Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection
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Standard Conditions for Secondary Treatment Units Approved for Remedial Use

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A Secondary Treatment Unit (STU) is an alternative technology that may be used as a component of an on-site sewage disposal system where soil or site conditions make conventional soil absorption systems more costly to construct or infeasible. A conventional system may be more costly to construct or infeasible where there is a shallow water table and/or limited area for the siting of a conventional system. As compared to a conventional system, in certain instances, an STU provides for higher loading rates (smaller leaching area) and may require less land area, potentially less fill, and less disturbance of the site.

The System consists of an STU designed to reduce the organic material and solids in the wastewater which reduces the demand for treatment in the soil absorption system. A conventional septic tank precedes the STU unless exempt by the Special Conditions for a specific Technology.

The use of an STU in accordance with this Approval for Remedial Use requires, among other things:

- A Disclosure Notice in the Deed to the property (310 CMR 15.287(10)) (A Deed Notice template is available from the Department);
- Certifications by the Designer and the Installer (310 CMR 15.021(3));
- A Massachusetts certified operator who has received training for the technology and is under contract for periodic inspection and maintenance (310 CMR 15.287(10));
- Periodic sampling, recordkeeping, and reporting, in accordance with this Approval;
- Notification within 24 hours by the System Owner to the local approving authority of any System failure;
- When pumping is required to discharge to the SAS, 24-hour emergency wastewater storage capacity above the elevation of the high level alarm; and
- System Owner Acknowledgement of Responsibilities, in accordance with this Approval.

Definitions and References:

The term "System" refers to the STU in combination with the other components of an on-site treatment and disposal system that may be required to serve a facility in accordance with 310 CMR 15.000.

The term "Approval" refers to these Standard Conditions applicable to all STU's with Remedial Use Approval, the Special Conditions contained in the Technology-specific Approval, the General Conditions of 310 CMR 15.287, and any other Attachments.

The Conditions contained herein MUST be read in conjunction with any Special Conditions that are Technology-specific.

I. Purpose

1. Approval for Remedial Use allows the use of the Alternative System only where the local Approving Authority finds that the Alternative System is for the upgrade or replacement of an existing failed, failing or nonconforming system with a design of flow of less than 10,000 gpd, where there is no increase in the actual or proposed design flow, and where a conventional system with a reserve area, designed in accordance with the standards of 310 CMR 15.100 through 15.255, cannot feasibly be built on-site.

2. The sale, design, installation, and use of the System shall be subject to these requirements for any system that submits a complete Disposal System Construction Permit (DSCP) application after the effective date of these Standard Conditions. Existing Systems and Systems for which a complete DSCP application was submitted prior to the effective date of these requirements shall not be subject to the design and installation requirements, however, the System Owner, the Service Contractor, and the Company shall be subject to all other requirements contained herein.

3. With the other applicable permits or approvals that may be required by 310 CMR 15.000, the Approval authorizes the installation and use of the Alternative System in Massachusetts. Except those provisions that specifically have been varied by this Approval, the provisions of 310 CMR 15.000, including the General Conditions of 310 CMR 15.287, apply to the sale, design, installation, and use of the System.

4. Unless stated otherwise in the Special Conditions that apply to a specific Technology, all the conditions contained in this document shall apply to secondary treatment units which have obtained Remedial Use Approval. (Special Conditions may be more or less stringent than the requirements of this document.)

5. Provided that the local Approving Authority approves the Alternative System in conformance with the Department's Technology Approval, Department review and approval of the site-specific System design and installation is not required unless the Department determines on a case-by-case basis, pursuant to its authority at 310 CMR 15.003(2)(e), that the proposed System requires Department review and approval.

II. Design and Installation Requirements

1. Effluent BOD_5, TSS and pH - The effluent discharge concentrations from the Secondary Treatment Unit to the SAS shall not exceed secondary treatment standards of 30 mg/L BOD_5 and 30 mg/L TSS and the effluent pH range shall be 6.0 to 9.0.

2. The Designer shall be a Massachusetts Registered Professional Engineer or a Massachusetts Registered Sanitarian, including when designing systems for repair, provided that such Sanitarian shall not design a system with a discharge greater than 2,000 gallons per day.

3. 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 designed and constructed in accordance with the standards of 310 CMR 15.200 - 15.279.

