

1 .Title

2 A RULE AND REGULATION relating to on-site sewage
3 treatment and disposal systems; adding new sections to
4 BOH chapter 13.04, adding a new section to BOH
5 chapter 13.08, amending R&R 3, Part 13, Section 1, as
6 amended, and BOH 13.04.050, R&R 3, Part 13, Section
7 3, as amended, and BOH 13.04.070, R&R No. 99,
8 Section 2 (part), as amended, and BOH 13.08.010, R&R
9 3, Part 1, Section 5, as amended, and BOH 13.08.020,
10 R&R No. 3, Part 1, Section 5 (part), as amended, and
11 BOH 13.08.140, R&R 99-01, Section 2 (part), as
12 amended, and BOH 13.08.152, R&R No. 99-01, Section
13 2 (part), and BOH 13.08.226, R&R No. 99-01, Section 2
14 (part), as amended, and BOH 13.08.284, R&R no. 3, Part
15 1, Section 5 (part), as amended, and BOH 13.08.300,
16 R&R No. 99-01, Section 2, and BOH 13.08.342, R&R
17 No. 3, Part 1, Section 5 (part), as amended, and R&R
18 13.08.350, R&R No. 3, Part 1, Section 5 (part), as
19 amended, and R&R 13.08.380, R&R No. 3, Part 1,
20 Section 5 (part), as amended, and BOH 13.08.490, R&R
21 3, Part 10, Section 2, as amended, and BOH 13.12.030,
22 R&R 3, Part 10, Section 3(B), as amended, and BOH

23 13.12.050, R&R 3, Part 12, Section 1, as amended, and
24 BOH 13.16.010, R&R 3, Part 2, Section 1, as amended,
25 and BOH 13.20.010, R&R 3, Part 2, Section 2(B), as
26 amended, and BOH 13.20.030, R&R 99-01, Section 2, as
27 amended, and BOH 13.20.035, R&R 3, Part 2, Section 3,
28 as amended, and BOH 13.20.040, R&R 3, Part 3, Section
29 1, and BOH 13.24.010, R&R No. 3, Part 3, Section 2, as
30 amended, and BOH 13.24.020, R&R No. 3, Part 3,
31 Section 3, as amended, and BOH 13.24.030, R&R No 3,
32 Part 3, Sections 1 and 4, as amended, and BOH
33 13.28.010, R&R 3, Part 4, Section 2, as amended, and
34 BOH 13.28.020, R&R 3, Part 4, Section 3, as amended,
35 and BOH 13.28.030, R&R No. 3, Part 4, Section 7, as
36 amended, and BOH 13.28.070, R&R No. 3, Part 5,
37 Section 2(A), as amended, and BOH 13.36.010, R&R No.
38 3, Part 5, Section 3(C), and BOH 13.40.030, R&R No. 3,
39 Part 5, Section 5, and BOH 13.48.010, R&R No. 3, Part
40 6, Section 1, as amended, and BOH 13.52.010, R&R No.
41 3, Part 7, Section 5, and BOH 13.56.050, R&R No. 99-
42 01, Section 2 (Part), as amended, and BOH 13.56.054,
43 R&R No. 99-01, Section 2 (part), as amended, and BOH
44 13.60.005, R&R No. 3, Part 8, Section 1, as amended,

45 and BOH 13.60.010 , R&R 08-03, Section 145, and BOH
46 13.60.030, R&R No. 3, Part 9, Section 1, as amended,
47 and BOH 13.64.010, R&R 3, Part 9, Section 2, as
48 amended, and BOH 13.64.020, R&R No. 3, Part 11,
49 Section 1, as amended, and BOH 13.68.010, R&R No. 3,
50 Part 11, Section 2, as amended, and BOH 13.68.020,
51 R&R No. 3, Part 11, Section 3, as amended, and BOH
52 13.68.030, R&R No.3, Part 11, Section 5, as amended,
53 and BOH 13.68.050, repealing R&R No. 99-01, Section 2
54 (part), and BOH 13.08.024, R&R No. 08-03, Section 12,
55 and BOH 13.08.055, R&R No. 3, Part 1, Section 5 (part),
56 as amended, and BOH 13.08.060, R&R No. 3, Part 1,
57 Section 5 (part), as amended, and BOH 13.08.070, R&R
58 No. 99-01, Section 2 (part), and BOH 13.08.072, R&R
59 No. 99-01, Section 2 (part), as amended, and BOH
60 13.08.084, R&R No. No. 3, Part 1, Section 5 (part), as
61 amended, and BOH 13.08.090, R&R No. 99-01, Section
62 2 (part), as amended, and BOH 13.08.114, R&R No. No.
63 08-03, Section 21, and BOH 13.08.115, R&R No. 08-03,
64 Section 23, and BOH 13.08.117, R&R No. 08-03, Section
65 27, and BOH 13.08.131, R&R No. 99-01, Section 2
66 (part), as amended, and BOH 13.08.132, R&R No. 99-01,

67 Section 2 (part), and BOH 13.08.134, R&R No. 08-03,
68 Section 30, and BOH 13.08.141, R&R No. 08-03, Section
69 32, and BOH 13.08.151, R&R No. 08-03, Section 34, and
70 BOH 13.08.154, R&R No. 09-03, Section 37, and BOH
71 13.08.175, R&R No. 3, Part 1, Section 5 (part), as
72 amended, and BOH 13.08.180, R&R No. 3, Part 1,
73 Section 5 (part), as amended, and BOH 13.08.190, R&R
74 No. 99-01, Section 2 (part), as amended, and BOH
75 13.08.202, R&R No. 08-03, Section 40, and BOH
76 13.08.205, R&R No. 99-01, Section 2 (part), and BOH
77 13.08.212, R&R No. 08-03, Section 41, and BOH
78 13.08.213, R&R No. 99-01, Section 2 (part), and BOH
79 13.08.226, R&R No. 08-03, Section 47, and BOH
80 13.08.257, R&R No. 08-03, Section 49, and BOH
81 13.08.261, R&R No. 08-03, Section 50, and BOH
82 13.08.263, R&R No. 3, Part 1, Section 5 (part), as
83 amended, and BOH 13.08.280, R&R No. 08-03, Section
84 55, and BOH 13.08.287, R&R No. 3, Part 1, Section 5
85 (part), as amended, and BOH 13.08.290, R&R No. 08-03,
86 Section 56, and BOH 13.08.305, R&R No. 3, Part 1,
87 Section 5 (part), as amended, and BOH 13.08.320,

88 R&R No. 08-03, Section 57, and BOH 13.08.3215, R&R
89 No. 99-01, Section 2 (part), as amended, and BOH
90 13.08.322, R&R No. 99-01, Section 2 (part), as amended,
91 and BOH 13.08.324, R&R No. 08-03, Section 60, and
92 BOH 13.08.327, 2R&R No. 3, Part 1, Section 5 (part), as
93 amended, and BOH 13.08.330, R&R No. 99-01, Section
94 2 (part), and BOH 13.08.341, R&R No. 08-03, Section
95 61, and BOH 13.08.346, R&R No. 3, Part 1, Section 5, as
96 amended, and BOH 13.08.350, R&R No. 99-01, Section
97 2 (part), as amended, and BOH 13.08.372, R&R No. 99-
98 01, Section 2 (part), and BOH 13.08.402, R&R No. 99-
99 01, Section 2 (part), and BOH 13.08.406, R&R No. 3,
100 Part 1, Section 5 (part), as amended, and BOH 13.08.410,
101 R&R No. 08-03, Section 69, and BOH 13.08.424, R&R
102 No. 99-01, Section 2 (part), and BOH 13.08.426, R&R
103 No. 08-03, Section 72, and BOH 13.08.465, R&R No. 3,
104 Part 1, Section 5, as amended, and BOH 13.08.470, R&R
105 No. 99-01, Section 2 (part), as amended, and BOH
106 13.08.472, R&R No. 08-03, Section 74, and BOH
107 13.08.477, R&R No. 08-03, Section 76, and BOH
108 13.08.482, R&R No. 99-01, Section 2 (part), as amended,
109 and BOH 13.08.484, R&R No. 09-03, Section 79, and

110 BOH 13.08.493, R&R No. 08-03, Section 80, and BOH
111 13.08.4934, R&R No. 08-03, Section 81, and BOH
112 13.08.4937, R&R No. 99-01, Section 2 (part), as
113 amended, and BOH 13.08.496, R&R No. 3, Part 1,
114 Section 5 (part), as amended, and BOH 13.08.500, R&R
115 No. 08-03, Section 87, and BOH 13.08.505, R&R No.
116 99-01, Section 2 (part), and BOH 13.08.512, R&R No.
117 99-01, Section 2 (part), and BOH 13.08.516, R&R No.
118 08-03, Section 88, and BOH 13.08.520, and prescribing
119 penalties; enacted pursuant to RCW 43.20.050 and
120 70.05.060, including the latest amendments or revisions
121 thereto.

