

Department of Environmental Protection

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CERTIFICATION FOR GENERAL USE Pursuant to Title 5, 310 CMR 15.000

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Name and Address of Applicant:

American Manufacturing Company, Inc. 22011 Greenhouse Road, PO Box 97 Elkwood, VA 22718

Trade name of technology and model:

PERC-RITE Drip Dispersal System, Models QM(WD), ASD-15, ASD-25 & ASD-40 (hereinafter called the "System"). A schematic drawing of a typical System, a Design Manual, an Installation Manual, and an inspection checklist are part of this Approval.

Transmittal Number: X250379 Date of Issuance: March 15, 2007, revised November 23, 2016

Authority for Issuance

Pursuant to Title 5 of the State Environmental Code, 310 CMR 15.000 ("Title 5" or "the Code"), the Department of Environmental Protection hereby issues this Certification for General Use to: American Manufacturing Company, Inc., PO Box 97, Elkwood, VA 22718 (Hereinafter "the Company"), for 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 Certification constitutes a violation of 310 CMR 15.000.

Often

David Ferris, Director Wastewater Management Program Bureau of Water Resources

November 23, 2016 Date

This information is available in alternate format. Call Michelle Waters-Ekanem, Diversity Director, at 617-292-5751. TTY# MassRelay Service 1-800-439-2370 MassDEP Website: www.mass.gov/dep

I. Purpose

- 1. Department approved Drip Dispersal Systems provide alternatives to a conventional leaching system and alternatives to some of the other design requirements of Title 5.
- 2. This Certification is for the installation of a System to serve a facility for which a site evaluation in compliance with 310 CMR 15.000 has been approved by the Approving Authority and the site meets the siting requirements for new construction..
- 3. This Certification shall not be used for the installation of a System to upgrade or replace an existing failed or nonconforming system, unless the facility meets the siting requirements for new construction, including a reserve area. All other proposed upgrades utilizing this System shall be in conformance with the Remedial Use Approval issued by the Department for this System.
- 4. With the other applicable permits or approvals that may be required by Title 5, the Certification for General Use authorizes the installation and use of the System in Massachusetts. All the provisions of Title 5, including the General Conditions for 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 this Approval.
- 5. Provided that the local approving authority approves the System in conformance with the Department's General Use Certification for the System, 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.
- 6. The Department has determined that the System is equivalent to a pressure distribution system designed in accordance with the Department's Pressure Distribution Guidance.

II. Design and Installation Requirements

- 1. The Drip Dispersal System may only be used for disposal of wastewater effluent from a Title 5 septic tank meeting the most current standards for new construction or from a secondary treatment unit Certified for General Use by the Department. In addition to the requirements of this Approval, when a secondary treatment unit precedes the Drip Dispersal System, the Designer, the Installer, the Service Contractor, and System Owner shall be responsible for compliance with the requirements of the Department unit Certification.
- 2. 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 septic tank or secondary effluent and pressure discharge it at a depth of at least 6 inches below finished grade. The System includes a pump, 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 pressure compensating emitters. The emitters operate on a pressure differential across the emitter, with wastewater discharged in small doses. Dispersal field dosing is timed and controlled electronically to provide pre-programmed volumes of effluent for discharge to each dispersal zone(s). The System allows periodic backwashing of the filtration system and forward-flushing of the dispersal tubing with the flush/backwash effluent conveyed by return line to the septic tank. The System may include single (the QM/WD model) or two-stage (the ASD models) automatic backwashing disc filters within the filter module and air vents in each dispersal zone. 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.

- 3. The System shall include the following:
 - a) Pumps capable of providing pressure of 10-60 psi throughout the dispersal zone(s). Each drip dispersal zone shall be dosed a minimum of four times per day, or as recommended by the Company. Duplex pumping shall be provided for facilities with design flows of 2,000 gpd or greater. The pump chamber, combined with available storage in the pretreatment units, shall provide at least one-day storage, as required by Title 5.
 - 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) Automatically backwashed filter(s) capable of screening particles larger than 115 microns prior to discharge of the effluent to the drip tubing. Filter(s) backwash shall be conveyed back to a separate settling tank or to the septic tank.
 - 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 spaced 24 inches on center. The drip dispersal tubing shall be automatically forward flushed after a pre-programmed number of dosing cycles as determined by the Company. Flushing velocity shall be at least 2 feet per second at the distal end(s) of each drip dispersal lateral within a zone. All drip line flushwater shall be conveyed back to the pump tank, a separate settling tank or to septic tank.
 - f) The dispersal area shall not be installed under a paved surface, or in areas of routine traffic, parking or storage of heavy equipment. In addition no planting or soil excavation shall be done in or within 5 feet of the drip disposal area after its installation. The system may be designed to allow for installation of drip tubing up to five feet from a building cellar wall.
 - g) No change in existing surface slope over the dispersal field is required..
- 4. The System may be installed in soils with a percolation rate of up to 60 minutes per inch (MPI) in Class I, II, III, or IV soils, subject to the restrictions of the Approval. The

System shall only be installed in Class IV soils, as defined in 310 CMR 15.243, when the design has been reviewed and certified by the Company (see Paragraph V.3).

