Chapter 246-273 WAC
ON-SITE SEWAGE SYSTEM ADDITIVES

WAC
246-273-001 Purpose and authority. (1) This chapter establishes the review, criteria and decision-making procedures for evaluating on-site sewage disposal system additives to determine whether individual additives have an adverse effect on public health or water quality.

(2) The Washington state department of health administers this chapter under the authority and requirements of chapter 70.118 RCW.

[Statutory Authority: Chapter 70.118 RCW and RCW 43.70.040. WSR 95-24-062, § 246-273-001, filed 12/1/95, effective 1/1/96.]

246-273-010 Definitions. "Additive" means a commercial product intended to affect the performance or aesthetics of an on-site sewage disposal system.

"Additive manufacturer" means any person who manufactures, formulates, blends, packages, or repackages an additive product for sale, use, or distribution within Washington state.

"Approved" means a written statement of acceptability, in terms of the requirements of this chapter, issued by the Washington state department of health.

"Chemical additive" means those additives containing acids, bases, or other chemicals deemed unsafe by the department for use in an on-site sewage disposal system. Chemicals identified as unsafe are specified in WAC 246-273-050.

"Department" means the Washington State Department of Health, P.O. Box 47826, Olympia, Washington 98504-7826.

"Failure" means:
- Effluent has been discharged on the surface of the ground prior to approved treatment; or
- Effluent has percolated to the surface of the ground; or
- Effluent has contaminated or threatens to contaminate a groundwater supply.

"On-site sewage disposal system" means any system of piping, treatment devices, or other facilities that convey, store, treat, or dispose of sewage on the property where it originates or on nearby property under the control of the user where the system is not connected to a public sewer system. For purposes of this chapter, an on-site sewage disposal system does not include indoor plumbing and associated fixtures.

"Person" means any individual, corporation, company, association, society, firm, partnership, joint stock company, or any governmental agency, or the authorized agents of any such entities.

"Sewage" means any urine, feces, and the water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments or other places.

WAC 246-273-020 Applicability. (1) After July 1, 1994, no person shall use, sell, or distribute an on-site sewage disposal system chemical additive in Washington state.

(2) After January 1, 1996, no person shall use, sell or distribute an on-site sewage disposal system additive whose ingredients have not been approved by the department in accordance with requirements of chapter 70.118 RCW and this chapter.

WAC 246-273-030 Additive review and approval application—Process and requirements. (1) Manufacturers desiring to sell, advertise, or distribute an on-site sewage disposal system additive for use in Washington state must request and obtain departmental review and approval of their product(s) by submitting a complete application, including:

(a) Comprehensive, yet concise, response to the questionnaire (see subsection (3) of this section);

(b) A product sample in the labeled container intended for sale or distribution;

(c) The on-site sewage disposal system additive evaluation fee described in WAC 246-273-990.

(2) All submitted material (written responses and other materials) must be legible, typed or printed. Hand-written responses to the application questions or hand-written notes or other submitted documentation may, at the discretion of the department, result in rejection of the application.

(3) The questionnaire for review and approval of an on-site sewage disposal system additive consists of four parts: Applicant information, product information, product literature, and certification. All applicants must provide complete written responses to the following questions:

(1/18/11)
Applicant information (AI)

(AI-1) Applicant name, mailing address, street address, city/town, state, zip code, telephone and fax, with area code, time zone. The applicant must be vested with the authority to represent the manufacturer in this capacity.

(AI-2) Contact individual (if different from person in Item 1) name, mailing address, street address, city/town, state, zip code, telephone and fax, with area code, time zone.

(AI-3) Manufacturing facility location/address, mailing address, street address, city/town, state, zip code.

(AI-4) Name of on-site sewage disposal system additive product. (One product per application. If identical formulations of product are marketed under different product names or distributor labels, list them here. If product formulations vary, submit separate applications for each product.)

(AI-5) List of firms, companies, or persons distributing the on-site sewage disposal system additive product in Washington state. Do not list product retailers. Provide the following information for each: Contact person name, mailing address, street address, city/town, state, zip code, telephone and fax, with area code, time zone.