122 ..Body

123 BE IT ADOPTED BY THE KING COUNTY BOARD OF HEALTH:

124 NEW SECTION. SECTION 1. There is hereby added a new section to BOH
125 Chapter 13.04 to read as follows:

126 **State on-site sewage system regulations adopted.**

127 A. Except as otherwise specifically provided in this title, Chapter 246-272A
128 WAC, Washington On-site Sewage System Regulations, as amended, are hereby adopted
129 and by this reference made a part of this title.

130 B. If a provision or definition of Chapter 246-272A WAC is inconsistent with a
131 provision or definition otherwise established under this title, the more stringent
132 provisions of this title shall apply.

133 NEW SECTION. SECTION 2. There is hereby added a new section to BOH
134 Chapter 13.04 to read as follows:

135 **Equity impact review.** Whenever the health officer performs review of an on-
136 site sewage system local management plan under WAC 246-272A-0015, the health
137 officer will conduct an equity impact review in accordance with King County Ordinance
138 16948 and report the results of the review to the King County Board of Health before
139 approving a revised local management plan.

140 SECTION 3. R&R 3, Part 13, Section 1, as amended, and BOH 13.04.050 are
141 each hereby amended to read as follows:

142 **Connection to public sewer.**

143 A. The owner or occupant of lands or premises located within the Urban Growth
144 Area, as defined in the King County Comprehensive Plan, undertaking new residential or
145 nonresidential construction, short subdivision or subdivision from which sewage will
146 originate shall connect the construction to a public sewer if the sewer utility permits such
147 connection. Within unincorporated King County such connection shall be in accordance
148 with ~~((King County Code Section))~~ K.C.C. 13.24.136. Within incorporated cities such
149 connection shall be in accordance with the policies of that city or the local sewer utility.
150 The connection shall be made by connecting the building drain with an approved side
151 sewer, and the side sewer to the public sewer.

152 B. For existing development located within (~~or outside~~) the Urban Growth Area
153 and which is within two hundred feet of a public sewer, where an on-site sewage system
154 is operating, the owner shall abandon the on-site sewage system in accordance with WAC
155 246-272A-0300 and connect the sanitary drainage system to the public sewer when the
156 sewerage authority permits such connection and when:

157 1. Repair, modification or replacement of the on-site sewage system is
158 necessary, or the existing on-site sewage system has failed and an on-site sewage system
159 fully conforming to this title cannot be designed and installed; or

160 2. Additional construction which in any way affects the on-site sewage system
161 is proposed.

162 C. The distances set forth in subsection B. of this section shall be calculated
163 along the shortest route in road rights-of-way and easements(~~(, consistent with the~~
164 ~~comprehensive planning and sewer extension practices of the sewer utility involved,))~~
165 from the existing sewer to the nearest point of the lands or premises to be served,
166 consistent with the jurisdictional comprehensive plan and sewer extension practices of
167 the sewer utility involved.

168 D. Every plumbing fixture and every sanitary drainage system not connected to a
169 public sewer, or not required by law to be connected to a public sewer, shall be connected
170 to an on-site sewage system.

171 E. The health officer is authorized to grant waivers from specific requirements of
172 this section in accordance with WAC 246-272A-0420, as amended.

173 F. A decision of the health officer requiring connection of a property’s
174 wastewater drainage to a public sewer and denying an application to repair or replace the
175 failing on-site sewage system shall be subject to the administrative appeals process under
176 RCW 36.01.330, as amended.

177 SECTION 4. R&R 3, Part 13, Section 3, as amended, and BOH 13.04.070 are
178 each hereby amended to read as follows:

179 **Domestic water supply source.** No on-site sewage system may be constructed
180 or expanded if the plumbing fixtures draining to the system are not supplied with water
181 from an approved source. An approved water source consists of one of the following:

182 A. Public water source: A public water source currently in compliance with
183 chapter 246-290 or 246- 291 WAC and BOH Title 12.

184 B. Private individual well source: A private well on a lot five acres or greater in
185 size or a lot created prior to May 18, 1972, which complies with all of the following
186 conditions:

187 1. Well location approval: Any proposed new or replacement individual private
188 well location shall be submitted to the health officer and receive approval prior to
189 construction of the well.

190 a. ~~((All private water system development in the urban growth area or in the~~
191 ~~rural area as defined by the King County Comprehensive Plan is subject to the provisions~~
192 ~~of King County Code Sections 13.24.140 and 13.24.138, respectively.~~

193 b.)) Proposed new initial well locations shall be accurately specified upon an
194 OSS site design application and shall be submitted for review by the health officer in

195 conjunction with evaluation of the proposed OSS design. If the protective well radius is
196 within ten feet of any lot line, easement line or any source of contamination, the health
197 officer may require the well site to be surveyed.

198 ~~((e.))~~ b. Application for replacement well locations shall be made on forms
199 obtained from the health officer and shall be accompanied by a review fee as specified in
200 the fee schedule.

201 ~~((f.))~~ c. The new or replacement well location shall be clearly identified at the
202 site.

203 ~~((g.))~~ d. Information shall be provided as part of the well location application to
204 include, at minimum, a completely dimensioned plot plan, drawn to a scale not smaller
205 than one inch equals one hundred feet accurately showing the location of the proposed
206 water well relative to property boundary lines, existing and proposed OSS components
207 including OSS reserve area, existing and proposed structures, roads and driveways,
208 surface water, direction of surface drainage, a designated well protection sanitary control
209 area and any other features relevant to the siting of a water well location.

210 ~~((h.))~~ e. A water well site approval is valid for ~~((two))~~ three years from the date
211 of approval or until the expiration of a building permit issued by the building official for
212 construction of the primary structure to be served by the new well, whichever period is
213 longer.

214 2. Water well protection covenant: The property owner shall establish a water
215 well protection sanitary control area by providing a recorded protective covenant
216 prohibiting, within a horizontal distance of not less than one hundred feet of the well,

217 potential sources of contamination as described in BOH 12.24.010 and WAC 173-160-
218 171.

219 3. Demonstrate adequate water quantity by:

220 a. Drilling, in known or suspected areas of low production, the well and
221 conducting a four hour pump test that demonstrates that the proposed well is capable of
222 providing water to a residential dwelling in the amount of not less than four hundred
223 gallons per day. This pump test may be required to be performed during the months of
224 August, September or October at the health officer's discretion; or

225 b. Providing, in all other areas, adequate information to the satisfaction of the
226 health officer to demonstrate the aquifer's capability to provide four hundred gallons per
227 day. This information may include well logs or pumping reports from neighboring wells
228 utilizing the same aquifer. The neighboring well or wells shall be shown on a map of the
229 surrounding area identifying both the subject property and the location of the well or
230 wells identified as neighboring. The map shall be included with the OSS site design
231 application submittal.

232 4. Demonstrate adequate water quality by submitting results of all tests taken for
233 the following and showing:

234 a. Bacteriological analysis from at least two raw source water samples from the
235 well indicating no presence of coliform bacteria; and

236 b. At least one chemical test for nitrate and arsenic from the well water
237 described in table 2, WAC 246-291-170, which does not exceed the primary maximum
238 contaminant level under WAC 246-291-170.

239 5. Provide a copy of well driller's report under WAC 173-160-141.

240 6. Construction of the well must meet Washington state Department of
241 Ecology's construction standards under chapter 173-160 WAC.

242 C. A private spring on a lot five acres or greater or a lot created prior to May 18,
243 1972, that complies with all of the following conditions prior to application for OSS site
244 design approval:

245 1. Application for an individual private spring water source shall be made on
246 forms provided by the health officer and shall be accompanied by a fee as specified in the
247 fee schedule.

248 2. The application shall include: a recorded protective covenant of no less than
249 two hundred feet up slope and one hundred feet down slope from the spring prohibiting
250 any potential sources of contamination as described in BOH 13.04.070 B.2., a spring
251 location plot plan, a detailed spring construction plan, and information demonstrating
252 acceptable water quality and quantity as specified in BOH 12.20.040 and chapter 246-291
253 WAC.

254 3. Within thirty days of receiving a complete application the health officer shall
255 approve, deny or notify the applicant that the application is pending. Reasons for denial
256 or pendency of the application shall be stated in writing.

257 D. A rainwater catchment system that serves as the only source of drinking water
258 for a single family residence and that complies with each of the following conditions:

259 1. The health officer finds that requiring connection of the plumbing system to
260 an approved public water source or to an approved private well would cause undue
261 hardship.

