE				
COMPONENTS (IF APPLICABLE)	**CHECK COMPLETED (YES / NO OR N/A)**	**FINDINGS**	**CORRECTIVE ACTIONS REQUIRED/ TAKEN**	**COMPLETED DATE**
SEPTIC TANK				
DOSE TANK				
PUMP TANK				
PUMP/SIPHON/FLOUT				
FLOATS & PUMP SWITCHES				
CONTROL PANEL/ HIGH LEVEL ALARM				
DISTRIBUTION LINE				
D-BOX & EQUALIZERS				
PUMP STN & LOW PRESSURE LINE				
PIPE IN PIPE				
VENT(S)				
PIEZOMETER/ INSPECTION PORTS				
SAMPLING DEVICE				
AES PIPE SYSTEM				
SYSTEM SAND (IF REQUIRED)				
SURFACE/BACKFILLED AREA OF AES SYSTEM				

INSPECTION NOTES

DATE OF INSPECTION/SERVICE	
OTHER NOTES	