Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection
One Winter Street Boston, MA 02108 • 617-292-5500

PILOTING APPROVAL
Pursuant to Title 5, 310 CMR 15.000

Name and Address of Applicant:

NORWECO, Inc.
220 Republic Street
Norwalk, OH 44857

Trade name of technology: NORWECO Subsurface Disposal system (hereinafter the 'System', 'Alternative System' or 'Technology').
Specifications of the System, Installation & Operation and a technology inspection checklist are part of this Approval.

Transmittal Number:	X287577
Date of Issuance:	December 9, 2021, Modified on December 20, 2021.
Date of Expiration:	December 9, 2026

Authority for Issuance

Pursuant to Title 5 of the State Environmental Code, 310 CMR 15.000, the Department of Environmental Protection hereby issues this Approval to: NORWECO, Inc. 220 Republic Street in Norwalk, OH (hereinafter 'the Company'), to Pilot in the Commonwealth of Massachusetts the System described herein. Sale and use of the System are conditioned on and subject to compliance by the Company, the Designer, the Installer, the Service Contractor, and the System Owner with the terms and conditions set forth below. Any noncompliance with the terms or conditions of this Approval constitutes a violation of 310 CMR 15.000.

/s/ Marybeth Chubb
Marybeth Chubb, Section Chief
Wastewater Management Program
Bureau of Water Resources

December 20, 2021
Date

I. Purpose

1. The purpose of Piloting Approval ('the Approval') is to allow installation and use of no more than 15 on-site sewage disposal systems utilizing the Technology in Massachusetts to provide field testing and a technical demonstration that a particular alternative system can or cannot function effectively under relevant physical and climatological conditions (310 CMR 15.285).

2. The Approval requires that sufficient performance testing be completed so that the Department may determine if the System can or cannot consistently provide a level of environmental protection at least equivalent to that of a system designed and constructed in accordance with 310 CMR 15.100 through 15.293.

3. The Approval authorizes the installation and use of a System to serve a facility with design flows less than 10,000 gallons per day, including new construction, an increase in flow at an existing facility, or an upgrade or replacement of an existing failed or nonconforming system as long as the facility meets the siting requirements, including a reserve area. The facility must meet the specific siting conditions for piloting an Alternative System (310 CMR 15. 285(2)), and the facility must meet the siting requirements of this Approval.

4. With the other applicable permits or approvals that may be required by Title 5, the Approval authorizes the installation and use of the Alternative System in Massachusetts. All the provisions of Title 5, including the General Conditions for all Alternative Systems (310 CMR 15.287), apply to the sale, design, installation, and use of the System, except those provisions that specifically have been varied by the Approval.

II. System Description

The System is a pressure distributed subsurface wastewater drip dispersal (disposal) system that replaces a conventional soil absorption system (SAS). The System is designed to distribute secondary effluent and pressure discharge it at a depth of at least 6 inches below finished grade. The System shall be preceded by a secondary treatment unit Certified for General Use and effectively distribute the effluent into the subsurface soil in a controlled manner. The System shall allow effluent to be evenly dispersed throughout the entire area of the drip field. Effluent disposal shall be accomplished through evapotranspiration, nutrient uptake by vegetation and uniform dispersal into the shallow subsurface soil. The System shall be used only for disposal of treated effluent and shall be installed immediately downstream of the wastewater treatment systems. Floor drains, foundation drains, downspouts and other storm water sources shall not be connected to the drip disposal system.

The System includes a pump chamber, control panel, a filter module/hydraulic unit and drip dispersal zone(s) with drip tubing incorporating discharge emitters. The dispersal zone(s) include small diameter flexible polyethylene tubing with turbulent flow emitters regularly spaced inside the line. The System can be designed with either classic turbulent flow emitters or with pressure compensating emitters spaced one or two feet apart. The tubing is extruded with an inner lining of an anti-microbial agent to prevent bacterial growth. Dispersal field dosing is timed and controlled electronically to provide pre-programmed volumes of effluent for discharge to each dispersal zone(s). Each zone shall have air release valves at the high points of manifolds and check valves on each return manifold in multi-zone systems. The System shall be equipped with a totalizing flow meter.

The System shall be specifically designed for use in wastewater applications. Principal items of equipment supplied shall include an effluent pump chamber, high head effluent pump, integrated system controls, mechanical float switches, headworks assembly, optional zone

indexing valve, supply lines, pressure compensating drip tubing, air/vacuum relief valves and return lines. Wastewater treatment systems that do not include non-mechanical flow equalization, pretreatment, secondary treatment and effluent filtration are subject to washout of solids and shall not be considered for this Application.

Treated effluent shall be retained in the pump chamber and be distributed throughout the entire day to the disposal field in programmable, low volume doses. The pump chamber shall contain a submersible high head pump for delivery of the treated effluent to the headworks assembly. Within the headworks assembly, flow shall pass through a 100 micron disc filter before continuing to the pressurized supply line manifold. The supply manifold shall extend the length of the disposal field. Flexible connector assemblies shall be used to attach individual lengths of drip tubing to the supply line manifold at 24" intervals. Along each length of drip tubing, pressure compensating emitters shall be located at 24" intervals for even effluent distribution in the disposal field. The downstream end of each individual length of drip tubing shall be connected to the effluent return line manifold with flexible connector assemblies.