262 2. Application for a rainwater catchment system source approval shall be
263 submitted for review on forms provided by the health officer. The applicant shall pay to
264 the health officer the rainwater catchment system review fee as specified in the fee
265 schedule, payable after completion of the application review.

266 3. Application for a rainwater catchment system source approval shall be
267 prepared by any one or more of the following:

268 a. a professional engineer authorized under a current, valid license to practice
269 in Washington state;

270 b. an environmental health professional holding a current, valid registration
271 from either the Washington State Environmental Health Association or the National
272 Environmental Health Association;

273 c. a King County licensed water system designer holding a current, valid
274 license to design water systems in King County; and

275 d. a rainwater system designer holding a current, valid accreditation from the
276 American Rainwater Catchment System Association.

277 4. Rainwater catchment system design shall conform to chapter 51-56 WAC,
278 Uniform Plumbing Code, as amended, and shall include, at a minimum, the following
279 information:

280 a. estimated daily and weekly and annual demand;

- 281 b. available catchment area and estimated annual rainwater capture;
- 282 c. roofing materials used;
- 283 d. storage capacity of and materials used in the construction of the rainwater
- 284 catchment system;
- 285 e. treatment specifications including filtrations and disinfection system
- 286 specifications; and
- 287 f. operation and maintenance requirements.

288 5. Composite or shake shingles or other materials determined by the health
289 officer to present a risk of contamination may not be approved or used as roofing
290 materials for a rainwater catchment system source.

291 6. Before using a rainwater catchment system source, the property owner shall
292 file in the county recorder's office a notice on title advising that the property is served by
293 a rainwater catchment system and including the following information:

- 294 a. the estimated daily, weekly and annual water supply furnished by the
- 295 rainwater catchment system;
- 296 b. that the water supply from the rainwater catchment system may be limited
- 297 due to variations in rainfall or usage; and
- 298 c. that regular maintenance of the treatment system and components is required
- 299 in order to minimize the risk of consuming contaminated water,

300 E. Lot area designated in whole or in part as a critical area may be included in the
301 computation of the minimum five-acre lot size required under Subsections B. and C. of
302 this section.

303 SECTION 5. R&R No. 99, Section 2 (part), as amended, and BOH 13.08.010 are
304 each hereby amended to read as follows:

305 **Abbreviations.**

306 A. "ASTM" means American Society of Testing Materials.

307 B. "ATU" means Aerobic Treatment Unit.

308 C. ~~((("BOD5" means biochemical oxygen demand, typically expressed in mg/L.~~

309 ~~Ð.))~~ "CBOD5" means carbonaceous biochemical oxygen demand, typically
310 expressed in mg/L. For purposes of approximate conversion from BOD5 to CBOD5,
311 multiply the BOD5 by 0.83.

312 ~~((E.))~~ D. "CEU" means continuing education unit.

313 ~~((F. "DDES"))~~ E. DLS means King County Department of ~~((development and~~
314 ~~environmental))~~ Local Services.

315 ~~((G.))~~ F. "DOH" means the Washington state Department of Health.

316 ~~((I. "mg/L" means milligrams per liter.~~

317 ~~J. "NSF" means National Sanitation Foundation International.~~

318 ~~K. "O and G," means oil and grease, a component of sewage typically originating~~
319 ~~from foodstuffs, which are animal fats or vegetable oils, or consisting of compounds of~~
320 ~~alcohol or glycerol with fatty acids, which are soaps and lotions. The quantity of O and G~~
321 ~~is typically expressed in mg/L.~~

322 ~~L. "TN" means total nitrogen, typically expressed in mg/L.~~

323 ~~M. "TSS" means total suspended solids, a measure of all suspended solids in a~~
324 ~~liquid, typically expressed in mg/L.~~

325 ~~N.))~~ G. ">" means greater than.

326 ~~((O:))~~ H. "<" means less than.

327 ~~((P:))~~ I. "OSM" means certified on-site system maintainer.

328 SECTION 6. R&R 3, Part 1, Section 5, as amended, and BOH 13.08.020 are each
329 hereby amended to read as follows:

330 **Accessory living quarters.** "Accessory living quarters" means living quarters
331 ~~((within an))~~ accessory ~~((building))~~ to a single-family residence and for the sole use of
332 the family or persons employed on the premises or for the temporary use of guests of the
333 occupants of the premises. Such quarters have no kitchen facilities and are not rented or
334 otherwise used as a separate dwelling unit.

335 NEW SECTION. SECTION 7. There is hereby added a new section to BOH
336 Chapter 13.08 to read as follows:

337 **Bedroom.** "Bedroom" means a room intended to be used for sleeping and that
338 includes a window, a door, and a closet. "Bedroom" does not include a room not greater
339 than seventy square feet in area with a closet, or an entry way with a closet.

340 SECTION 8. R&R No. 3, Part 1, Section 5 (part), as amended, and BOH
341 13.08.140 are each hereby amended to read as follows:

342 **Excessively permeable soils.** "Excessively permeable soils" means soils with a
343 soil texture type 1 or other textures as defined by the United States Department of
344 Agriculture standards ~~((and)),~~ or where conditions are such that the treatment potential is
345 ineffective in retaining or removing substances of public health significance to

346 underground sources of drinking water (~~((and))~~), or soils with a percolation rate of one and
347 one-half minutes per inch or faster.

348 SECTION 9. R&R 99-01, Section 2 (part), as amended, and BOH 13.08.152 are
349 each hereby amended to read as follows:

350 **Failure.** "Failure" means a condition of an on-site sewage system or (~~((side~~
351 ~~sewer))~~ component that threatens the public health by inadequately treating sewage or by
352 creating a potential for direct or indirect (~~((human))~~) contact between sewage and the
353 public. Examples of failure include:

354 A. Sewage(~~((, septage or effluent))~~) on the surface of the ground;

355 B. Sewage(~~((, septage or effluent))~~) backing up into a structure caused by slow soil
356 absorption of septic tank effluent;

357 C. Sewage(~~((, septage or effluent))~~) leaking from a (~~((septic tank, pump chamber,~~
358 ~~holding tank, conveyance))~~ sewage tank or collection system;

359 D. Cesspools(~~((;))~~) or seepage pits (~~((and pit privies))~~) where evidence of
360 groundwater or surface water quality degradation exists;

361 E. Inadequately treated effluent contaminating ground water or surface water;

362 (~~((and))~~) or

363 F. (~~((Failure to meet conditions))~~) Noncompliance with standards stipulated on the
364 permit.

365 SECTION 10. R&R No. 99-01, Section 2 (part), and BOH 13.08.226 are each
366 hereby amended to read as follows:

367 ~~((Limited))~~ **Minor repair.** "~~((Limited))~~ Minor repair" means the replacement,
368 addition or alteration of ~~((a))~~ any of the following broken or malfunctioning ~~((building~~
369 ~~sewer pipe, sewage tank lid, sewage tank baffles, sewage tank pumps, pump control~~
370 ~~floats, pipes connecting multiple sewage tanks and drainfield inspection boxes and ports))~~

371 OSS components where the subsurface soil absorption system is not failing;

372 A. Building sewer pipe;

373 B. Sewage tank lids and risers;

374 C. Sewage tank baffles;

375 D. Sewage tank pumps;

376 E. Pump control floats;

377 F. Pipes connecting multiple sewage tanks;

378 G. Drainfield inspection boxes and ports;

379 H. Control panels and timers;

380 I. Components of a proprietary treatment unit;

381 J. UV disinfection units; or

382 K. Jetting of pressure distribution pipes or hard plastic or polyvinyl chloride

383 pipes in a gravity OSS.

384 SECTION 11. R&R No. 99-01, Section 2 (part), as amended, and BOH

385 13.08.284 are each hereby amended to read as follows:

386 **On-site system maintainer.** "On-site system maintainer" (or "OSM") means a
387 qualified person approved by the health officer to conduct performance monitoring

388 inspections of, diagnose causes of malfunction and failure of, or perform preventive
389 maintenance on and make (~~limited~~) minor repairs to on-site sewage systems.

390 SECTION 12. R&R no. 3, Part 1, Section 5 (part), as amended, and BOH
391 13.08.300 are each hereby amended to read as follows:

392 **Original permeable soil.** "Original permeable soil" means the naturally
393 occurring soil of soil texture types 1 through ~~(5)~~ 6 overlying any impermeable layer,
394 any cemented layer overlying the groundwater table, or the elevation of groundwater
395 during the wet season, with a percolation rate not greater than fifty-nine (59) minutes per
396 inch.