4. Except where the Approval specifically states otherwise, the Alternative System shall include a properly sized and constructed septic tank, designed in accordance with 310 CMR 15.223 – 15.229, connected to the building sewer and followed in series by the Technology and the SAS;

5. Alternative Design Standards - Provided that the Designer demonstrates that the impact of the proposed Alternative System has been considered and the design requirements of 310 CMR 15.000 have been varied to the least degree necessary so as to allow for both the best feasible upgrade within the borders of the lot and the least effect on public health, safety, welfare and the environment, the local approving authority may allow any combination of the following alternative design standards without the need for granting a variance under 310 CMR 15.400 or obtaining Department approval:
   a) If a reduction in the size of the SAS is necessary, the size of the SAS may be reduced up to 50 percent from the effective leaching area required when using the loading rates for gravity systems of 310 CMR 15.242(1)(a) for Systems sited in soils with a percolation rate of 60 minutes or less per inch, or for soils with a recorded percolation rate of between 60 and 90 minutes per inch, the loading rates of 310 CMR 15.245(4). (Alternatively, the effluent loading rates provided in 310 CMR 15.242(1)(b) for pressure distribution may be utilized, however, no reduction in the effective leaching area may be taken when using these loading rates, as stated in the regulation.); and/or
   b) If a reduction in the depth to groundwater required by 310 CMR 15.212 is necessary, the depth to groundwater may be reduced by up to 2 feet, resulting in a minimum separation distance of two feet in soils with a recorded percolation rate of more than two minutes per inch and three feet in soils with a recorded percolation rate of two minutes or less per inch, measured from the bottom of the soil absorption system to the high groundwater elevation; and/or
   c) If a reduction in the depth of the naturally occurring pervious material layer is necessary, a proposed reduction of up to 2 feet may be allowed in the four feet of naturally occurring pervious material layer required by 310 CMR 15.240(1) provided

that it has been demonstrated that no greater depth in naturally occurring pervious material can be met anywhere on the site.

6. Any proposed reduction in the required depth to groundwater, specified in 310 CMR 15.212, may only be approved when:
   a) An approved Soil Evaluator who is a member or agent of the local Approving Authority determines the high groundwater elevation;
   b) No reduction is granted under LUA for setbacks from public or private wells, bordering vegetated wetlands, surface waters, salt marshes, coastal banks, certified vernal pools, water supply lines, surface water supplies or tributaries to surface water supplies, or drains which discharge to surface water supplies or their tributaries, is allowed; and
   c) In accordance with 310 CMR 15.212(2), for systems with a design flow of 2,000 gpd or greater, the separation to high groundwater as required by 310 CMR 15.212(1) shall be calculated after adding the effect of groundwater mounding to the high groundwater elevation as determined pursuant to 310 CMR 15.103(3).

7. The Alternative Design Standards for effective leaching area, depth to groundwater, and depth of naturally occurring pervious material contained in the Department's Standard Conditions for Secondary Treatment Unit Approved for Remedial Use shall not be made less stringent by the local Approving Authority under the LUA provisions of 310 CMR 15.405 or under the variance procedures of 310 CMR 15.411. The local Approving Authority may vary other design requirements under the LUA provisions of 310 CMR 15.405 or under the variance procedures of 310 CMR 15.411.

8. Except those allowed under LUA and the Approval, any further deviation from the siting and design requirements of 310 CMR 15.000 for the remedial use of a Secondary Treatment Unit shall require the following:
   a) The applicant may propose the use of a Bottomless Sand Filter (BSF) as the means of on-site effluent disposal in conjunction with a Secondary Treatment Unit. The installation and use of the BSF must be in accordance with the conditions of the Remedial Use Approval issued by the Department for the BSF; and/or
   b) The applicant may request the approving authority to grant a variance.

9. The proposed use of a Secondary Treatment Unit Approved for Remedial Use shall be subject to the following:
   a) the approved record drawings, on file with the local approving authority, shall clearly indicate an area for the best feasible upgrade that could be installed to replace the proposed System, including the STU, in the event that the proposed System fails or it is determined that it is not capable of providing equivalent environmental protection;
   b) the installation of the proposed System shall not disturb the site in any manner that would preclude the future installation of the best feasible upgrade that could be installed to replace the proposed System. Components of the proposed System may

be sited in an area for the future installation of the best feasible upgrade, provided that it does not render the area unusable for a potential future upgrade; and

c) except for the installed SAS, the System Owner shall not construct any permanent buildings or structures in the area for the best feasible upgrade that could be installed to replace the proposed System and the System Owner shall not disturb the site in any other manner that would preclude the future installation of the best feasible upgrade.