The return line piping shall be routed back through the headworks assembly. Inside the headworks assembly, the flush valve shall maintain constant back pressure in the upstream drip tubing and all other piping. The flush valve shall maintain a constant low volume flow during pump operation. The valve shall be fully opened during system service to create a high volume flush of the field piping back to the pump chamber. A flexible tube connection shall allow the 100 micron filter reservoir to constantly direct filtered solids to the return line downstream of the flush valve.

Air/vacuum relief valves shall be located at the high points of the supply line and the return line. The valves shall prevent soil from being drawn into the drip tubing as effluent drains to the pump chamber during the "off' cycle. The air/vacuum relief valves shall also permit rapid filling of the supply lines, return lines and drip tubing by purging air from the lines during the pump "run" cycle. Applications needing a pump delivery rate in excess of 20 gallons per minute (GPM) shall require the use of an automatic zone indexing valve. The valve shall allow the total disposal field area to be divided into independent zones. Each of the zones shall be dosed sequentially by automatic indexing of the valve.

III. Site Application, Design and Installation Requirements

1. Each proposed site-specific use of the System to be piloted must be reviewed by the Department prior to installation of the System. The Owner shall submit to the Department the written approval of the Local Approving Authority (LAA or BOH), together with a copy of the completed Department application BRP WP 64b and obtain Department written approval as required by 310 CMR 15.285(2).

2. The Designer shall be a Massachusetts Registered Professional Engineer or a Massachusetts Registered Sanitarian if a system is < 2,000 gpd.

3. The Drip Dispersal System may only be used for disposal of wastewater provided that it is preceded by a secondary treatment unit Certified for General Use and the effluent discharge concentrations from the secondary treatment unit to the Drip Dispersal System shall not exceed secondary treatment standards of 30 mg/L CBOD5 and 30 mg/L TSS and the effluent pH range shall be 6.0 to 9.0.

4. The System shall include the following:

a) Pumps capable of providing pressure of 20-30 psi throughout the dispersal zone(s). Delivery of the treated effluent to the sub-surface discharge system shall be metered throughout the day. The pump chamber, combined with available storage in the pretreatment units, shall provide minimum 18 hour retention of the design daily flow from the facility being served at least one-day storage, as required by 310 CMR 15.231.
b) Timed dosing for the drip system with a timer controller capable of operating the system during peak flow events without high-level alarms.
c) A self-cleaning filter capable of screening particles larger than 100 microns prior to discharge of the effluent to the drip tubing. The filter shall be provided with a flush valve on the debris end; a ball with a constant bleed or a solenoid valve that can be activated by the timer.
d) Air vents in a zone shall be placed at a higher elevation than the drip tubing in that zone but below the ground surface. Air vents shall be accessible from finished grade and insulated to prevent freezing.
e) Drip tubing lines installed as level as possible on contour and a minimum of 6 inches below finished grade. Drip line spacing is typically 24 inches with drip tubing emitters typically spaced 24 inches on center. The downstream end of each individual length of drip tubing shall be connected to effluent return line manifold with flexible connector line assemblies.

5. The dispersal area shall not be installed under a paved surface, or in areas of routine traffic, parking or storage of heavy equipment.

6. No planting or soil excavation shall be done in or within 5 feet of the drip disposal area after its installation.

7. The system may be designed to allow for installation of drip tubing up to five feet from a building cellar wall.

8. No change in existing surface slope over the dispersal field is required to comply with 310 CMR 15.240(10).

9. The System may be installed in soils with a percolation rate of up to 60 minutes per inch (MPI) in Class I, II, or III soils, subject to the restrictions of the Approval. The System shall not be installed in Class IV soils as defined in 310 CMR 15.243.

10. The System may be installed in the A, B or C soil horizon or in fill material meeting the specifications at 310 CMR 15.255(3), at a depth of at least 6 inches below, but not more than 24 inches below, the finished grade. The use of the A horizon (or fill material) shall not be included in the determination of the required minimum of 4 feet of naturally occurring pervious material. For proposed installations in the A or B soil horizon, a soil evaluation shall be performed to determine whether or not these soils are the most restrictive layer and the appropriate loading rate for the design of the Drip Dispersal System. The soil evaluation of the A and B horizon must be acceptable to the local approving authority and may include, but not necessarily be limited to, a sieve analysis or a modified shallow percolation test.

11. A reserve area for a conventional leaching system shall be provided which does not underlie or include any of the installed effective dispersal area. A reserve area capable of only being used for a drip dispersal system shall not be adequate to meet the reserve area requirement.

12. The record drawings, on file with the local approving authority, shall clearly indicate an area capable of supporting a primary conventional leaching system separate from a reserve area for a conventional leaching system. The drawings shall indicate that the area for a full-sized primary SAS and the area for a full-sized reserve SAS are for the sole purpose of on-site sewage disposal.