Product information (PI)

(PI-1) List all physical, chemical, biological, or other agents which make up the additive and provide toxicity information for each component (provide material safety data sheet, if possible). Provide trade and scientific name and formula of chemical agents. Specify trade and scientific name(s) of bacteria and enzymes, and characterization (origin, native occurrence, pathogenicity, etc.). Report formulation in "% by weight," including inert and active ingredients, and trace amounts, if any, of prohibited ingredients (WAC 246-273-050).

(PI-2) Describe the anticipated use of the additive in the on-site sewage system. Include in the description where and how the product is to be applied, the frequency of application, who will perform the application, and the amount and/or concentration of the product per application. For additives with chemical constituents, indicate the amount and/or concentration of each chemical constituent applied and resulting from application of the product.

(PI-3) Describe the function of the additive within the on-site sewage disposal system and explain in detail how the additive achieves this function.

(PI-4) List all known reactions and by-products produced by the use of the additive including:
   • The product's effect on bacteria normally found in a septic tank or aerobic treatment device and the soil surrounding a subsurface drainfield, and in the treatment media of a sand filter or sand mound system; and
   • pH range adjustment in all parts of an on-site sewage disposal system.

(PI-5) Provide any known or projected limitation on the use of the on-site sewage disposal system additive.

(PI-6) Provide reports of any available studies on the use of the on-site sewage disposal system additive to support the responses to questions PI-1 through PI-5 and to demonstrate the product's safety (lack of harm) to the public health, water quality, on-site sewage system components and function. Include monitoring reports and data from actual field or laboratory-based on-site sewage system studies.

(PI-7) Attach any formal approvals or other acceptances from other jurisdictions (private sector, state, or federal) for use of the on-site sewage disposal system additive.

Product literature (PL)

(PL-1) Attach single copies of sewage system additive product marketing, sales, distribution, advertising literature/materials intended for use in Washington state, not otherwise submitted as part of the complete application.

Certification (C)

(C-1) The following statement must be included as part of a complete application:
   "I certify that I represent (INSERT MANUFACTURING COMPANY NAME), that I am authorized to prepare, or direct the preparation of, this application, and that the product presented for review and approval contains no prohibited ingredients (WAC 246-273-050). I attest, under penalty of law, that this document and all attachments, to the best of my knowledge and belief, are true, accurate, and complete."

(C-2) Lines or space must be provided for the applicant's signature, printed name of preparer (if different than the applicant), preparer's signature (if needed) and date.

[Statutory Authority: Chapter 70.118 RCW and RCW 43.70.040. WSR 95-24-062, § 246-273-030, filed 12/1/95, effective 1/1/96.]

**WAC 246-273-040 Review criteria and decision-making procedures.** The department shall:

(1) Upon receipt of an application for review and approval of an on-site sewage disposal system additive:
(a) Determine if the application is complete. The department may return incomplete applications, suspending further review until a completed application is submitted. Processing time period begins anew with resubmittal.

(b) Notify the applicant, in writing, that the completed application has been received, and inform the applicant of the anticipated time period for review. A decision of either approval or denial shall be made within forty-five calendar days of receiving a complete application.

(2) Upon review of a complete application, grant or deny approval of the on-site sewage disposal system additive for use, sale, or distribution in Washington state, informing the applicant, in writing, of either approval or denial of the application. Notice of denial shall include explanation of the reason(s) for denial.

(3) Evaluate the request for approval of an on-site sewage disposal system additive according to the following criteria:

(a) Does the additive contain any ingredients deemed unsafe by the department? If yes, the application for approval shall be denied.

(b) Does the additive contain acids or bases that raise or lower the pH of the contents of a septic tank, or wastewater in any other portion of an on-site sewage disposal system, outside of a pH range between 6.0 - 8.0? If yes, the application for approval shall be denied.

