WAC 246-272A-0130  Bacteriological reduction. This section establishes the requirements for registering bacteriological reduction processes.

(1) Manufacturers shall, for the purpose of product registration as described in WAC 246-272A-0110 and 246-272A-0120 for meeting treatment levels A, B, or C, verify bacteriological reduction performance by sampling for fecal coliform.

(a) For products not yet tested according to ANSI/NSF Standard 40 testing protocol dated July 1996 or later, the requirements of both ANSI/NSF Standard 40 and the protocol specified in subsection (2) of this section for verifying bacteriological reduction must be met.

(b) For products that have been tested according to ANSI/NSF Standard 40 dated July 1996 or later but have not yet been tested for bacteriological reduction, treatment performance of the treatment product or sequence may be established based on test results for CBOD₅ and TSS obtained from the previous ANSI/NSF Standard 40 testing and bacteriological reduction performance based on testing according to the protocol in subsection (2) of this section. Provided that the testing entity must verify the influent wastewater stream throughout the bacteriological testing period meets the influent threshold levels for CBOD₅ and TSS required by ANSI/NSF Standard 40 testing protocol.

(2) All test data submitted for product registration shall be produced by an ANSI accredited, third-party testing and certification organization whose accreditation is specific to on-site wastewater treatment products. Bacteriological reduction performance must be determined while the treatment product or sequence is tested according to the ANSI/NSF Standard 40 testing protocol. During this testing the following requirements apply:

(a) Collect samples from both the influent and effluent streams, identifying the treatment performance achieved by the full treatment process (component or sequence);

(b) Obtain influent characteristics falling within a range of $10^6 - 10^8$ fecal coliform/100 mL calculated as thirty-day geometric means during the test.

(c) Test the influent to any disinfection unit and report the following at each occasion of sampling performed in (d) of this subsection:

   (i) Flow rate;
   (ii) pH;
   (iii) Temperature;
   (iv) Turbidity; and
   (v) Color.

(d) Obtain samples for fecal coliform analysis during both the design loading and stress loading periods identified by NSF Standard 40. Grab samples shall be collected from both the influent and effluent on three separate days of the week. Each set of influent and effluent grab samples must be taken from a different dosing time frame (morning, afternoon, or evening) so that samples have been taken from each dosing time frame by the end of the week.

(e) Conduct analyses according to standard methods;

(f) Report the geometric mean of fecal coliform test results from all samples taken within thirty-day or monthly calendar periods;

(g) Report the individual results of all samples taken throughout the test period design and stress loading; and
(h) Report all maintenance and servicing conducted during the testing period, including for example, instances of cleaning a UV lamp, or replenishment of chlorine chemicals.

(3) Manufacturers may register products in treatment levels A and B using disinfection.

(4) Manufacturers may not register products for treatment level C using disinfection.

[Statutory Authority: RCW 43.20.050. WSR 06-01-020, § 246-272A-0130, filed 12/12/05, effective 1/12/06; WSR 05-15-119, § 246-272A-0130, filed 7/18/05, effective 9/15/05.]