13. The installation of the System shall not disturb the site in any manner that would preclude the future installation of a conventional system with a full-sized SAS while preserving the approved full-sized reserve area, both designed in accordance with the current Title 5 standards for new construction. If the drip dispersal system is installed in the area shown on the plans for the conventional primary area, the installation shall not disturb or alter the area in any way that would prevent the primary area from being reused for the future installation of a conventional leaching system.

14. The System Owner shall not construct any permanent buildings or structures or disturb the site in any manner that would require encroaching on the approved reserve area to install, in the future, a full-sized conventional SAS.

15. The effective dispersal area shall be calculated as the bottom area of the drip tubing system. No sidewall effective dispersal area credit shall be given for Drip Dispersal Systems.

16. The maximum effective dispersal area allowed per emitter shall be 4 square feet (2 feet by 2 feet), provided that adjacent lines of the tubing are spaced at least 2 feet apart and the emitters are at least 2 feet apart along the length of the tubing. The effective dispersal area provided by each emitter shall not overlap with the effective dispersal area provided by an adjacent emitter.

17. The minimum spacing between emitters along the tubing shall be 24 inches and minimum spacing between lines of drip tubing shall be 24 inches. Emitters in the effective dispersal area shall not exceed one emitter per square foot.

18. If additional drip tubing is installed in the future, the effective dispersal area for each existing and new emitter must be recalculated based on the new separation distances and the requirements above.

19. Based on the soil characteristics (classification and percolation rate) of the most restrictive layer of underlying naturally occurring pervious materials, Drip Dispersal Systems shall provide an effective effluent dispersal area equal to the effective leaching area required by Title 5.

20. For residential Systems with design flows less than 2000 gpd, the required effective dispersal area may be reduced up to 50 percent when using the loading rates for gravity systems of 310 CMR 15.242(1)(a), provided that the System includes a secondary treatment unit with General Use Certification that allows for a 50% reduction in effective leaching area. Any reduction in effective leaching area shall be in accordance with the requirements and limitations of the secondary treatment unit General Use Certification and this Certification. No further reduction is allowed in addition to the reduction allowed under the secondary treatment unit General Use Certification.

21. For flows of 2000 gpd or greater and for all nonresidential systems, no reduction in the effective dispersal area is allowed. Alternatively, the effluent loading rates provided in 310 CMR 15.242(1)(b) for pressure distribution may be utilized, but no reduction in the effective leaching area may be taken when using these loading rates, as stated in the regulation.

22. The supply lines, drip tubing manifolds, and headers shall be sloped to allow effluent to drain back to the effluent pump (dosing) chamber by gravity to prevent freezing or installed at a depth of least four feet. The drip tubing shall be designed to drain into the soil upon completion of the pump cycle.

23. For Systems with a design flow of 2,000 GPD or greater, the System shall be equipped with a flow meter and automatic remote telemetric notification to the Service Contractor.

24. The System shall be equipped with sensors and high-level alarms to protect against high water due to pump failure, pump control failure, loss of power or system freeze up. The control panel including alarms and controls shall be mounted in a location always accessible to the Service Contractor.

25. The System does not require a five foot over dig as indicated at 310 CMR 15.255(5).

26. All System control units, valve boxes, drip dispersal lines, conveyance lines and other System appurtenances shall be designed and installed to prevent freezing per the Company's recommendations.

27. Installation of inspection ports as described in 310 CMR 15.240(13) is not required for this System.

28. Upon submission of an application for a Disposal System Construction Permit (DSCP), the Designer shall provide to the local Approving Authority:
    a) proof that the Designer has satisfactorily completed any required training by the Company for the design and installation of the Technology;
    b) for any proposed non-residential System or any residential System with a design flow 2,000 GPD or greater, certification by the Company as specified in Paragraph V.2.
    c) certification by the Designer that the design conforms to the Approval and 310 CMR 15.000; and
    d) a certification, signed by the Owner of record for the property to be served by the Technology, stating that the property Owner:
        i. has been provided a copy of the Approval, the Owner's Manual, and the Operation and Maintenance Manual and the Owner agrees to comply with all terms and conditions;
        ii. has been informed of all the Owner's costs associated with the operation including, when applicable: power consumption, maintenance, sampling, recordkeeping, reporting, and equipment replacement;
        iii. understands the requirement for a service contract;
        iv. agrees to fulfill his responsibilities to provide a Deed Notice as required by 310 CMR 15.287(10) and the Approval;
        v. agrees to fulfill his responsibilities to provide written notification of the Approval to any new Owner, as required by 310 CMR 15.287(5);
        vi. if the design does not provide for the use of garbage grinders, the restriction is understood and accepted; and

vii. whether or not covered by a warranty, the System Owner understands the requirement to repair, replace, modify or take any other action as required by the Department or the local Approving Authority, if the Department or the local Approving Authority determines that the Alternative System is not capable of meeting the performance standards.

29. The System Owner and the Designer shall not submit to the local Approving Authority a DSCP application for the use of a Technology under this Certification if the Certification has been revised, reissued, suspended, or revoked by the Department prior to the date of application. The Certification continues in effect until the Department revises, reissues, suspends, or revokes the Certification.

30. The System Owner shall not authorize or allow the installation of the System other than by a person trained by the Company to install the System.