(c) Would use of the additive (when applied according to the manufacturer's product-use instructions) adversely affect public health or water quality (surface water or groundwater) by either the nature of the ingredients or the effect of the additive on the function of the on-site sewage system? If yes, the application for approval shall be denied.

(d) If the review according to the criteria listed above determines that none of these questions are answered "yes," the on-site sewage disposal system additive shall be approved.

[Statutory Authority: Chapter 70.118 RCW and RCW 43.70.040. WSR 95-24-062, § 246-273-040, filed 12/1/95, effective 1/1/96.]

WAC 246-273-050 Ingredients—Prohibitions and conditions. (1) The following substances and compounds shall not be ingredients of approved on-site sewage disposal system additives. Trace amounts of these substances and compounds may exist in approved on-site sewage disposal system additives if deemed safe by the department for use in an on-site sewage disposal system.

(a) Any substance or compound listed as an EPA toxic pollutant in Title 40 Code of Federal Regulations (C.F.R. 40) 1994, Part 122, Tables II, III, and V of Appendix D:

Table II-Organic Toxic Pollutants In Each Of Four Fractions In Analysis By Gas Chromatography/Mass Spectroscopy (GS/MS)

Volatiles

IV acrolein  5V bromoform

2V acrylonitrile

3V benzene

6V carbon tetrachloride

7V chlorobenzene

8V chlorodibromomethane

9V chloroethane

10V 2-chloroethylvinyl ether

11V chloroform

12V dichlorobromomethane

14V 1,1-dichloroethane

15V 1,2-dichloroethane

16V 1,1-dichloroethylene

17V 1,2-dichloropropane

18V 1,3-dichloropropylene

19V ethylbenzene

20V methyl bromide

21V methyl chloride

22V methylene chloride

23V 1,1,2,2-tetrachloroethane

24V tetrachloroethylene

25V toluene

26V 1,2-trans-dichloroethylene

27V 1,1,1-trichloroethane

28V 1,1,2-trichloroethane

29V trichloroethylene

31V vinyl chloride

Acid Compounds

1A 2-chlorophenol

2A 2,4-dichlorophenol

3A 2,4-dimethylphenol

4A 4,6-dinitro-o-cresol

5A 2,4-dinitrophenol

6A 2-nitrophenol

7A 4-nitrophenol

8A p-chloro-m-cresol

9A pentachlorophenol

10A phenol

11A 2,4,6-trichlorophenol

Base/Neutral

1B acenaphthene

2B acenaphthylene

3B anthracene

4B benzidine

5B benzo(a)anthracene

6B benzo(a)pyrene

7B 3,4-benzofluoranthene

(1/18/11)
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<thead>
<tr>
<th>Table III-Other Toxic Pollutants (Metals and Cyanide) and Total Phenols</th>
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<tbody>
<tr>
<td>Antimony, Total</td>
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<tr>
<td>Arsenic, Total</td>
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<tr>
<td>Beryllium, Total</td>
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<td>Thallium, Total</td>
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<td>Zinc, Total</td>
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<tr>
<td>Cyanide, Total</td>
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<td>Phenols, Total</td>
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<tr>
<th>Table IV-Toxic Pollutants and Hazardous Substances Required To Be Identified By Existing Dischargers If Expected To Be Present</th>
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<tbody>
<tr>
<td><strong>Toxic Pollutants</strong></td>
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<tr>
<td>Asbestos</td>
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<tr>
<td><strong>Hazardous Substances</strong></td>
</tr>
<tr>
<td>Acetaldehyde</td>
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<tr>
<td>Allyl alcohol</td>
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<tr>
<td>Allyl chloride</td>
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<tr>
<td>Amyl acetate</td>
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<tr>
<td>Aniline</td>
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</tbody>
