

1.4.2.2 Extended Treatment Package System Approvals

Extended treatment package systems (ETPS) are required to undergo two levels of approval in Idaho (IDAPA 58.01.03.009.03). The first level of approval is provisional approval based upon a manufacturer's submitted literature and data that support the treatment claims for the product. The second level of approval is general approval based upon a manufacturer's proven performance after installation and operation in Idaho. Upon receiving provisional approval, a manufacturer must proceed to obtain general approval within a specified timeframe otherwise the product will be disapproved.

1.4.2.2.1 Provisional ETPS Approval

Provisional ETPS approval allows a manufacturer's unit to be installed on a property, but the system must undergo annual operation, maintenance, monitoring, and reporting performed by an approved service provider and third-party tester. Operation, maintenance, monitoring, and reporting are the responsibility of the manufacturer under provisional approval.

Manufacturers seeking provisional approval of ETPS technology shall submit product information to DEQ's on-site wastewater coordinator for review by DEQ. In addition to product information (i.e., engineering designs and product manuals), manufacturers seeking approval on ETPS units for reducing total suspended solids (TSS) and carbonaceous biological oxygen demand (CBOD₅) must submit NSF/ANSI Standard 40 approvals, reports, and associated data or equivalent third-party standards. Manufacturers also seeking approval on the ETPS units for reduction of total nitrogen (TN) must submit NSF Standard 245 approvals, reports, and associated data or equivalent third-party standards. Equivalency determinations of third-party standards shall be made by DEQ on a case-by-case basis. All third-party standards evaluated for the ETPS model must be submitted including approvals, disapprovals, reports, and associated data. ETPS units that have not undergone third-party testing and wish to be approved for reduction in TSS, CBOD₅, and TN must be permitted and installed under the guidance in Section 4.7, "Experimental System."

As part of their request for provisional approval, manufacturer shall submit a quality assurance project plan to document how sampling and analysis will occur under provisional approval and identify who will perform both the sampling and analysis. All operation and maintenance performed during the provisional approval stage shall be done by a service provider approved by DEQ. All effluent testing performed during the provisional approval stage shall be done by a third-party contracted by the manufacturer with experience in wastewater sampling. The service provider and effluent tester may not be the same individual or work for the same company. The manufacturer seeking approval and third-party tester will be responsible for obtaining property access for testing of their system's effluent during the provisional approval stage. The manufacturer shall also be responsible for effluent testing costs.

All ETPS manufacturers that obtain provisional approval for one of their products must attempt to gain general approval and shall follow the minimum operation, maintenance, and effluent-testing procedures outlined in section 4.8.3. Upon receiving provisional approval for an ETPS model, a manufacturer must install that specific ETPS model within 2 years. If installation of the provisionally approved product does not occur within 2 years of the provisional approval, the ETPS model shall be disapproved (IDAPA 58.01.03.009.04). Once a manufacturer's ETPS

model is installed under provisional approval, operation, maintenance, and monitoring of that unit as described in the manufacturer's quality assurance project plan and section 4.8.3 must begin that same reporting year unless the system was installed less than 3 weeks before the reporting deadline. Additionally, if operation, maintenance, and monitoring of the provisionally approved unit are not submitted to DEQ for any year after initial installation under provisional approval, the ETPS model shall be disapproved. Installed products under provisional approval that are disapproved shall be replaced by the manufacturer with a system that meets the installation requirements of the specific site where the ETPS model is installed.

1.4.2.2.2 General ETPS Approval

General ETPS approval allows a manufacturer's unit to be installed on a property without the requirement to sample effluent on an annual basis for systems that are not required to obtain a TN level <27 milligrams per liter (mg/L). The property owner must still have their ETPS unit undergo annual operation, maintenance, and reporting performed by an approved service provider.

To obtain general approval, or to lower reduction levels from those set in a general approval for any constituent, the EPTS model manufacturer must submit data from the ETPS models installed in Idaho. The data submitted must be obtained through operation, maintenance, and monitoring protocols described in section 1.4.2.2.1 under a DEQ-accepted quality assurance project plan. Data from other states will not be considered under this approval process. Any data submitted must be specific to a particular ETPS make and model. Data submission must include information on 30 installations with a minimum of 3 full years of operational data on each system, or the equivalent number of data points obtained on an annual basis for a lesser number of installations. All maintenance and effluent testing records, as described in section 4.8.3, obtained over this period must be submitted for review.