10. When identifying the best feasible upgrade that could be installed to replace the proposed System, the Designer shall consider these options in the following order:

    a) a conventional system designed in accordance with the standards of 310 CMR 15.100 through 15.255 that can be built feasibly, with the exception of providing a reserve area (15.248);

    b) a conventional system that can only be built feasibly under a Local Upgrade Approval (LUA);

    c) where a conventional system cannot be built feasibly under a LUA, a Bottomless Sand Filter, in conjunction with an STU;

    d) where a System can only be built feasibly with variances, a System that has been demonstrated to vary the design requirements of 310 CMR 15.000 to the least degree necessary and have the least effect on public health, safety, welfare and the environment (the System may be an Alternative System with variances); or

    e) a tight tank.

11. For the upgrade or replacement of an existing failed or nonconforming system in a nitrogen sensitive area (NSA), as defined in 310 CMR 15.215, Systems serving facilities with actual or design flows of 2,000 GPD or greater must include treatment with a Recirculating Sand Filter (RSF) or equivalent technology, as required by 310 CMR 15.202(1). Secondary Treatment Units with Remedial Use Approval are not approved as an RSF equivalent technology and shall not be installed in a NSA, as defined in 310 CMR 15.215, to serve facilities with actual or design flows of 2,000 GPD or greater. (The technology may also have a separate approval for nitrogen reduction, but must be installed under that approval, when appropriate.)

12. Except for septic tank covers which are not required to be at grade, the frames and covers of the other access manholes and ports of the System components shall be watertight, made of durable material, and shall be installed and maintained at grade, to allow for necessary inspection, operation, sampling and maintenance access. Manholes brought to final grade shall be secured to prevent unauthorized access. No structures which could interfere with performance, access, inspection, pumping, or repair shall be located directly upon or above the access locations.

13. Any System structures with exterior piping connections located within 12 inches of or lower than the Estimated Seasonal High Groundwater elevation shall have the connections made watertight with neoprene seals or equivalent.

14. All System control units, valve boxes, distribution piping, conveyance lines and other System appurtenances shall be designed and installed to prevent freezing.

15. The System control panel including alarms and controls shall be mounted in a location always accessible to the operator (or service contractor).

    When pumping is required to discharge to the SAS, 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, system freeze ups, or backups. Emergency storage shall be required when pumping to discharge is employed, including pressure distribution. Emergency storage capacity for wastewater above the high level alarm shall be provided equal to the daily design flow of the System and the storage capacity shall include an additional allowance for the volume of all drainage which may flow back into the System when pumping has ceased.

16. System malfunction alarms or high water alarms shall be readily visible and audible for the facility occupants and the Service Contractor and the alarms shall be connected to circuits separate from the circuits serving operating equipment and pumps.

17. The System shall not include any relief valve or outlet for the discharge of wastewater to prevent flooding of the system, back up or break out.

18. In compliance with 310 CMR 15.240(13), a minimum of one (1) inspection port shall be provided within the SAS consisting of a perforated four inch pipe placed vertically down to the elevation of the SAS interface with the underlying unsaturated pervious soils to enable monitoring for ponding. The pipe shall be capped with a screw type cap and accessible to within three inches of finish grade. (A locking cap at-grade is preferred for annual inspection.)

19. 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.3;
    c) certification by the Designer that the design conforms to the Approval, any Company Design Guidance, 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 estimated 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.

20. 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 Approval, if the Approval has been revised, reissued, suspended, or revoked by the Department prior to the date of application. The Approval continues in effect until the Department revises, reissues, suspends, or revokes the Approval.

21. The System Owner shall not authorize or allow the installation of the System other than by a locally approved Installer and, if required by the Company, a person certified or trained by the Company to install the System.

22. 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, if required by the Company, is certified by or has received appropriate training by the Company.

23. 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.

24. Prior to the issuance of a Certificate of Compliance by the local Approving Authority, the System Installer and Designer must provide, in addition to the certifications required by 310 CMR 15.021(3), certifications in writing to the local Approving Authority that the System has been constructed in compliance with the terms of the Approval.

25. 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.

    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.

    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.