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| 8B  | benzo(ghi)perylene                          | 4P  | gamma-BHC                                  |
| 9B  | benzo(k)fluoranthene                        | 5P  | delta-BHC                                  |
| 10B | bis(2-chloroethoxy)methane                  | 6P  | chlordane                                   |
| 11B | bis(2-chloroethyl)ether                     | 7P  | 4,4'-DDT                                    |
| 12B | bis(2-chloroisopropyl)ether                 | 8P  | 4,4'-DDE                                    |
| 13B | bis(2-ethylhexyl)phthalate                  | 9P  | 4,4'-DDD                                    |
| 14B | 4-bromophenyl phenyl ether                  | 10P | dieldrin                                    |
| 15B | butylbenzyl phthalate                       | 11P | alpha-endosulfan                            |
| 16B | 2-chloronaphthalene                         | 12P | beta-endosulfan                             |
| 17B | 4-chlorophenyl phenyl ether                 | 13P | endosulfan sulfate                          |
| 18B | chrysene                                     | 14P | endrin                                      |
| 19B | dibenzo(a,h)anthracene                      | 15P | endrin aldehyde                             |
| 20B | 1,2-dichlorobenzene                         | 16P | heptachlor                                  |
| 21B | 1,3-dichlorobenzene                         | 17P | heptachlor epoxide                          |
| 22B | 1,4-dichlorobenzene                         | 18P | PCB-1242                                    |
| 23B | 3,3'-dichlorobenzidine                      | 19P | PCB-1254                                    |
| 24B | diethyl phthalate                           | 20P | PCB-1221                                    |
| 25B | dimethyl phthalate                           | 21P | PCB-1232                                    |
| 26B | di-n-butyl phthalate                        | 22P | PCB-1248                                    |
| 27B | 2,4-dinitrotoluene                          | 23P | PCB-1260                                    |
| 28B | 2,6-dinitrotoluene                          | 24P | PCB-1016                                    |
| 29B | di-n-octyl phthalate                        | 25P | toxaphene                                   |
| 30B | 1,2-diphenyhydrazine (as azobenzene)        | 31B | fluoranthene                                |
| 32B | fluorene                                    | 32B | fluorene                                    |
| 33B | hexachlorobenzene                           | 33B | hexachlorobenzene                           |
| 34B | hexachlorobutadiene                         | 34B | hexachlorobutadiene                         |
| 35B | hexachlorocyclopentadiene                   | 35B | hexachlorocyclopentadiene                   |
| 36B | hexachloroethane                            | 36B | hexachloroethane                            |
| 37B | indeno(1,2,3-cd)pyrene                      | 37B | indeno(1,2,3-cd)pyrene                      |
| 38B | isophorone                                  | 38B | isophorone                                  |
| 39B | naphthalene                                 | 39B | naphthalene                                 |
| 40B | nitrobenzene                                | 40B | nitrobenzene                                |
| 41B | N-nitrosodimethylamine                      | 41B | N-nitrosodimethylamine                      |
| 42B | N-nitrosodi-n-propylamine                   | 42B | N-nitrosodi-n-propylamine                   |
| 43B | N-nitrosodiphenylamine                      | 43B | N-nitrosodiphenylamine                      |
| 44B | phenanthrene                                | 44B | phenanthrene                                |
| 45B | pyrene                                      | 45B | pyrene                                      |
| 46B | 1,2,4-trichlorobenzene                     | 46B | 1,2,4-trichlorobenzene                     |