31. Prior to the commencement of construction, the System Installer must certify in writing to the Designer, the local Approving Authority, and the System Owner that (s)he is a locally approved System Installer and has received appropriate training by the Company.

32. Except where the Approval specifically states otherwise, the Alternative System shall be installed in a manner which does not intrude on, replace, or adversely affect the operation of any other component of the subsurface sewage disposal system.

33. Drip tubing may be installed with a vibratory plow, a static plow, a narrow trencher (<6" width), by hand trenching, or by scarifying the surface and bedding the drip tubing in clean sand meeting the requirements for fill material in Title 5 at 310 CMR 15.255(3) with cover consisting of sand and topsoil meeting the 6 inch minimum depth requirement. Vegetative cover must be replaced for installations where it is removed or buried during installation.

34. The Installer shall maintain on-site, at all times during construction, a copy of the approved plans, the Owner's manual, the O&M manual, and a copy of the Approval.

35. Prior to the issuance of a Certificate of Compliance for the Alternative System, the Company or its designee shall submit to the local approving authority and the System Owner a signed certification that the Alternative System has been installed in accordance with the Company's requirements, the approved plan, and the Approval. This certification in no way changes the requirements of 310 CMR 15.021(3) for the Designer and Installer certifications.

36. The Department has not determined that the performance of the System will provide a level of protection to public health and safety and the environment that is at least equivalent to that of a sanitary sewer system.
    a) If it is feasible to connect a new or existing facility to the sewer, the Designer shall not propose an Alternative System to serve the facility and the facility Owner shall not install or use an Alternative System; and
    b) when a sanitary sewer connection becomes feasible after an Alternative System has been installed, the System Owner shall connect the facility served by the System to the sewer within 60 days of such feasibility and the System shall be abandoned in compliance with 310 CMR 15.354, unless a later time is allowed in writing by the Department or the local Approving Authority

IV. Operation and Maintenance, Monitoring, and Inspection

1. As stated in 310 CMR 15. 285(3), the Company shall implement a system monitoring and reporting plan as described in this Approval, covering no less than 18 months of operation at each facility to be piloted. For all Systems installed under the Approval, the Company or its authorized agent shall be responsible for oversight, monitoring, data collection, and submissions to the LAA and the Department

2. For the duration of the performance evaluation, the System Owner and the Company shall enter into an O&M Agreement. The Company shall be responsible for providing a qualified Service Contractor to service the System during this period. Prior to commencement of construction of a System installation, the Company shall provide to the LAA a copy of a signed O&M Agreement with the System Owner. For the duration of the performance evaluation, the Company shall maintain a copy of the current O&M Agreement.

3. The System shall be inspected, monitored, operated, and maintained by a Service Contractor under an O&M Agreement in accordance with this Approval and in accordance with any Company, Designer, or LAA requirements. The Service Contractor must be trained by the Company, must be on the Company's current list of Service Contractors.

4. Prior to issuance of the Certificate of Compliance, a clean water test of the System shall be performed in the presence of a Company representative and the Service Contractor to check for leaks and for the proper distribution of effluent and to ascertain and verify system design flush and dose rates. The local approving authority shall be given adequate notification and opportunity to witness the clean water test, or at their discretion, may accept a letter from the Company representative certifying that the System operated properly during the clean water test.

5. The Company shall provide written notification to the Department within seven days of any cancellation or expiration of the O&M Agreement required for the duration of the performance evaluation.

6. At a minimum any O&M Agreement shall include the following provisions:

   a) The name of the qualified Service Contractor that appears on the Company's current list of Service Contractors;

   b) In the case of a System failure, equipment failure, alarm event, components not functioning as designed, or violations of the Approval, procedures and responsibilities of the Company, the Service Contractor, and the System Owner shall be clearly defined for corrective measures to be taken immediately;

   c) The Service Contractor shall agree to provide written notification within five days, describing corrective measures taken, to the System Owner, the local board of health, and the Company; and

   d) Procedures and responsibilities for recording wastewater flows and power consumption during the performance evaluation must be defined. If direct metering of power consumption is not feasible, equipment run times shall be recorded in order for the Company to provide recorded estimates of power consumption of the facility.

6. The System Owner and the Service Contractor shall maintain on-site, at all times, a copy of the approved plans, the Owner's Manual, the O&M Manual, a copy of the Approval, and a copy of the current O&M Agreement.

7. The System Owner and the Service Contractor shall provide written notification to the LAA within seven days of any cancellation, expiration or other change in the terms and/or conditions of the required O&M Agreement.