III. Operation and Maintenance, Effluent Quality, Monitoring, and Inspection

1. From start up and thereafter, the System Owner and Service Contractor shall be responsible for the proper operation and maintenance of the System in accordance with this Approval, the Designer's O&M requirements, the Company's O&M requirements, and the requirements of the local Approving Authority. The System Owner and Service Contractor shall be responsible for compliance with the sampling, monitoring, and inspection requirements. Any inspection, operation, maintenance, or monitoring requirements remain in effect until the conditions are modified, terminated, or superseded by a new Approval.

2. To ensure proper operation and maintenance (O&M) of the System, the System Owner shall enter into an O&M Agreement with a qualified Service Contractor whose name appears on the Company's current list of Service Contractors and has been certified, at a minimum, at Grade Level II (two) by the Board of Registration of Operators of Wastewater Treatment Facilities, in accordance with Massachusetts regulations 257 CMR 2.00.

3. The System shall comply with the following monitoring requirements and effluent limits. The required O&M Agreement with the Service Contractor shall include the following monitoring schedule, at a minimum, subject to modifications that may be required by Paragraphs III.8.a)and 8.b):

Parameter	Monitoring Frequency	Sample Type	Location	Effluent Limits
pH	See frequency specified below	grab	effluent to SAS	6 to 9
turbidity	See frequency specified below	measure	effluent of treatment unit	≤ 40 NTU
settleable solids	See frequency specified below	measure	effluent of treatment unit	Measure and record ml/l only
color	See frequency specified below	visual observation	effluent of treatment unit	Record observation only

Parameter	Monitoring Frequency	Sample Type	Location	Effluent Limits
dissolved oxygen (D.O.)	See frequency specified below	measure	effluent of treatment unit	≥ 2 mg/l
Depth of Ponding Within SAS	once every year	measure	Inspection port to bottom of SAS	See Paragraph III.10
Thickness of floating grease/scum layer	Once every 3 years	measure	Septic tank or other process tank where solids are retained	Pump out, as necessary
Depth of Sludge and distance to effluent tee/filter/outlet	Once every 3 years	measure	Septic tank or other process tank where solids are retained	Pump out, as necessary

4. An individual household shall be monitored at least once every 12 months (exclusive of alarm responses or other maintenance visits).

5. Facilities (residential and nonresidential) with a design flow of less than 2,000 gpd, other than an individual household, shall be monitored a minimum of twice/year with a minimum of 5 months since the last monitoring inspection (exclusive of alarm responses or other maintenance visits) and a maximum of 7 months between monitoring inspections.

6. Facilities (residential and nonresidential) with a design flow of 2,000 gpd or greater shall be monitored quarterly not less than 2 months since the last monitoring inspection (exclusive of alarm responses or other maintenance visits) and not more than 4 months between monitoring inspections.

7. For Systems that include a Bottomless Sand Filter (BSF) for effluent disposal, the monitoring requirements shall be as specified in the BSF Remedial Use Approval.

8. Systems installed under this Remedial Use Approval shall be subject to the following Performance Requirements:
   a) Whenever field tests indicate a pH outside the specified range, an exceedance of the turbidity limit, or D.O. below the desired minimum, the Service Contractor shall make adjustments and/or repairs to the System, as deemed necessary during the inspection, and collect an effluent sample for laboratory analysis for BOD_5 and TSS;
   b) For an individual household, if laboratory analyses indicate an exceedance of 30 mg/L BOD_5 or 30 mg/L TSS, the Service Contractor shall conduct a follow-up inspection and field-testing within 180 days of the original inspection date. Should the follow-up field-test indicate a pH outside the specified range, an exceedance of

the turbidity limit, or D.O. below the desired minimum, the Service Contractor shall make adjustments and/or repairs to the System, as deemed necessary during the inspection, and collect another effluent sample for laboratory analysis for BOD_5 and TSS; and

c) Whenever two consecutive monitoring rounds for any Secondary Treatment Unit include at least one exceedance of the limits for BOD_5 or TSS, the System Owner shall be responsible for submitting to the local Approving Authority, within 90 days of the second exceedance of the limits for BOD_5 or TSS, a written evaluation with recommendations for changes in the design, operation, and/or maintenance of the System. 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 since the last annual report to the local Approving Authority.

Recommendations shall be implemented, as approved by the local Approving Authority, in accordance with an approved schedule, provided that all corrective measures are implemented consistent with the limitations described in Paragraph IV.9.