- 5. The System may be installed in the A, B or C soil horizon or in fill material meeting the current Title 5 specifications, 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.
- 6. The minimum effective dispersal area provided for the System shall be based on the soil loading rate (gpd/sq.ft.) derived from the Company's Design Guidance or the limitations imposed by this Approval, whichever is more stringent.
- 7. 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.
- 8. The effective dispersal area provided by each emitter shall not overlap with the effective dispersal area provided by an adjacent emitter.
- 9. The effective dispersal area shall be a maximum of 4 square feet per emitter (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.
- 10. The minimum spacing between lines of drip tubing shall be 12 inches. The total number of emitters in the effective dispersal area shall not exceed one emitter per 1 square foot of the effective dispersal area.
- 11. The System may have a layout which is different than a conventional system in terms of shape. Accordingly, a reserve area must be provided that meets the dimensional requirements of a conventional soil absorption system using either standard or pressure distribution loading rates.
- 12. Prior to using Perc-Rite Drip Dispersal for new construction, the record drawings submitted to the Approving Authority shall demonstrate that both a primary and reserve area for a conventional SAS can be designed for this the property, including both a primary and a reserve area. Once it has been determined that a conventional system can be constructed the record drawings can then depict the location of a primary Perc-Rite Drip Dispersal system, sized per this Approval, which would be constructed. No additional Perc-Rite Drip Dispersal reserve area need be depicted. The System Owner shall not construct any permanent buildings or structures or disturb the site in any manner (except for installation of drip tubing) on the approved conventional reserve area in a manner that would prohibit installation, if needed, of a full-sized conventional SAS.

- 13. 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.
- 14. <u>Residential Systems less than 2000 gpd, Alternative Design Standard to 310 CMR</u> <u>15.242(1)(a) Effluent Loading Rates</u> – 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 Drip Dispersal System is preceded by 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 reduction is allowed in addition to the reduction allowed under the secondary treatment unit General Use Certification flows of 2000 gpd or greater and for all nonresidential systems, no reduction in the effective dispersal area is allowed.

The record drawings must indicate an area for a full-sized conventional primary SAS and the area for a full-sized conventional reserve SAS are for the sole purpose of upgrading the on-site sewage disposal system in the future, if necessary, without any increase in flow.

(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.)

- 15. 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 and shallow manifolds shall be designed to drain into the soil upon completion of the pump cycle.
- 16. 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.
- 17. Except for septic tank covers which are not required to be at grade, the frames and covers of all 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.
- 18. The System shall be equipped with sensors and high-level alarms to provide notification to the System Owner and Service Contractor of a high water situation 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.

- 19. The System does not require a five foot over dig as indicated at 310 CMR 15.255(5).
- 20. 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.
- 21. System unit malfunction and high water alarms shall be connected to circuits separate from the circuits to the operating equipment and pumps.
- 22. Any System structures with exterior piping connections located within 12 inches or below the Estimated Seasonal High Groundwater elevation shall have the connections made watertight with neoprene seals or equivalent.
- 23. Installation of inspection ports as described in 310 CMR 15.240(13) is not required for this System.
- 24. .Upon submission of an application for a Disposal System Construction Permit (DSCP), the Designer shall provide to the local Approving Authority:
 - a) for any proposed non-residential System, any System to be installed in Class IV soils, or any residential System with a design flow 2,000 GPD or greater, certification by the Company as specified in Paragraph V.3.
 - b) certification by the Designer that the design conforms to the Approval, the Company Design Guidance, and the Code; and
 - c) a certification, signed by the Owner of record for the property to be served by the Technology, stating that the property Owner:
 - 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, 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 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 the System to be failing to protect public health and safety and the environment, as defined in 310 CMR 15.303.

- 25. 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.
- 26. The System Owner shall not authorize or allow the installation of the System other than by a person certified by the Company to install the System.
- 27. 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 been certified by the Company as qualified to install the System.
- 28. 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.
- 29. 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 current requirements for fill material in Title 5 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.
- 30. Drip tubing shall not be installed when soils are frozen or saturated.
- 31. 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.
- 32. Prior to the issuance of a Certificate of Compliance for the 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 Title 5 requirements for the Designer and Installer certifications.
- 33. 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 Title 5, certifications in writing to the local Approving Authority that the System has been constructed in compliance with the terms of the Approval.
- 34. 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 current Code requirements, unless a later time is allowed in writing by the Department or the local Approving Authority.

III. Operation and Maintenance

- 1. 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. 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.
- 2. 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 Certification, 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 all monitoring and inspection requirements. All inspection, operation, maintenance, and monitoring requirements remain in effect until the conditions are modified, terminated, or superseded by a new Approval.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. At a minimum, the Service Contractor shall clean the effluent tee filter according to 310 CMR 15.227(7), inspect pumps, controllers, air relief valves, and other system filters, and provide service, as necessary.