8. At a minimum, the Service Contractor shall inspect, properly operate, and properly maintain the System:

   a) any time there is System failure, equipment failure, or an alarm event;

   b) in accordance with the O&M manual and Designer requirements;

   c) in accordance with the requirements of the LAA;

   d) in accordance with the Approval; and

   e) for seasonal use, the Service Contractor shall be on-site and responsible for the proper start-up and shut down of the Alternative System.

   f) shall submit inspection data and inspection results within 45 days of each inspection to the System Owner and the LAA with the O&M report and inspection checklist, and to the Department. Submittal to the Department will be through the Barnstable County Septic Management Program's IA Tracking Database: https://septic.barnstablecountyhealth.org/ The inspection results reported must include the information recorded/required on a DEP approved inspection form (https://www.mass.gov/lists/title-5-septic-system-forms#title-5-inspections-&-pumping-forms-) and the Company's technology inspection checklist

9. Each time a Pilot Alternative System is inspected by a Service Contractor the following shall be recorded, at a minimum:

   a) date, time, air temperature, and weather conditions;

   b) observations for objectionable odors;

   c) observations for signs of breakout of sanitary sewage in the vicinity of the Alternative System, which indicate a failure of the Alternative System;

   d) identification of any apparent violations of the Approval;

   e) since the last inspection, whether the system had been pumped with date(s) and volume(s) pumped;

   f) sludge depth and scum layer thickness, if measured;

   g) when responding to alarm events, the cause of the alarm and any remedial steps taken to address the alarm and to prevent or reduce the likelihood of future similar alarm events;

   h) field testing results, if any;

   i) list of samples taken for laboratory analysis, if any;

   j) any cleaning and lubrication performed;

   k) any adjustments of control settings, as recommended or deemed necessary;

   l) any testing of pumps, switches, alarms, as recommended or deemed necessary;

   m) identification of any equipment failure or components not functioning as designed;

n) parts replacements and reason for replacement, whether routine or for repair; and

o) further corrective actions recommended, if any.

10. Flow Metering – For Alternative Systems installed under Piloting Approval, wastewater flow data shall be reported each time the System is inspected and/or sampled by the Service Contractor. At a minimum, wastewater flow shall be based on:

    a) actual metering data of wastewater flow to the System; or

    b) actual water meter data for the total facility with either metered or estimated flows for non-wastewater flow subtracted from the total facility water usage. If estimating the wastewater flow as a portion of total metered water usage, the Service Contractor shall provide the method of estimating, such as pump run times, occupancy rates, adjusting for seasonal outdoor water use, etc.

System Monitoring Responsibility

11. For at least the first 18 months of operation and until a System's Performance Evaluation (PE) has been completed by the Company, the Company shall be responsible for the following minimum inspection requirements:

    a) For year-round properties the facility shall be inspected quarterly.

    b) Seasonal properties shall be inspected at least twice per year, once 30 to 60 days after occupancy and the second inspection shall be done no less than 2 months after the first inspection or just prior to the seasonal end-of-use.

    Quarterly inspection shall be performed not less than 2 months since the last inspection and not more than 4 months since the last inspection.

12. After a minimum of 18 months and completion of the PE of a System that shows the System was in compliance with Title 5, and the performance goals and conditions of this Approval for at least the previous 12 months, and upon approval by DEP, the System Owner and the Service Contractor shall be responsible for the following:

    a) For design flow rates of less than 2,000 gpd, the Service Contractor shall inspect and service the System at least annually, in accordance with Company requirements and checklist.
    b) For actual or design flow rates of 2,000 gpd or greater, the System shall be inspected and serviced at least quarterly, consistent with the pressure distribution inspection requirements of 310 CMR 15.254(2)(d) and in accordance with Company requirements and checklist

13. Within 45 days of each site visit, all inspection data shall be submitted to the System Owner and the LAA with the O&M report and inspection checklist, and to the Department. Submittal to the Department will be through the Barnstable County Septic Management Program's IA Tracking Database: https://septic.barnstablecountyhealth.org/

    The inspection results reported must include the information recorded/required on a DEP approved inspection form (https://www.mass.gov/lists/title-5-septic-system-forms#title-5-inspections-&-pumping-forms-) and the Company's technology inspection checklist

Compliance Requirements

14. The System shall be subject to the following performance requirements:
    a) whenever the ponding level within the SAS is above the invert of the pump chamber, an additional measurement shall be made 30 days later. If the subsequent reading indicates the elevation of ponding within the SAS is above the invert of the pump chamber, within 60 days of the follow up inspection, a written evaluation with recommendations for changes in the design, operation, and/or maintenance of the System shall be submitted to the LAA. The written evaluation with recommendations shall be prepared by the Service Contractor or a Designer and the submission shall include all monitoring data, inspection reports, and laboratory analyses for the previous year; and
    b) recommendations for any changes to the System shall be implemented, as approved by the LAA, in accordance with an approved schedule, provided that all corrective measures are implemented consistent with the limitations described in Paragraph V.8.
15. Responsibility for completing these compliance requirements will be carried out by the Company until the completion of the Performance Evaluation (PE) period and the responsibility shall be passed upon the owner and operator after the successful completion and approval of PE by the Department.
16. For Systems failing to comply with any terms of the Approval until the Company submits a Performance Evaluation report to the System Owner and the LAA showing the System was in compliance with Title 5, effluent limits, and the performance goals and conditions of this Approval for at least the previous 12 months, the Company or its authorized agent shall determine the cause(s) of the noncompliance. The Company shall provide written recommendations for corrective actions to the System Owner and the LAA. Corrective actions may include but are not limited to design changes, installation changes, operation or maintenance changes including sampling modifications, and/or changes in roles and responsibilities for the manufacturer, vendors, designers, installers, service contractors and owners. Any recommended changes which are not consistent with this Approval shall first be submitted to the Department with an application for an Approval modification.