DEQ will issue general approval of an ETPS product in conjunction with associated reduction levels for TSS, CBOD₅, and TN. TSS and CBOD₅ reduction levels will be set at less than or equal to 45 mg/L and 40 mg/L, respectively, based on the data showing that 90% of the installed units have successfully maintained effluent reduction levels at, or below, 45 mg/L TSS and 40 mg/L CBOD₅. TN reduction levels will be determined through statistical analysis of the data submitted. The submitted data will be statistically evaluated to determine a resulting value that corresponds to a 95% upper confidence limit. The resulting value that corresponds to the 95% upper confidence limit will be used as the system's TN performance limit. Third-party report average reduction values will not be accepted to establish system performance approvals for any constituent.

For an adjustment in reduction levels of effluent constituents to be approved from a current general approval, a manufacturer must submit data that were obtained through a DEQ-accepted quality assurance project plan as described in section 1.4.2.2.1. Adjustments shall be made based on data analysis described in section 1.4.2.2.2 except that the data must be obtained over a period of at least 2 years regardless of the number of data points and must be obtained for all of the specific ETPS models installed in Idaho for which the adjustment is being requested.

1.4.2.3 Gravelless System Product Approvals

Manufacturers seeking approval of a gravelless system product (e.g., chamber or synthetic media) as an alternative to drainfield aggregate shall submit product information to the DEQ on-site wastewater coordinator for review by DEQ and TGC. In addition to product information described in section 1.4, manufacturers must submit NSF/ANSI Standard 240 approvals, reports, and associated data. Any additional third-party standards evaluated for the gravelless system product must also be submitted including approvals, disapprovals, reports, and associated data.

DEQ will issue gravelless system product approval with associated sizing reduction allowances. Sizing reductions will be determined by analyzing the open trench bottom area, associated sidewall area, and storage capacity in comparison to a standard trench. Each component will be analyzed independently and compared to a standard trench, taking into account NSF/ANSI Standard 240 data. Reductions provided may be allowed up to a maximum of 25%.

Approval of products that have not undergone NSF/ANSI Standard 240 will not be considered for sizing reductions.

1.4.2.4 Proprietary Wastewater Treatment Product Approval Policy

Proprietary wastewater treatment products (PWTP) for subsurface sewage disposal are produced by a manufacturer to provide secondary wastewater treatment. PWTPs shall be considered on a case-by-case basis by the TGC. The manufactured product must have treatment characteristics similar to single-pass or recirculating media filters to be classified as a proprietary wastewater treatment product. Products requiring mechanical components in excess of a single-pass or recirculating media filter or that may allow wastewater to pass through the system untreated by design will not be considered for proprietary approval.

PWTP manufacturers must obtain approval from DEQ before permitting and installation. To obtain approval, the manufacturer must submit the required information listed in section 1.4 of this manual to DEQ's on-site wastewater coordinator. To justify the product's effectiveness for wastewater treatment, the manufacturer must also submit the final evaluation report on the product from NSF International under the provisions of NSF/ANSI Standard 40 or another equivalent third-party standard. The NSF/ANSI Standard 40 report is required to obtain the same drainfield sizing reduction and separation distance reduction to limiting layers for the product as intermittent sand or recirculating gravel filters. If the manufacturer wants to obtain approval for TN reduction, they must submit the final evaluation report on the product from NSF International under the provisions of NSF/ANSI Standard 245 or another equivalent third-party standard. The NSF/ANSI Standard 245 report is required to obtain the same TN reduction as the recirculating gravel filter. Equivalency of third-party standards will be made by DEQ on a case-by-case basis.

Approval of PWTPs must be recommended to DEQ by the TGC. Approval of a PWTP may be required to undergo the same two-level approval process as ETSPs (section 1.4.2.2) depending on the system design and effluent reduction approvals sought. Approval processes and minimum installation requirements for PWTPs shall be determined on a case-by-case basis by the TGC. PWTPs submitted for approval that have not been evaluated under NSF/ANSI Standard 40 and/or 245, or another equivalent third-party standard shall not be considered for reduction in