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**Pesticides**

1P  | aldrin                              |
2P  | alpha-BHC                           |
3P  | beta-BHC                            |
Benzonitrile
Benzyl chloride
Butyl acetate
Butylamine
Captan
Carbaryl
Carbofuran
Carbon disulfide
Chlorpyrifos
Coumaphos
Cresol
Crotonaldehyde
Cyclohexane
2,4-D(2,4-Dichlorophenoxy acetic acid)
Diazinon
Dicamba
Dichlobenil
Dichlorone
2,2-Dichloropropionic acid
 Dichlorvos
Diethyl amine
Dimethyl amine
Dinitrobenzene
Diquat
Disulfoton
Dimuron
Epichlorohydrin
Ethion
Ethylene diamine
Ethylene dibromide
Formaldehyde
Furfural
Guthion
Isoprene
Isopropanolamine
Dodecylbenzenesulfonate
Kelthane
Kepone
Malathion
Mercaptodimethur
Methoxychlor
Methyl mercaptan
Methyl methacrylate
Methyl parathion
Mevinphos
Mexacarbate
Monoethyl amine
Monomethyl amine
Naled
Napthenic acid
Nitrotoluene
Parathion
Phenolsulfonate
Phosgene
Propargite
Propylene oxide
Pyrethrins
Quinoline
Resorcinol
Strontium
Strychnine
Styrene
2,4,5-T (2,4,5-Trichlorophenoxy acetic acid)
TDE (Tetrachlorodiphenylethane)
2,4,5-TP (2-(2,4,5-Trichlorophenoxy propanoic acid)
Trichlorofan
Triethanolamine
Dodecylbenzenesulfonate
Triethylamine
Trimethylamine
Uranium
Vanadium
Vinyl acetate
Xylene
Xylenol
Zirconium

(b) Other chemicals deemed by the department to be detrimental to on-site sewage disposal system function, public health, or water quality.

(2) The department may prohibit (not approve on-site sewage system additives containing) acids and bases depending upon the effect on public health or groundwater of their concentration when applied according to the manufacturer's product-use instructions.

[Statutory Authority: Chapter 70.118 RCW and RCW 43.70.040. WSR 95-24-062, § 246-273-050, filed 12/1/95, effective 1/1/96.]

WAC 246-273-060 Unfair practices. Manufacturers of approved additives advertised, sold, or distributed in Washington state shall:

(1) Make no claims relating to the elimination of the need for septic tank pumping or proper septic tank maintenance;

(2) List the components of additive products on the product label, along with information regarding instructions for use and precautions;

(3) Make no false statements, design, or graphic representation relative to an additive product that is inconsistent with RCW 70.118.060, 70.118.070, or 70.118.080; and

(4) Make no claims, either direct or implied, about the performance of the product based on state approval of its ingredients.

[Statutory Authority: Chapter 70.118 RCW and RCW 43.70.040. WSR 95-24-062, § 246-273-050, filed 12/1/95, effective 1/1/96.]

WAC 246-273-065 Reregistration. Reregister, by written correspondence to the department, their on-site sewage disposal system additive product(s) each time the product formulation changes. The department may require a new review and approval for reregistration of products that undergo formulation changes.

[Statutory Authority: Chapter 70.118 RCW and RCW 43.70.040. WSR 95-24-062, § 246-273-065, filed 12/1/95, effective 1/1/96.]

WAC 246-273-070 Confidentiality. (1) Manufacturers shall submit a signed confidentiality statement if any information submitted would, if made public, divulge confidential business information, methods, or processes entitled to protection as trade secrets of the manufacturer, and identify any such information.
(2) The department shall not disclose any information obtained from manufacturers, when stated by the manufacturer, that the information, if made public, would divulge confidential business information, methods or processes entitled to protection as trade secrets of the manufacturer.

[Statutory Authority: Chapter 70.118 RCW and RCW 43.70.040. WSR 95-24-062, § 246-273-070, filed 12/1/95, effective 1/1/96.]

WAC 246-273-080 Enforcement. (1) The attorney general, or appropriate city or county prosecuting attorney may bring appropriate action to enjoin any violation of the:
   (a) Prohibition on the sale or distribution of on-site sewage disposal system additives; or
   (b) Conditions of RCW 70.118.080 Additives—Unfair practices, and WAC 246-273-060 (1) through (4).

(2) The department may rescind approval of an on-site sewage disposal system additive in response to:
   (a) Demonstrated link to on-site sewage disposal system failure resulting from use (consistent with the manufacturer’s product-use instructions) of an approved additive; or
   (b) Documentation that ingredients or formulation of an approved on-site sewage system additive differs from the ingredients or formulation information submitted for review, and upon which departmental approval was granted.

[Statutory Authority: Chapter 70.118 RCW and RCW 43.70.040. WSR 95-24-062, § 246-273-080, filed 12/1/95, effective 1/1/96.]