397 SECTION 13. R&R No. 99-01, Section 2, and BOH 13.08.342 are each hereby
398 amended to read as follows:

399 **Pumper.** "Pumper" means a qualified person approved by the health officer and
400 holding a certificate(s) of competency pursuant to Chapter 13.68 of this title, to perform
401 one or more of the following activities: May also be referred to as a "sludgehauler."

402 A. OSS pumper removes sewage and~~(/or)~~ septage from sewage holding tanks,
403 portable toilet units and OSS wastewater tanks and transports the contents to an approved
404 disposal site, and conducts routine monitoring and performance inspections of gravity
405 OSS.

406 B. Portable toilet pumper removes sewage from only portable/chemical toilet
407 units and transports the contents to an approved disposal site.

408 C. Vessel (boat) sewage tank pumper removes sewage from holding tanks on
409 vessels (boats) and transports the contents to an approved disposal site.

410 D. Grease trap/interceptor pumper removes animal and vegetable fats, oils and
411 greases from grease traps and/or grease interceptor tanks and transports the contents to a
412 recycling or approved disposal site.

413 E. Miscellaneous sewage pumper removes sewage and sewage-contaminated
414 wastes from sewer lines, lift stations, or other sources of sewage or sewage-contaminated
415 wastes and transports the contents to an approved disposal site.

416 SECTION 14. R&R No. 3, Part 1, Section 5 (part), as amended, and R&R
417 13.08.350 are each hereby amended to read as follows:

418 **Repair.** "Repair" means the ~~((replacement, reconstruction or relocation of, or~~
419 ~~addition or alteration to, a sewage tank, distribution box, tight line, or other~~
420 ~~appurtenances of an existing OSS, and including any replacement, reconstruction or~~
421 ~~relocation of, or addition or alteration to a soil absorption system)) relocation,~~
422 replacement, or reconstruction of a failed OSS or any failed component of an OSS, other
423 than a minor repair as defined under this title, in order to restore the OSS to nonfailure
424 status.

425 SECTION 15. R&R No. 3, Part 1, Section 5 (part), as amended, and R&R
426 13.08.380 are each hereby amended to read as follows:

427 **Restrictive layer.** "Restrictive layer" means a stratum impeding the vertical
428 movement of water, air, and growth of plant roots. Examples of such layers or conditions
429 are groundwater tables, hardpans, claypans, fragipans, some compacted soil, bedrock,
430 caliche and ~~((clayey)) unstructured clay soil.~~

431 SECTION 16. R&R No. 3, Part 1, Section 5 (part), as amended, and BOH

432 13.08.490 are each hereby amended to read as follows:

433 **Surface water.** "Surface water" means any body of water, whether fresh or
434 marine, which either flows or is contained in natural or artificial unlined depressions or
435 drainage course and contains water for forty-eight (48) continuous hours during any of
436 the months of May through October, or is identified by King County department of
437 natural resources as a significant drainage feature. Such bodies include, but are not
438 limited to, natural and artificial lakes, ponds, springs, rivers, streams, swamps, marshes,
439 tidal water and wetlands.

440 SECTION 17. R&R 3, Part 10, Section 2, as amended, and BOH 13.12.030 are
441 each hereby amended to read as follows:

442 **Public meetings—Procedure.**

443 A. Meetings shall be held on the call of the health officer, and shall be held with
444 sufficient frequency that no more than ~~((forty (40)))~~ ninety days shall elapse from the
445 time an appeal for reconsideration is commenced until a recommendation is returned to
446 the health officer by the committee, except that if a continuance is granted at the request
447 of an appellant the committee shall return its recommendation within a reasonable time.
448 The filing of any technical report or other exhibit subsequent to the commencement of an
449 appeal shall be deemed a request for a continuance.

450 B. The committee may make recommendations to the health officer concerning
451 the health officer's decision or determination that is the subject of the appeal for
452 reconsideration acting in an advisory capacity only.

453 C. Notice of all meetings of the committee shall be given not less than three (3)
454 days prior thereto to any appellant and to any other person which had previously made
455 known a desire to affect the disposition of the order or decision of the health officer
456 which is the subject of the appeal for reconsideration.

457 D. All meetings of the committee shall be open to the public. Verbal testimony
458 may be given to the committee during the meeting.

459 SECTION 18. R&R 3, Part 10, Section 3(B), as amended, and BOH 13.12.050
460 are each hereby amended to read as follows:

461 **Appeal for reconsideration—Filing.** The appeal for reconsideration shall be in
462 writing, submitted on one or more forms prescribed by the health officer, and shall be
463 filed with the health officer not later than 5:00 p.m. of the ((~~sixtieth (60th)~~) ninetieth
464 calendar day following the date of the decision or order that is the subject of the appeal.
465 The appeal shall cite with particularity the decision or order appealed from, and shall
466 contain a statement of the reason for the appeal and what relief is sought. The appeal
467 shall be accompanied by any technical reports or other exhibits, prepared at the
468 appellant's own expense, which the appellant wishes the committee and the health officer
469 to consider.

470 SECTION 19. R&R 3, Part 12, Section 1, as amended, and BOH 13.16.010 are
471 each hereby amended to read as follows:

472 **Membership.** There is established an on-site wastewater treatment and disposal
473 ((~~stakeholders~~) technical advisory committee.

474 A. Membership of the advisory committee shall consist of at least nine members,
475 including the health officer, ex officio, and any eight or more of the following voting
476 members appointed by the health officer:

477 1. Sanitary, agricultural or civil engineer licensed by the state of Washington;

478 2. On-site sewage system designer;

479 3. Seattle Master Builders Association representative;

480 4. Seattle-King County Board of Realtors representative;

481 5. A representative of a nonprofit, nonpartisan public affairs or environmental
482 affairs organization;

483 6. On-site sewage system maintainer;

484 7. A consumer representing the King County Unincorporated Area Councils;

485 8. Representative of incorporated cities;

486 9. Representative of a sewer utility district;

487 10. On-site sewage system installer;

488 11. On-site sewage system pumper; ~~((and))~~

489 12. Field Sanitarian;

490 13. A representative of a federally recognized tribe or a 501(c)(3) organization
491 registered in Washington that serves American Indian and Alaska Native people and
492 provides services within King County;

493 14. A consumer representing users of OSS within the Urban Growth Area of
494 King County;

495 15. A consumer representing users of OSS within a Marine Recovery Area or
496 Shellfish Protection District within King County; and

497 16. A consumer representing users of OSS serving commercial properties in
498 King County.

499 B. In addition to the voting members, any combination of the following may be
500 appointed by the health officer to serve as ex officio members of the committee:

- 501 1. A King County department of natural resources and parks representative;
- 502 2. A Washington state Department of Ecology representative.
- 503 3. A Washington state Department of Health representative; and
- 504 4. A United States Department of Agriculture, Natural Resource Conservation
505 Service representative.

506 SECTION 20. R&R 3, Part 2, Section 1, as amended, and BOH 13.20.010 are
507 each hereby amended to read as follows:

508 **Permits -- general.**

509 A. Unless otherwise specified in this title, it is unlawful to construct, install,
510 repair or modify an OSS without an approved OSS ~~((construction))~~ installation permit.

511 Any person, other than the owner of the property where the OSS is located, who
512 constructs, installs, repairs, or modifies any part of an OSS without an approved OSS
513 ~~((construction))~~ installation permit, including but not limited to replacing a drainfield,
514 will be subject to the assessment of civil penalty fines of up to fifteen thousand dollars
515 per violation. The owner of the property where the OSS is located will be subject to the
516 assessment of civil penalty fines of up to five thousand dollars per violation for

517 performing the work without an approved OSS (~~((construction))~~) installation permit. The
518 health officer may reduce or waive the penalty assessed against the property owner under
519 this section after a permitted OSS installation or repair has been completed and the health
520 officer has approved the installation or repair.

521 Such permit shall be posted on the building or premises where the work permitted is
522 being done, before the work is begun, and unless revoked, shall not be removed until
523 such work has been finally approved by the health officer.

524 B. The application submitted for an OSS (~~((construction))~~) installation permit shall
525 be accompanied by an approved site design application or approved repair proposal. The
526 permit application for a new OSS to serve a building shall be accompanied by evidence
527 that the responsible building official has issued a building permit authorizing construction
528 of that building.

529 C. The fee for an OSS (~~((construction))~~) installation permit shall be as set forth in
530 the fee schedule.

531 D. OSS (~~((construction))~~) installation permits shall expire (~~((two))~~) three years from
532 date of issue.

533 E. Unless otherwise provided in this title, the applicant for an OSS
534 (~~((construction))~~) installation permit shall be a certified master installer and shall be
535 responsible for all work done under that permit.

536 F. The applicant for an OSS (~~((construction))~~) installation permit may not also be
537 the designer named on the site application unless the work to be done consists solely of
538 OSS failure repair.