- 7. 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;
 - 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 steps taken to address the alarm and to prevent or reduce the likelihood of future similar alarm events;
 - h) any cleaning and lubrication performed;
 - i) any adjustments of control settings, as recommended or deemed necessary;
 - j) any testing of pumps, switches, alarms, as recommended or deemed necessary;
 - k) identification of any equipment failure or components not functioning as designed;
 - 1) parts replacements and reason for replacement, whether routine or for repair; and
 - m) further corrective actions recommended, if any.
- 8. 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. 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 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.

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

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

- 3. The System Owner shall provide access to the site for the Service Contractor to perform inspections, maintenance, repairs, and responding to alarm events, as may be required by the Approval.
- 4. The System Owner and the Service Contractor shall maintain an O&M Agreement at all times. The duration of the O & M Agreement shall be at least one year and shall include the following provisions:
 - a) The name of a Service Contractor, who meets the qualifications specified in the Approval, shall be included;
 - b) The Service Contractor's responsibilities for inspection, operation, maintenance, monitoring, recordkeeping and reporting, as required by this Approval shall be included;
 - c) In the case of a System which is determined to be failing to protect public health and safety and the environment, as defined in 310 CMR 15.303, 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, including corrective measures to be taken immediately.

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

- 5. The Service Contractor shall submit to the System Owner the O&M report and inspection checklist within 60 days of any site visit.
- 6. 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 local Approving Authority for a minimum of three years.
- Upon determining that the System is in violation of the Approval or the System is failing to protect public health and safety and the environment, as defined in 310 CMR 15.303, the Service Contractor shall notify the System Owner immediately.
- 8. Upon determining that the System is failing to protect public health and safety and the environment, 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.
- 9. In the case of a System that has been determined to be failing to protect public health and safety and the environment, 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 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 System Approval;
- c) the design of any repairs or upgrades requiring a DSCP shall be performed by a Designer who is a Massachusetts Registered Professional Engineer or a Massachusetts Registered Sanitarian, provided that such Sanitarian shall not design a system with a discharge greater than 2,000 gallons per day.
- d) the installation shall be done by an Installer with a currently valid Disposal System Installers Permit and the Installer shall be certified by the Company as qualified to install the System .

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 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.
- 11. By February 15th of each year, the System Owner and the Service Contractor shall be responsible for submitting to the local Approving Authority all O&M reports and inspection checklists completed by the Service Contractor during the previous 12 months.
- 12. By February 15th of each year, the Service Contractor shall be responsible for submitting to the Company copies of all O&M reports including alarm event responses, 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.
- 13. 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.
- 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 Paragraph III.1 to reflect the changes to the terms and conditions of the Approval.
- 15. 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.

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.

V. Company Requirements

- 1. The Approval shall only apply to model units with the same model designations specified in the System Approval and meet the same specifications, operating requirements, and plans, as provided by the Company or its authorized agent 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, the Company or its authorized agent shall be responsible for verification of the appropriate model unit as part of the review of proposed installations under a General Use Approval.
- 2. Prior to submission of an application for a DSCP, the Company or its authorized agent 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);
 - iv) alarm response procedures and troubleshooting procedures;
 - c) An owner's manual, including alarm response procedures;
 - d) Estimates of the Owner's costs associated with the operation including, when applicable: power consumption, maintenance, recordkeeping, reporting, and equipment replacement;
 - e) A copy of the Company's warranty; and
 - f) Lists of certified Installers and trained Service Contractors.
- 3. Prior to the submission of an application for a DSCP, for all nonresidential Systems, all Systems to be installed in Class IV soils, and all Systems with design flows of 2,000 gpd or greater, the Company or its authorized agent 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 System'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 must maintain 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 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 trained Service Contractors, certified Installers and, if training is provided, trained Designers. The Company or its authorized agent shall certify that the Service Contractors and, if training is provided, 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.9, 10, and 12.

- 5. 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.
- 6. The Company or its authorized agent shall not sell the System to an Installer unless the Installer is certified to install the System by the Company or its authorized agent. The Company or its authorized agent shall require, by contract, that distributors and resellers of the Technology shall not sell the System to an Installer unless the Installer is certified to install the System by the Company.
- 7. As part of any training programs for Service Contractors, Installers, or Designers, the Company or its authorized agent 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.
- 8. 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 System 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 which may require a modification of the Approval.
- 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 of a revised Approval, the Company shall provide written notification of changes to the Approval to all Service Contractors servicing existing installations of the System and all distributors and resellers of the System.
- 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 System. 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. All provisions of this Approval applicable to the Company shall be applicable to successors and assigns of the Company, unless the Department determines otherwise.
- 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;
 - 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);
 - iv) alarm response procedures and troubleshooting procedures.
 - e) estimates of the operating costs provided to the Owner, including, when applicable: power consumption, maintenance, recordkeeping, reporting, and equipment replacement;
 - f) a copy of the Company's warranty; and
 - g) lists of trained Designers (if any), certified Installers, and trained Service Contractors.
- 14. The Company shall maintain the following additional information for the Systems installed in Massachusetts and make it available to the Department within 30 days of a request by the Department:
 - a) the address of each facility where the System was installed, the Owner's name and mailing 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; and
 - d) copies by 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.

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 Disposal System Construction Permit ("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, non-compliance with the terms of the Approval, 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.