9. Each time an Alternative System is visited 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) depth of ponding within the SAS, if measured
   e) identification of any apparent violations of the Approval;
   f) since the last inspection, whether the system had been pumped with date(s) and volume(s) pumped;
   g) sludge depth and scum layer thickness, if measured;
   h) 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;
   i) field testing results when performed as part of the site visit;
   j) samples taken for laboratory analysis, if any;
   k) any cleaning and lubrication performed;
   l) any adjustments of control settings, as recommended or deemed necessary;
   m) any testing of pumps, switches, alarms, as recommended or deemed necessary;
   n) identification of any equipment failure or components not functioning as designed;
   o) parts replacements and reason for replacement, whether routine or for repair; and
   p) further corrective actions recommended, if any.

10. Whenever an SAS inspection port measurement indicates the ponding level within the SAS is above the invert of the distribution system, 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 distribution system, the System Owner shall be responsible for submitting to the local Approving Authority, 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. 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.

    Recommendations shall be implemented, as approved by the local Approving Authority, in accordance with an approved schedule, provided that all corrective measures are implemented consistent with the limitations described in Paragraph IV.9.

11. Unless directed by the local Approving Authority 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.

IV. Additional System Owner and Service Contractor Requirements

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

2. Prior to commencement of construction of the System and after recording and/or registering the Deed Notice required by 310 CMR 15.287(10), the System Owner shall provide to the local Approving Authority a copy of:
    a) a certified Registry copy of the Deed Notice bearing the book and page/or document number; and
    b) if the property is unregistered land, a Registry copy of the System Owner's deed to the property, bearing a marginal reference on the System Owner's deed to the property.

    The Notice to be recorded shall be in the form of the Notice provided by the Department.

3. 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 local Approving Authority within 10 days of giving such notice to the transferee(s).

4. The System Owner and Service Contractor shall properly operate and maintain the System in accordance with the Approval, the Designer's O&M requirements, the Company's O&M requirements and the requirements of the local Approving Authority.

5. Prior to commencement of construction of the System, the System Owner shall provide to the local Approving Authority a copy of a signed O&M Agreement that meets the requirements of Paragraph IV.6.

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 O&M Agreement.

   The O & M agreement shall be at least for one year and include the following provisions:

   a) The name of a Service Contractor who meets the qualifications specified in the Approval;
   b) The Service Contractor must inspect the Alternative System as required by the Approval;
   c) The Service Contractor shall be responsible for obtaining lab analyses and submitting the monitoring results to the System Owner and the local Approving Authority in accordance with the reporting requirements; and
   d) In the case of a System failure, an equipment failure, alarm event, components not functioning as designed, or violations of the Approval, procedures and responsibilities of the Service Contractor and System Owner shall be clearly defined for corrective measures to be taken immediately. 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.

7. The Service Contractor shall notify the System Owner of any changes to the terms and conditions of the Approval within 60 days of any changes.

8. 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 Paragraph IV.6 to reflect the changes to the terms and conditions of the Approval.

9. In the case of a System failure, an equipment failure, alarm event, components not functioning as designed, components not functioning in accordance with manufacturers' specifications, or violations of the Approval, the Service Contractor shall provide written notification within five days, describing corrective measures taken, to the System Owner, the local board of health, 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 II.2;

d) the installation of any repairs or upgrades requiring a DSCP shall be done by an Installer with a currently valid Disposal System Installers Permit, in accordance with 310 CMR 15.019 and the Installer shall also comply with Paragraph II.22.

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

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

11. 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 local Approving Authority; and
    d) in accordance with the Approval.

12. The Service Contractor shall collect samples, if required by the Approval, and obtain analysis results from an approved laboratory, perform any required field testing, and submit results to the System Owner with the O&M report and inspection checklist within 60 days of the site visit. The O&M report and inspection checklist shall include, at a minimum, any required wastewater analyses, any required flow data, and all the information required to be recorded for a maintenance inspection of an Alternative System.

13. The System Owner and the Service Contractor shall maintain copies of any wastewater analyses, wastewater flow data, field testing results, the Service Contractor's O&M reports, inspection checklists, and all reports and notifications to the local Approving Authority for a minimum of three years.

14. 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.

15. 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 local Approving Authority within 24 hours of such determination.

16. In the case of a System failure, an equipment failure, violations of the Approval, an alarm event, or components not functioning as designed or in accordance with the Company specifications, the Service Contractor shall provide written notification to the Company within five days describing proposed corrective measures or corrective measures taken.