539 G. Application for an OSS (~~(construction)~~) installation permit shall be made in
540 writing in a manner prescribed by the health officer and shall be accompanied by a fee as
541 set forth in the fee schedule. The health officer may deny the application if in the health
542 officer's judgment operation of the system will result in a public health hazard. The
543 health officer may consider any relevant health and safety factors in making such a
544 determination. If an application is denied on the grounds of a hazard to public health, the
545 health officer at the time of the denial shall inform the applicant in writing of the reasons
546 for the denial and the applicant's right to appeal the denial.

547 H. Each (~~(construction)~~) installation permit issued pursuant to this title for an
548 OSS installation or repair is nontransferable and is valid only for the designer or installer
549 named thereon and for the type of OSS construction or repair for which the permit has
550 been issued. A new (~~(construction)~~) installation permit shall be obtained in the event of
551 change of designer or installer performing the work, or in the type of OSS for which a
552 permit has previously been issued.

553 SECTION 21. R&R 3, Part 2, Section 2(B), as amended, and BOH 13.20.030 are
554 each hereby amended to read as follows:

555 **Installer certification.**

556 A. Except as provided in BOH 13.20.035 and 13.20.040, it is unlawful to install,
557 modify or repair OSS without a currently valid installer's certificate of competency.

558 B. (~~(1. Application)~~) An applicant for a master installer's or associate installer's
559 certificate of competency shall (~~(be made)~~) submit the application to the health officer
560 and shall (~~(be accompanied by a)~~) include the following with the application:

561 1. Payment of the installer certificate of competency fee as set forth in the fee
562 schedule under BOH chapter 2.18((-):

563 2. (~~The application shall be accompanied by evidence~~) Evidence of successful
564 completion within the previous twelve months of a health officer-recognized course of
565 instruction in the basics of OSS and installation of OSS((-); and

566 3. (~~The health officer shall examine the applicant, shall charge an exam fee as~~
567 ~~set forth in the fee schedule and may deny the application if in the health officer's~~
568 ~~judgment the applicant is for any reason, including previous finding of negligence,~~
569 ~~incompetence, misrepresentation or failure to comply with this title, not qualified to~~
570 ~~install on-site sewage systems~~) Evidence of two years of full-time equivalent
571 employment with relevant OSS experience within the five-year period preceding
572 application submittal, except that associate installer is not required to provide this
573 evidence.

574 4. A signed attestation that the applicant for a new or renewal certificate of
575 competency is familiar with and agrees to perform all OSS services in accordance with
576 the requirements of this title and the King County OSS code of performance and ethics.

577 C. (~~(1-)~~) As a condition of certification (~~(the)~~):

578 1. A master installer ((applicant)) shall submit evidence of and maintain at all
579 times compliance with state of Washington minimum performance bonding requirements
580 as stated in chapter 18.27 RCW((-), as amended;

581 2. (~~The health officer may suspend or revoke any master or associate installer's~~
582 ~~certificate of competency, pursuant to BOH chapter 1.08~~) A first-time applicant for a

583 master or associate installer’s certificate of competency shall submit payment of the
584 examination fee as set forth in the fee schedule and attain a passing score on the
585 applicable certification examination; and

586 3. A master or associate installer shall consistently demonstrate reasonable care
587 and skill in performing work governed by this title, meet the requirements of the OSS
588 code of performance and ethics, and comply with all the terms and conditions of these
589 and all other applicable rules and regulations.

590 D. The master or associate installer's certificate of competency shall expire
591 December 31 of each year. ((The)) An installer may not obtain installation permits or
592 construct or repair any OSS after December 31 unless the ((certification)) certificate has
593 been renewed. ((The holder of such a certificate))

594 E. An installer may renew the certificate ((on or before January 15 of the year
595 following expiration without taking the examination specified by this section, but only
596 if)) upon submittal, to the health officer, of a completed renewal application and fee
597 payment as specified in the fee schedule under BOH chapter 2.18, accompanied by
598 evidence that at least one CEU credit has been earned by the master or associate installer
599 during the previous calendar year, except that:

600 ~~((a. A renewal application accompanied by a fee as specified in the fee~~
601 ~~schedule in BOH chapter 2.18 is submitted to the health officer. A late fee of twenty five~~
602 ~~percent of the renewal amount will be charged by the health officer for renewal~~
603 ~~applications received after January 15; and~~

604 ~~b. The applicant provides evidence that at least one CEU credit has been~~
605 ~~earned by the master installer applicant and the associate installer applicant during the~~
606 ~~previous calendar year))~~

607 1. A master or associate installer submitting the renewal application after
608 January 15 of the year following expiration shall, in addition to the applicable certificate
609 fee, pay a late fee of twenty five percent of the renewal amount, and provide evidence of
610 completion of at least one CEU credit during the previous calendar year; and

611 2. A master or associate installer submitting the renewal application more than
612 twenty-four months after certificate expiration shall, in addition to the applicable
613 certificate fee, pay the applicable examination fee and must retake and obtain a passing
614 score on the certification examination specified in this section as a condition of renewal.

615 F. The health officer may deny any application for an installer’s or associate
616 installer’s certificate of competency if in the health officer’s judgment the applicant is for
617 any reason, including previous findings of negligence, incompetence, misrepresentation
618 or failure to comply with this title, not qualified to install on-site sewage systems.

619 ~~((4.))~~ G. The health officer may hold, as necessary, informational((/)) or
620 educational meetings for all holders of installer's certificates of competency. A minimum
621 of four weeks' notice of the meeting time and location shall be sent to each installer.
622 Except as provided by the health officer attendance at the meetings shall be mandatory
623 for all installers. Failure to attend the required meetings, without prior approval of the
624 health officer, shall be cause for the health officer to withhold recertification until ((an
625 examination administered under the provisions of subsection B. of this section is

626 ~~retaken~~) the installer retakes and attains a passing score on the applicable examination
627 under the provisions of this section.

628 H. The health officer may assess civil penalty fines of up to one-thousand dollars
629 per violation against any holder of a master or associate installer's certificate of
630 competency, or institute probationary requirements, or suspend or revoke a master or
631 associate installer's certificate of competency for the installer's failure to comply with this
632 title or the King County OSS code of performance and ethics.

633 SECTION 22. R&R 99-01, Section 2, as amended, and BOH 13.20.035 are each
634 hereby amended to read as follows:

635 **Maintainer certification.**

636 A. ~~((Unless))~~ Except as otherwise specified in this title, including BOH
637 13.20.040 and 13.60.010 relating to homeowners, it is unlawful to conduct performance
638 monitoring inspections ~~((of and/or perform))~~, preventive maintenance service, ~~((to~~
639 ~~include making limited))~~ or minor repairs to on-site sewage systems~~((;))~~ without a
640 currently valid OSM certificate of competency.

641 B. ~~((1. Application))~~ An applicant for an OSM certificate of competency shall
642 ~~((be made))~~ submit the application to the health officer and shall ~~((be accompanied by a))~~
643 include the following with the application:

644 1. Payment of the OSM certificate of competency fee as set forth in the fee
645 schedule under BOH chapter 2.18((-);

646 2. ~~((The application shall be accompanied by evidence of two years of relevant~~
647 ~~OSS experience.~~

648 ~~3. The application shall be accompanied by evidence~~) Evidence of successful
649 completion within the previous twelve months of a health officer-recognized course of
650 instruction in the operation, monitoring and maintenance of on-site sewage systems~~((:));~~
651 and

652 ~~((4.)) 3. The health officer shall examine the applicant except that the health~~
653 ~~officer may waive the examination for the designer who is performing monitoring of only~~
654 ~~these systems designed by that person. The health officer may deny the application if in~~
655 ~~the health officer's judgment the applicant is for any reason, including previous findings~~
656 ~~of negligence, incompetence, misrepresentation or failure to comply with this title, not~~
657 ~~qualified to monitor and maintain on-site sewage systems~~) Evidence of two years of full-
658 time equivalent employment with relevant OSS experience within the five-year period
659 preceding application submittal.

660 4. A signed attestation that the applicant for a new or renewal certificate of
661 competency is familiar with and agrees to perform all OSS services in accordance with
662 the requirements of this title and the King County OSS code of performance and ethics.

663 C. ~~((1.))~~ As a condition of certification ~~((the))~~;

664 ~~((a.)) 1. A~~ maintainer shall submit evidence of and maintain at all times
665 compliance with state of Washington minimum performance bonding requirements as
666 stated in chapter 18.27 RCW, as amended; and

667 ~~((b.)) 2. A first-time applicant for an OSM certificate of competency shall pay~~
668 the examination fee as set forth in the fee schedule and attain a passing score on the

669 certification examination, except that the health officer may waive the examination for a
670 designer who performs monitoring of only those systems designed by that person; and

671 3. A maintainer shall consistently demonstrate reasonable care and skill in
672 performing work governed by this title, meet the requirements of the King County OSS
673 code of performance and ethics, and ((shall)) comply with all the terms and conditions of
674 these and all other applicable rules and regulations.