    The Company shall be responsible for implementation of recommended changes, as approved by the LAA, in accordance with an approved schedule. All corrective measures implemented shall be consistent with the Approval and the other limitations described in Paragraph V.8.

17. Unless directed by the LAA to take other action, the System Owner shall immediately cease discharges or have wastewater hauled off-site, if at any time during the operation of the Alternative System the system is in failure as described in 310 CMR 15.303(1)(a)1 or 2, backing up into facilities or breaking out to the surface.

V. Additional System Owner and Service Contractor Requirements

1. Prior to issuance of a Certificate of Compliance for a System installation, the System Owner shall record and/or register the Deed Notice required by 310 CMR 15.287(10) and provide a copy to the LAA. The Deed Notice shall be completed as follows:
    a) Certified Registry copy of the Deed Notice bearing the book and page/or document number;
    b) If the property is unregistered land, a copy of the System Owner's deed to the property as recorded at the Registry, bearing a marginal reference on the System Owner's deed to the property; and

c) The Notice to be recorded shall be in the form of the Notice provided by the Department Title 5 septic system forms | Mass.gov

2. Prior to signing any agreement to transfer any or all interest in the property served by the System, or any portion of the property, including any possessory interest, the System Owner shall provide written notice, as required by 310 CMR 15.287(5) of all conditions contained in the Approval to the transferee(s). Any and all instruments of transfer and any leases or rental agreements shall include as an exhibit attached thereto and made a part of thereof a copy of the Approval for the System. The System Owner shall send a copy of such written notification(s) to the LAA within 10 days of giving such notice to the transferee(s).

3. The System Owner shall provide access to the site for the Company and the Service Contractor to perform inspections, maintenance, repairs, responding to alarm events and field testing as may be required by the Approval, including sampling the System in accordance with the Approval.

4. The System Owner and the Service Contractor shall maintain copies of the Service Contractor's O&M reports, inspection checklists, and all reports and notifications to the LAA for a minimum of three years.

5. The System Owner shall not install, modify, upgrade, or replace the System except in accordance with a valid DSCP issued by the LAA which covers the proposed work.

6. Upon determining that the System is in violation of the Approval or the System has failed, as defined in 310 CMR 15.303, the Service Contractor shall notify the System Owner immediately.

7. Upon determining that the System has failed, as defined in 310 CMR 15.303, the System Owner and the Service Contractor shall be responsible for the notification of the LAA within 24 hours of such determination.

8. In the case of a System failure, an equipment failure, alarm event, components not functioning as designed, components not functioning in accordance with manufacturer's specifications, or violations of the Approval, the Service Contractor shall provide written notification within five days describing corrective measures to the System Owner, the LAA and the Company and may only propose or take corrective measures provided that:

   a) all emergency repairs, including pumping, shall be in accordance with the limitations and permitting requirements of 310 CMR 15.353;

   b) the design of any repairs or upgrades are consistent with the Alternative System Approval;

   c) the design of any repairs or upgrades requiring a DSCP shall be performed by an individual meeting the qualifications of Paragraph III.2;

   d) the installation shall be done by an Installer with a currently valid Disposal System Installers Permit (310 CMR 15.019) and the Installer shall also comply with Paragraph III.31.

   The System Owner shall also be responsible for ensuring written notification is provided within five days to the local Board of Health.

9. The Service Contractor shall provide written notification to the Company within seven days of any cancellation, expiration or other change in the terms and/or conditions of a required O&M Agreement.

10. By September 30th of each year, the System Owner and the Service Contractor shall be responsible for submitting to the LAA all O&M reports, all monitoring results, and inspection checklists completed by the Service Contractor during the previous 12 months.

11. By September 30th of each year, the Service Contractor shall be responsible for submitting to the Company copies of all O&M reports including alarm event responses, all monitoring results, violations of the Approval, inspection checklists completed by the Service Contractor, notifications of system failures, and reports of equipment replacements with reasons during the previous 12 months.

12. The Service Contractor shall notify the System Owner of any changes to the terms and conditions of the Approval within 30 days of any changes.

13. Upon the Company's completion of a System performance evaluation (PE) report finding the System in compliance with Title 5, effluent limits, and the performance goals and conditions of this Approval for at least the previous 12 months (see Paragraph VI. 5), the System Owner and Service Contractor shall be responsible thereafter until the conditions of the Approval are modified, terminated, or superseded by a new Approval. The System Owner and the Service Contractor shall enter into an O&M Agreement and the Agreement shall be at least for one year.

14. Within one year of any changes to the terms and conditions of the Approval, the System Owner shall amend, as necessary, the O&M Agreement required by Paragraphs IV.2 & 3 to reflect the changes to the terms and conditions of the Approval.

15. The System Owner shall furnish the Department any information that the Department requests regarding the System, within 21 days of the date of receipt of that request.

16. The Approval shall be binding on the System Owner and on its agents, contractors, successors, and assigns, including but not limited to the Designer, Installer, and Service Contractor. Violation of the terms and conditions of the Approval by any of the foregoing persons or entities, respectively, shall constitute violation of the Approval by the System Owner unless the Department determines otherwise.