17. Violations of the BOD5, TSS, or pH in the System effluent shall not constitute a failure of the System for the purposes of 24-hour notification or 5-day written reporting as required in provisions applicable to all Alternative Systems. Breakout constitutes a failure of the System. If breakout occurs, the Service Contractor and System Owner shall comply with the 24-hour notification or 5-day written reporting provisions applicable to all Alternative Systems**.**

18. By March 1st of each year, the System Owner and the Service Contractor shall be responsible for submitting to the local Approving Authority all O&M reports, all monitoring results, and inspection checklists completed by the Service Contractor during the previous calendar year.

19. The System Owner and the Service Contractor shall provide written notification to the local Approving Authority within seven days of any cancellation, expiration or other change in the terms and/or conditions of a required O&M Agreement with a Service Contractor**.** 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 with a System Owner.

20. By March 1st 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 calendar year.

21. To determine whether cause exists for modifying, revoking, or suspending the Approval or to determine whether the conditions of the Approval have been met, 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.

22. 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.

V. Company Requirements

1. The Approval shall only apply to model units with the same model designations specified in the Technology Approval and meet the same specifications, operating requirements, and plans, as provided by the Company at the time of the application. Any proposed modifications of 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 Designer shall be responsible for the selection of the appropriate model unit except, for systems of 2,000 gpd or more and nonresidential systems, the Company

shall be responsible for verification of the appropriate model unit as part of the review of proposed installations under a Remedial Use Approval.

2. 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 alarm response procedures, if any;
   d) Estimates of Owner's costs associated with the 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 qualified Service Contractors and, if training is required, qualified Designers and Installers.

3. Prior to the submission of an application for a DSCP, for all nonresidential Systems and Systems with design flows of 2,000 gpd or greater, the Company shall submit to the Designer and the System Owner, a certification by the Company or its authorized agent that the design conforms to the Approval and all Company requirements and that the proposed use of the System is consistent with the Technology's capabilities. The authorized agent of the Company responsible for the design review shall have received technical training in the Company's products.

4. The Company shall maintain programs of training and continuing education for Service Contractors. Training shall be made available at least annually. If the Company requires trained Designers or Installers, the Company or its authorized agent shall institute programs of training and continuing education that is separate from or combined with the training for Service Contractors. The Company or its authorized agent shall maintain, annually update, and make available by February 15th of each year, lists of Service Contractors and, if certification or training is provided by the Company, Designers and Installers. The Company or its authorized agent shall certify that the Service Contractors and, if training is required, Designers and Installers on the lists have taken the appropriate training and passed the Company's training qualifications. The Company or its authorized agent shall further certify that the Service Contractors on the list have submitted to the Company all the reports required by Paragraphs IV.16, 19, and 20.

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

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

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

7. The Company shall provide, in printed or electronic format, the System design, 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. Prior to publication or distribution in Massachusetts, the Company shall submit to the Department for review a copy of any proposed changes to the manual(s) with reasons for each change, at least 30 days prior to issuance. The Company shall request Department approval for any substantive changes, as stated in Paragraph V.8.

8. Prior to publication or distribution in Massachusetts, when substantive changes in the design, installation, operation, or maintenance of the System may be outside the limits of this Approval and may require a modification of this Approval or may be the basis for a separate Approval, the Company shall request approval by the Department.

9. Prior to its sale of any System that may be used in Massachusetts, the Company shall provide the purchaser with a copy of this 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.

10. To determine whether cause exists for modifying, revoking, or suspending the Approval or to determine whether the conditions of the Approval have been met, 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.

11. Within 60 days of issuance by the Department, 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.

12. 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.

13. The Company shall maintain copies of:
    a) the Approval;
    b) the installation manual specifically detailing procedures for installation of its System;
    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 and recommendations(including water use and power consumption when required) and sampling procedures;
        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 trained Service Contractors and, if training or certification is required, Designers and Installers.

14. 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, operators, and owners; and
    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.

    All of the information required by this Paragraph shall be maintained by Company and shall be made available to the Department within 30 days of a request by the Department.

15. 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

VI. General Requirements

1. Any 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 a System installed under the Approval for the System; or
   b) the Department, the local approval authority, or a court requires the 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

3. The Department may suspend, modify or revoke the Approval for cause, including, but not limited to, noncompliance with the terms of the Approval, non-payment of any 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 a System utilizing the Technology against the Company, a Designer, a System Owner, an Installer, and/or Service Contractor.