675 ~~((2. The health officer may suspend or revoke any OSM certificate of~~
676 ~~competency, pursuant to BOH chapter 1.08.~~

677 ~~3.))~~ D. The OSM certificate of competency shall expire December 31 of each
678 year. ~~((The holder of such certificate may renew the certificate on or before January 15~~
679 ~~of the year following expiration without taking the examination specified by this section,~~
680 ~~but only if:~~

681 ~~a. a renewal application accompanied by a fee as specified in the fee schedule I~~
682 ~~submitted to the health officer. A late fee of twenty five percent of the renewal amount~~
683 ~~will be charged by the health officer for renewal applications received after January 15;~~
684 ~~and~~

685 ~~b. the applicant submits evidence of bonding as specified by BOH~~
686 ~~13.20.035.C.1; and~~

687 ~~c. the applicant submits evidence that at least one CEU credit has been earned~~
688 ~~by the OSM applicant during the previous calendar year.~~

689 4. ~~The~~) A ((on-site system)) maintainer may not conduct performance
690 monitoring inspections or perform preventive maintenance of on-site sewage systems
691 after December 31, unless the certification has been renewed.

692 E. A maintainer may renew the OSM certificate of competency on or before
693 January 15 of the year following expiration upon submittal, to the health officer, of a
694 completed renewal application, accompanied by evidence that at least one CEU credit has
695 been earned by the master or associate installer during the previous calendar year, and
696 fee payment as specified under BOH chapter 2.18, except that:

697 ~~((5-))~~ 1. An applicant submitting the renewal application after January 15 of the
698 year following expiration shall, in addition to the applicable certificate fee, pay a late fee
699 of twenty five percent of the renewal amount, and submit evidence that the applicant has
700 earned at least one CEU credit during the previous calendar year; and

701 2. An applicant submitting the renewal application more than twenty-four
702 months after certificate expiration must retake and obtain a passing score on the
703 certification examination specified in this section.

704 F. The health officer may deny any application for an OSS maintainer's
705 certificate of competency if in the health officer's judgment the applicant is for any
706 reason, including previous findings of negligence, incompetence, misrepresentation or
707 failure to comply with this title, not qualified to install on-site sewage systems.

708 G. The health officer may hold informational(~~/~~) or educational meetings for all
709 holders of OSM certificates of competency. A minimum of four weeks' notice of the
710 meeting time and location shall be sent to each maintainer. Unless otherwise specified by

711 the health officer, attendance at the meeting shall be mandatory for all maintainers.
712 Failure to attend the required meetings without prior approval of the health officer shall
713 be cause for the health officer to withhold recertification until ~~((an OSM examination is~~
714 ~~successfully completed))~~ the maintainer retakes and attains a passing score on the
715 certification examination specified in this section.

716 H. The health officer may assess civil penalty fines of up to one-thousand dollars
717 per violation against any holder of an OSS maintainer's certificate of competency, or
718 institute probationary requirements, or suspend or revoke a maintainer's certificate of
719 competency for the maintainer's failure to comply with this title or the King County OSS
720 code of performance and ethics.

721 SECTION 23. R&R 3, Part 2, Section 3, as amended, and BOH 13.20.040 are
722 each hereby amended to read as follows:

723 **Resident owner design, construction and monitoring.**

724 A. A resident owner may personally design a system for the resident owner's own
725 single-family residence, but only if the site application submitted by the homeowner
726 demonstrates that:

- 727 1. The area where the drainfield and reserve area are to be located has a
728 minimum of four feet of original permeable soil, and a minimum vertical separation of
729 three feet is maintained.
- 730 2. Not more than one system is designed in any twelve-month period.
- 731 3 A gravity soil absorption system is proposed; ~~((and))~~
- 732 4. The property is not adjacent to a ~~((marine))~~ shoreline;

733 5. The system primary area and reserve area are not less than two hundred feet
734 from surface water;

735 6. The design includes a soil evaluation performed by a state of Washington
736 licensed on-site sewage system designer or professional engineer, or a soil scientist as
737 defined under Chapter 246-272A WAC; and

738 7. The design describes a system fully conforming with this title.

739 B. A resident owner may personally construct, install, or repair a gravity system
740 for the resident owner's own single-family dwelling, but only if:

741 1. The area where the drainfield and reserve area are located has a minimum of
742 four feet of original permeable soil and a minimum vertical separation of three feet is
743 maintained;

744 2. The resident owner constructs and installs not more than one system in any
745 twelve-month period; and

746 3. The property is not adjacent to a ~~((marine))~~ shoreline.

747 C. The requirement for soil depths as required in ~~((this subsection B. and~~
748 ~~subsection))~~ subsections A. and B. of this section may be waived by the health officer
749 when the resident owner is making repairs or additions to an existing gravity system or
750 repairing or replacing the building sewer component of an alternative system.

751 D. A resident owner of a single-family residence may monitor the performance of
752 and perform prescribed preventive maintenance services for a gravity OSS and for the
753 septic tank component of an alternative OSS or, upon approval from the health officer,
754 for a low pressure distribution system.

755 SECTION 24. R&R 3, Part 3, Section 1, and BOH 13.24.010 are each hereby
756 amended to read as follows:

757 Application.

758 A. Application for subdivision or short subdivision approval shall be made to the
759 health officer on forms provided for this purpose, shall be accompanied by a fee as set
760 forth in the fee schedule and shall be in sufficient detail to allow evaluation of the
761 suitability of the proposed means of on-site sewage treatment and disposal. The
762 application shall be made by a licensed designer or professional engineer as defined
763 under this title. If a community on-site system is proposed, the preliminary report and
764 plans and specifications shall be in accordance with BOH 13.28.040. ~~((If any soils work~~
765 ~~is required or evaluation of an existing OSS is necessary the application must be~~
766 ~~submitted to the health officer by a licensed septic system designer or qualified~~
767 ~~professional engineer.))~~

768 B. Department review is not required for those subdivisions within the urban
769 growth area where group A public water and public sewer service will be used for all of
770 the resultant lots.

771 C. The application for any development, including but not limited to
772 subdivisions, short subdivisions, mobile home parks, multi-family housing, and
773 commercial establishments, shall include evidence that suitable site and soil conditions as
774 required by this title, to adequately treat and dispose of sewage on-site are present. The
775 applicant for development in a critical aquifer recharge area shall include, in the
776 application, evidence of compliance with K.C.C. 21A.24.316, as amended, including

777 evidence of compliance with the critical aquifer recharge area requirements. After
778 review of the proposed development, the health officer shall either approve, deny, or hold
779 the proposal pending submittal of additional information.

780 SECTION 25. R&R No. 3, Part 3, Section 2, as amended, and BOH 13.24.020
781 are each hereby amended to read as follows:

782 **Determination of minimum lot size.**

783 A. The minimum lot size when creating new lots utilizing OSS shall be
784 established by the health officer on the basis of the information submitted and any on-site
785 inspections by the health officer.

786 1. All lots created must be at least (~~twelve thousand five hundred~~) thirteen
787 thousand square feet and shall not exceed a maximum flow density of (~~one thousand five~~
788 ~~hundred seventy gallons of sewage per acre per day~~) 3.35 unit volumes of sewage per
789 day for public water supply and 1 unit volume of sewage per acre per day for private
790 water supply.

791 2. Lots utilizing an individual private water source shall be at least five acres.

792 B. Factors that may be considered when determining type of on-site system,
793 connection to sewers, or establishing minimum lot size area include but are not limited to
794 the following:

795 1. Availability of public sewers, as determined by the King County

796 Comprehensive Plan;

797 2. Soil type and depth;

798 3. Area drainage and lot drainage;

- 799 4. Protection of surface and ground water;
- 800 5. Setbacks from property lines, water supplies, rights of way and easements,
- 801 including but not limited to easements for drainfields, utilities and telecommunications;
- 802 6. Source of domestic water;
- 803 7. Topography, geology and ground cover;
- 804 8. Climatic conditions;
- 805 9. Activity or land use, present and anticipated;
- 806 10. Growth patterns;
- 807 11. Individual and accumulated gross effects on water quality;
- 808 12. Availability of a one hundred percent reserve area for system replacement;
- 809 13. Anticipated sewage volume - as determined by number of lots and
- 810 development;
- 811 14. Effect on other properties;
- 812 15. Compliance with zoning, critical area development restrictions including the
- 813 critical aquifer recharge area requirements under K.C.C. 21A.24.316, as amended, and
- 814 other code requirements of the governing agency as applicable.