VI. Company Requirements

1. The Approval shall only apply to the model unit(s) with the same model designations specified in the Technology's Pilot Approval and meet the same specifications, operating requirements and plans as provided by the Company at the time of the application. Any proposed modifications to the units, installation requirements, or operating requirements shall be subject to the review of the Department for inclusion under a modification of the Approval. The Company shall be responsible for verification of the appropriate model unit as part of the review of proposed installations under the Approval.

2. The Company must offer to the System Owner a two-year initial service policy with the purchase of the Technology that includes eight (8) site visits (every 3 months). The Company must make available, for a fee, an extended service policy for a minimum of 5 years beyond the two-year initial service policy.

3. Prior to submission of an application for a DSCP, the Company shall provide to the Designer and the System Owner:

   a) all design and installation specifications and requirements;

   b) an operation and maintenance manual, including:
      i an inspection checklist;
      ii. recommended inspection and maintenance schedule;
      iii. monitoring (i.e. water use and power consumption) and sampling procedures, if any;
      iv. alarm response procedures, if any, and troubleshooting procedures;

   c) an owner's manual, including proper system use and alarm response procedures, if any;

   d) estimates of the Owner's costs associated with System operation including, when applicable: power consumption, maintenance, sampling, recordkeeping, reporting, and equipment replacement;

   e) a copy of the Company's warranty, and

   f) lists of Designers, Installers, and Service Contractors.

4. Upon submission of an application for a DSCP to the Approving Authority, the Company shall submit to the Approving Authority, with a copy to the Designer and the System Owner, a certification by the Company or its authorized agent that the design conforms to the Approval and that the proposed use of the System is consistent with the unit's capabilities and all Company requirements. The review shall include evaluation of the need for installation of water meter(s) at each facility. An authorized agent of the Company responsible for the design review shall have received technical training in the Company's products.

5. Upon completion of the Performance Evaluation (PE) of a System after a minimum of 18 months of operation, the Company shall submit to the System Owner and the LAA a PE report on the System describing and summarizing the operations of the System, any changes in operation or design that were made during the piloting performance evaluation period and the results of the piloting program for that System. The report shall also include whether the System was in compliance with Title 5, the effluent limits, and the performance goals and conditions of this Approval for at least the previous 12 months of operation. That report shall also include either recommendations for approving and ending the piloting program for that System or recommendations for continuing piloting for any System that has not performed as planned and/or required.

   a. Upon completion of the PE of a System, if a System is not in compliance with Title 5 or this Approval for at least the previous 12 months of operation as determined by the Department, the Company shall either continue the piloting program for that system, or upgrade or replace the System with a fully complying Title 5 I/A or conventional system.

   b. Upon completion of the PE of a System, showing the System was in compliance, for at least the previous 12 months with Title 5, the effluent limits, the performance goals, and

the conditions of this Approval, and upon approval of the PE by the Department, the Company may turn the responsibility for operation and monitoring of the System over to the System Owner and Service Contractor in accordance with this Approval (see Paragraph IV.12 for continuing inspection requirements).

6. The Company shall institute programs of training and continuing education for Service Contractors. Training shall be provided at least annually. If the Company requires trained Designers and Installers, the Company shall institute programs of training and continuing education that is separate from or combined with the training for Service Contractors. The Company shall maintain, annually update, and make available by March 15th of each year, lists of approved Service Contractors and, if training is required, Designers and Installers. The Company shall certify that the Service Contractors and Designers and Installers on the lists have taken the appropriate training and passed the Company's training qualifications. The Company shall further certify that the Service Contractors on the list have submitted to the Company all the reports required by Paragraphs V.8, 9, and 11.

   The Company shall not re-certify a Service Contractor if the Service Contractor has not complied with the reporting requirements for the previous year.

7. If Installer training is required by the Company, the Company shall not sell the Technology to an Installer unless the Installer is trained. The Company shall also require, by contract, the distributors and resellers of the Technology shall not sell the Technology to an Installer unless the Installer is trained.

8. As part of any training programs for Designers, Installers, and Service Contractors, the Company shall provide each trainee with a copy of the Approval with the design, installation, O&M, and owner's manuals that were submitted as part of the Approval.

9. The Company shall provide, in printed or electronic format, the System design plan, installation, O&M, and Owner's manuals, and any updates associated with this technology Approval, to the System Owners, Designers, Installers, Service Contractors, vendors, resellers, and distributors of the System. The Company shall submit to the Department a copy of any proposed changes to the manual(s) with reasons for each change at time of issuance. The Company shall request Department approval for any substantive changes which may require a modification of the Approval.

10. Prior to its sale of any System that may be used in Massachusetts, the Company shall provide the purchaser with a copy of the Approval with the System design, installation, O&M, and Owner's manuals. In any contract for distribution or sale of the System, the Company shall require the distributor or seller to provide the purchaser of a System for use in Massachusetts with copies of these documents, prior to any sale of the System.

11. The Company shall furnish the Department any information that the Department requests regarding the Technology within 21 days of the date of receipt of that request.