815 C. The minimum lot size requirement for creating subdivisions involving single-

816 family residences or mobile home parks shall be determined by the soil type as outlined

817 in Table 13.24-1.

818 **Table 13.24-1**

819 **Minimum Land Area Requirement**

820 **Single-Family Residence or**

821

Unit Volume of Sewage

Type of Water Supply	Soil Type					
	1	2	3	4	5	6
Public Water System	0.5 acre	((12,500)) 13,000 sq. ft.	((15,000)) 16,000 sq. ft.	((18,000)) 19,000 sq. ft.	((20,000)) 21,000 sq. ft.	((22,000)) 23,000 sq. ft.
Individual/Private Well*	5 acres	5 acres	5 acres	5 acres	5 acres	5 acres
Minimum Usable Land Area	2,000 sq. ft.	2,000 sq. ft.	2,500 sq. ft.	3,333 sq. ft.	5,000 sq. ft.	10,000 sq. ft.

822
823
824
825
826

* Requirements for public wells may preclude use of private wells in certain instances. See RCW 19.27.097.

NOTE: Well location and construction must be consistent with the King County Comprehensive Plan, as amended.

827

SECTION 26. R&R No. 3, Part 3, Section 3, as amended, and BOH 13.24.030

828

are each hereby amended to read as follows:

829

Evaluation process. The applicant for subdivision or short subdivision approval

830

shall obtain the health officer's review of the development proposal in accordance with

831

this section.

832

A. The applicant shall obtain the health officer's preapplication or preliminary

833

review before submitting the development proposal to ((DDES)) DLS or other building

834

official, as applicable, and shall include the following information in the application

835

submittal:

836

1. A vicinity map providing precise directions to the parcel or parcels;

837

2. Signage or flagging at the identified entry point to the parcel or parcels;

838

3. Critical area review, including critical aquifer recharge area classification,

839

with all buffers and setbacks shown on the plot plan;

840 4. A minimum of two soil logs per proposed lot shall be provided prior to
841 department preliminary review. Such soil logs shall be excavated in accordance with the
842 requirements of BOH 13.28.050. The soil log or logs must clearly show that within the
843 lot area designated for the OSS the vertical separation specified in Table 13.28-1, and
844 minimum lot sizes specified in Table 13.24-1 are provided.

845 5. A scaled plot plan of the proposed subdivision depicting the land area
846 proposed for an initial on-site system and a contiguous one hundred percent (100%)
847 system reserve area and soil log locations. The plot plan shall also identify any wells,
848 surface water bodies and other features relevant to the siting of an on-site sewage system
849 on the proposed and adjacent parcels.

850 B. The applicant shall submit the following information to the health officer and
851 obtain the health officer's final approval of the development proposal:

852 1. A minimum of four soil logs per proposed lot shall be provided. Such soil
853 logs shall be excavated in accordance with BOH 13.28.050. Each soil log shall clearly
854 show that the vertical separation specified in Table 13.28-1 is provided.

855 2. A scaled plot plan identifying sufficient area for a drainfield and a contiguous
856 one hundred percent reserve area for each lot shall be submitted after road cuts have been
857 made, any plat development site grading affecting the OSS area completed, and drainage
858 plan completed. Such a plot plan shall also include any soil log locations, road cuts,
859 wells, surface water features, utility easements, storm and surface water retention and
860 disposal facilities and other features relevant to the design and installation of an OSS.

861 3. The applicant shall submit site designs for those proposed lots where the
862 health officer determines that it is unclear that there is sufficient area for an on-site
863 system and one hundred percent reserve area.

864 4. ~~((If existing homes are on any of the proposed lots then the applicant must
865 demonstrate all of the following:~~

866 ~~a. the existing OSS is in substantial conformance with this title;~~

867 ~~b. there is adequate reserve area available for repair or replacement of the
868 system in accordance with this title; and~~

869 ~~c. the continued operation of the system does not pose a threat to public health
870 or groundwater quality))~~ For lots with existing homes, the health officer will review all

871 applications to determine the compatibility of the proposed subdivision or short

872 subdivision with the existing OSS. Factors that the health officer may consider include,

873 but are not limited to, the following:

874 a. location of SSAS in relation to foundation and existing improvements;

875 b. size of SSAS in relation to proposed use;

876 c. condition of the existing OSS;

877 d. potential for reconstruction and repair of the existing on-site sewage
878 disposal system;

879 e. ultimate purpose of the remodeling; and

880 f. approved source of water.

881 SECTION 27. R&R No 3, Part 3, Sections 1 and 4, as amended, and BOH

882 13.28.010 are each hereby amended to read as follows:

883 **Application submittal, review, approval.**

884 A. Application for site design approval for a proposed new OSS installation,
885 repair or replacement of an existing failed soil absorption system, or modification,
886 connection to or expansion of an OSS shall be made on forms provided by the health
887 officer and be accompanied by 1. a plan review fee as set forth in the fee schedule and 2.
888 a plan that demonstrates that the standards required in this title are met.

889 B. Approval of plans shall expire (~~two~~) three years from date of approval unless
890 a valid building permit application has been accepted for review by the building official
891 for construction of the building for which the OSS has been designed. Upon expiration
892 of plan approval or building permit the applicant shall submit a complete new application
893 with fees for review and approval by the health officer.

894 C. After review of a site design application, the health officer may deny the
895 application if in the health officer's judgment the physical features of the property on
896 which it is proposed to locate the OSS, or the design of the proposed OSS, are not
897 adequate for effective operation of such a system.

898 D. Each site application denial or withdrawal of a previously issued approval
899 shall be in writing citing the reason or reasons and shall include a notice of the applicant's
900 right to appeal for reconsideration pursuant to this title.

901 SECTION 28. R&R 3, Part 4, Section 2, as amended, and BOH 13.28.020 are
902 each hereby amended to read as follows:

903 **Design support materials.** Design of OSS shall be in accordance with this title
904 and shall accommodate all sewage from the buildings and premises to be served. The

905 type of system required shall be determined by a soil and site evaluation conducted by the
906 designer, which shall include location, soil type, vertical separation and other relevant
907 conditions. All design control (~~(panels)~~) points shall be located with the designated
908 drainfield areas and remain in place until the health officer has issued final approval for
909 the installed OSS.

910 A. The OSS site design application shall include the following:

911 1. A completed site design application form for the individual OSS that includes
912 the following information:

- 913 a. approximate address of property;
- 914 b. parcel number and legal description of property;
- 915 c. type and size of building the system will support;
- 916 d. name and address of property owner, applicant and system designer;
- 917 e. size of the parcel;
- 918 f. whether the property is within the urban area or rural area as designated by
919 the King County Comprehensive Plan; and, if located within the urban area, the distance
920 of the nearest property line to the closest public sewer line;
- 921 g. designation of an approved domestic water supply source;
- 922 h. type of development for which site design application is being made, for
923 example: single-family, multi-family or commercial; and type of permit, for example:
924 new installation(;) or repair(~~(, or limited repair)~~) of an existing OSS;
- 925 i. the presence of critical area or areas, including critical aquifer recharge
926 areas, to be delineated on the scaled plot plan;

- 927 j. date of testing;
- 928 k. original signature in blue ink and Washington state Department of Licensing
929 certificate of competency number of designer or professional engineer's registration
930 number; and
- 931 1. all other information requested on the site application for on-site sewage
932 disposal system form.
- 933 2. Results of a soil and site evaluation conducted by the designer. The designer
934 shall:
- 935 a. provide soil logs that accurately describe subsurface soil conditions present
936 within the primary and reserve soil absorption areas;
- 937 b. use soil and site evaluation procedures and terminology in accordance with
938 Chapter 3 and Appendix A of the Design Manual: On-Site Wastewater Treatment and
939 Disposal Systems, United States Environmental Protection Agency, EPA-625/1-80-012,
940 October, 1980 or as amended, except where modified by, or in conflict, with this title;
- 941 c. use the soil names and particle size limits of the United States Department of
942 Agriculture Soil Conservation Service classification system;
- 943 d. determine texture, structure, compaction and other soil characteristics that
944 affect the treatment and water movement potential of the soil by using normal field
945 and/or laboratory procedures such as particle size analysis;
- 946 e. classify the soil as in Table 13.28-3, Soil Textural Classification;
- 947 f. describe ground water conditions, including the date of the observation or
948 observations, and the probable maximum water table height;