12. Within 60 days of issuance by the Department of a revised Approval, the Company shall provide written notification of changes to the Approval to all Service Contractors servicing existing installations of the Technology and all distributors and resellers of the Technology.

13. The Company shall provide written notification to the Department's Director of the Wastewater Management Program at least 30 days in advance of the proposed transfer of ownership of the Technology for which the Approval is issued. Said notification shall include the name and address of the proposed owner containing a specific date of transfer of ownership, responsibility, coverage and liability between them.

14. The Company shall maintain records of:
    a) the Approval;
    b) design and installation manuals;
    c) an owner's manual, including alarm response procedures, if any;
    d) an operation and maintenance manual, including:
        i. an inspection checklist;
        ii. recommended inspection and maintenance schedule;
        iii. monitoring requirements, if any (including water use and power consumption when required) and sampling procedures, and
        iv. alarm response procedures, if any, and troubleshooting procedures.
    e) estimates of the operating costs provided to the Owner, including, when applicable: power consumption, maintenance, sampling, recordkeeping, reporting, and equipment replacement;
    f) a copy of the Company's warranty, and
    g) lists of Designers, Installers, and trained Service Contractors.

15. The Company shall maintain the following information for the Systems installed in Massachusetts:
    a) the address of each facility where the Technology was installed, the Owner's name and address (if different), the type of use (e.g. residential, commercial, institutional, etc.), the design flow, the model installed;
    b) the installation date, start-up date, current operational status;
    c) the name of the Service Contractor, noting any cancellations or changes to any Service Contracts;
    d) a summary of system failures, system malfunctions, and violations of the Approval with the date of each event and corrective actions taken to reach compliance, including but not limited to: design changes; installation changes; operation/maintenance changes; monitoring changes; and/or changes in roles and responsibilities for the manufacturer, vendors, designers, installers, service contractors and owners;
    e) copies of all Service Contractor records submitted to the Company, including all O&M reports with alarm event responses, all monitoring results, inspection checklists completed by the Service Contractor, notifications of system failures, and reports of equipment replacements with reasons; and
    f) copies of any completed PE reports.

16. By March 15th of each year the Company shall submit to the Department an annual report that contains the following information for all Systems installed prior to January 1st of that year:
    a) a table of the information required by Sections a, b, c, d and f of the preceding Paragraph;
    b) a table of monitoring data collected for all Systems installed to-date;

c) a list of pending applications for System installations which have been submitted to local approving authorities.

d) identification of each System failure to comply with any performance criteria of the Approval or the system monitoring and reporting plan, including but not limited to, effluent quality limits. Include the date of each event, the date that the System was returned to compliance, and the reasons for the noncompliance and the corrective actions that were taken, including but not limited to any design changes, installation changes, operation or maintenance changes including sampling, and/or changes in roles and responsibilities for the manufacturer, vendors, designers, installers, service contractors and owners;

e) for any System in violation of the Approval or not in compliance with any performance criteria at the time of the annual report, the reasons for the noncompliance and the status of any corrective actions that are needed;

f) any recommendations and requests for changes to the system monitoring and reporting plan or the performance criteria of the Approval; and

The report shall be signed by a corporate officer, general partner or the Company owner.

(*Service Contractor records submitted to the Company should not be included with the annual report, but shall be made available to the Department within 30 days of a request by the Department.*)

17. The Approval shall be binding on the Company and its officers, employees, agents, contractors, successors, and assigns, including but not limited to dealers, distributors, and resellers. Violation of the terms and conditions of the Approval by any of the foregoing persons or entities, respectively, shall constitute violation of the Approval by the Company unless the Department determines otherwise.

18. If the Company wishes to continue this Piloting Approval after its expiration date, the Company shall apply for and obtain a renewal of this Approval. The Company shall submit a renewal application at least 180 days before the expiration date of this Approval, unless permission for a later date has been granted in writing by the Department.

VII. General Requirements

1. Any Alternative System for which a complete DSCP application is submitted while the Approval is in effect, may be permitted, installed, and used in accordance with the Approval, unless and until:

   a) the Department issues modifications or amendments to the Approval which specifically affect the installation or use of an Alternative System installed under the Approval for the Technology; or

   b) the Department, the local approval authority, or a court requires the Alternative System to be modified or removed or requires discharges to the System to cease.

2. All notices and documents required to be submitted to the Department by the Approval shall be submitted to:

   Director
   Wastewater Management Program
   Department of Environmental Protection
   One Winter Street - 5th floor
   Boston, Massachusetts 02108

Rights of the Department

3. The Department may suspend, modify or revoke the Approval for cause, including, but not limited to, non-compliance with the terms of the Approval, non-payment of the annual compliance assurance fee, for obtaining the Approval by misrepresentation or failure to disclose fully all relevant facts or any change in or discovery of conditions that would constitute grounds for discontinuance of the Approval, or as necessary for the protection of public health, safety, welfare or the environment, and as authorized by applicable law. The Department reserves its rights to take any enforcement action authorized by law with respect to the Approval and/or the System against the Company, a System Owner, a Designer, an Installer, and/or Service Contractor.