- 949 g. describe existence of structurally deficient soils, such as slide zones and
950 dunes, or those soils subject to major wind or water erosion events;
- 951 h. describe the existence and location of critical areas, for example designated
952 flood plains and incorporate into design drawings; and
- 953 i. describe the location of any encumbrances affecting system placement, such
954 as:
- 955 (1) wells, other water sources and water supply lines;
 - 956 (2) surface water and storm water infiltration areas;
 - 957 (3) abandoned wells;
 - 958 (4) outcrops of bedrock and restrictive layers;
 - 959 (5) buildings;
 - 960 (6) property lines and lines of easements;
 - 961 (7) drainage structures such as footing drains, curtain drains, and drainage
962 ditches;
 - 963 (8) cuts, banks, and fills;
 - 964 (9) driveways and parking areas;
 - 965 (10) existing OSS; and
 - 966 (11) underground utilities.
- 967 3. A completely dimensioned overall parcel plot plan, drawn to a one inch
968 equals twenty feet scale, or the largest scale that will allow the parcel plot plan to be
969 presented on a single page, no smaller than eight and one-half by eleven inches and no
970 larger than eleven by seventeen inches, accurately showing:

- 971 a. site drainage characteristics including direction of surface drainage;
- 972 b. an arrow indicating north;
- 973 c. topographical contours at two foot intervals over the OSS area and all other
- 974 areas containing features relevant to the design and installation of an adequate and
- 975 efficient OSS;
- 976 d. maximum building footprints, wastewater tanks and primary and reserve
- 977 soil absorption system locations;
- 978 e. all locations of and routes to soil log excavations, with such locations and
- 979 routes clearly identified by appropriate signage or flagging on the property;
- 980 f. locations of and routes to potable water sources near property lines (drilled
- 981 wells within one hundred feet and all other sources within two hundred feet, and all well
- 982 heads, with such locations and routes clearly identified by appropriate signage or flagging
- 983 on the property;
- 984 g. location of property and easement lines;
- 985 h. location and description of design control point or points within the
- 986 designated drainfield area; and
- 987 i. the boundaries of the SSAS detail drawing.
- 988 4. Construction plans and specifications showing:
- 989 a. plumbing stub elevation; and
- 990 b. vertical section detail drawings depicting dimensions of wastewater tank
- 991 details to include minimum and maximum elevation of installation, maximum depth of
- 992 cover over tanks, acceptable seasonal groundwater table elevation at all tank locations,

993 and depth of required bedding material. For drainfields, minimum and maximum
994 drainfield width and depth, vertical separation and amount of cover material and
995 placement if any, and any other OSS components to be constructed at the site.

996 5. An SSAS detail drawing scaled one inch equals twenty feet (or one inch
997 equals thirty feet on larger lots) depicting design control point or points, the dimensions
998 and location of all components of the proposed primary and reserve systems including
999 trench widths, lengths and horizontal separations. If the location of the reserve area is at
1000 an elevation above the outlet of the septic tank, the design shall include all tanks, dosing
1001 chambers and piping necessary to allow distribution of the effluent to the reserve area
1002 with a minimum of disruption to the original subsurface field and other property of the
1003 owner. The health officer may require the installation of the dosing chamber, pressure
1004 lines and distribution box/inspection box where the future access to the reserve area will
1005 be severely limited. Drawings may be submitted electronically in a format acceptable to
1006 and with the prior agreement of the health officer.

1007 6. Location of a pump tank controls in plain view of the pump tank shall be
1008 included on the design drawings.

1009 7. Construction details for and location of any proposed footing drains, curtain
1010 drains and interceptor drains.

1011 8. Calculations and observations supporting the proposed design, including:

1012 a. soil type; and

1013 b. hydraulic loading rate in the soil absorption component.

1014 9. An accurate vicinity location sketch and route map to the property, including
1015 written directions to the property from the last named street or road. Signage shall be
1016 displayed at the entrance to the property and include the names of the designer and
1017 applicant. A cleared and flagged route to the soil log and well site locations must be
1018 provided from the property entrance.

1019 10. Proof of availability of an approved domestic water supply source.

1020 11. One or more recorded easements describing the locations of all potable
1021 water lines connected to a well, spring, rain water catchment system, or water meter on
1022 the property and extending to service connections beyond the property boundary. The
1023 health officer may require each such easement to include, as applicable, provision for
1024 location of water storage reservoirs, well housing, pressure tanks, and any other facilities
1025 and equipment associated with the water source.

1026 12. Such other information as the health officer may require.

1027 B. Additional requirements for an application for an OSS serving buildings other
1028 than or in addition to single-family residences:

1029 1. Information to establish that the sewage is not industrial wastewater;

1030 2. Information to establish that the sewage effluent applied to the infiltrative
1031 surface does not exceed typical residential effluent characteristics by providing waste
1032 strength characteristics and parameters;

1033 3. For all commercial developments not classified as community on-site
1034 systems, recorded covenants declaring that the owner or owners of the property or

1035 properties served by the OSS are responsible for the operation, monitoring, and
1036 maintenance of the OSS in accordance with this title; and

1037 4. Proof of a system operation monitoring and maintenance plan in accordance
1038 with requirements of BOH chapter 13.60.

1039 SECTION 29 R&R 3, Part 4, Section 3, as amended, and BOH 13.28.030 are
1040 each hereby amended to read as follows:

1041 **General design requirements.**

1042 A. Collection systems will be designed to comply with criteria set forth in
1043 Criteria for Sewage Works Design, Washington state Department of Ecology, November
1044 2007 or as thereafter amended.

1045 B. Maximum Slopes.

1046 1. OSS shall not be allowed on slopes exceeding forty percent.

1047 2. On slopes exceeding thirty percent, the SSAS shall be pressure distribution
1048 and have a maximum SSAS trench width of two feet.

1049 C. SSAS reserve area or areas shall be designated equal to at least one hundred
1050 percent of the primary SSAS area. One or more areas may be designated as SSAS
1051 reserve areas. If more than one area is designated or if access is limited, at the discretion
1052 of the health officer the reserve system may be required to be installed along with the
1053 primary SSAS. At least two soil log excavations shall be installed in each designated
1054 reserve area. Construction plans for the SSAS reserve area may be required by the health
1055 officer.

1056 D. OSS for lots created after July 1, 1984, shall be located on the same lot as the
1057 buildings they are designed to serve. Any existing OSS which is failing and for which
1058 there is insufficient area on the lot to repair the system may be replaced by an OSS
1059 located off-site provided proof of easements is submitted to the health officer. Proof of
1060 lot creation date must be provided when requesting use of a drainfield easement for new
1061 construction. All drainfield easements shall be surveyed and permanently marked, and
1062 the soils within the easements protected against disturbance. Approval shall be subject to
1063 such additional conditions as deemed necessary by the health officer to protect public
1064 health.

1065 E. Any application for site design approval for OSS in a critical area shall include
1066 documentation from the applicable jurisdictional authority indicating critical area review
1067 has been completed. All critical areas and their buffers shall be identified and drawn to
1068 scale on the design drawing submittals. OSS shall not be located on landforms that are
1069 unstable.

1070 F. Where any type of drain is to be installed for the purpose of intercepting
1071 subsurface water and channeling, concentrating, focusing or directing its flow onto a
1072 downstream property not under the ownership or agency of the applicant or King County,
1073 a release of damages holding King County and its employees harmless for any
1074 subsequent erosion or loss or limitation of use of such property must be executed and
1075 filed with the King County records and elections division and which shall run with the
1076 land, prior to approval of any site application.

1077 G. All types of drains installed for the purpose of affecting vertical separation
1078 shall be verified as effective during the winter water table season as outlined in BOH
1079 13.28.060.C.

1080 H. No downspout or footing drain shall be directly or indirectly connected to an
1081 OSS and the OSS shall be so constructed and installed that surface water or groundwater
1082 will not interfere with the operation of the system.

1083 I. Seepage pits shall not be used for the disposal of septic tank effluent.

1084 J. The installation and use of cesspools and pit privies for disposal of sewage is
1085 not permitted.

1086 K. When grease traps are used, the design and installation will comply with
1087 criteria set forth in the Uniform Plumbing Code, ((2006)) 2021 Edition, International
1088 Association of Plumbing and Mechanical Officials, as amended. In addition the design
1089 application shall include a grease trap maintenance schedule.

1090 L. When siphon systems are used, they shall comply with Recommended
1091 Standards and Guidance for Pressure Distribution Systems, Washington State Department
1092 of Health, July 1, 2007.

1093 M. The connection of accessory living quarters as defined in this title to an OSS
1094 [is] designed for or in use by a single-family residence or commercial structure may be
1095 permitted provided that public health and groundwater quality are not affected, and the
1096 OSS is designed for the anticipated increased flow. For the purposes of this title,
1097 including the determination of required absorption areas, loading rates, and minimum
1098 capacities for septic tanks, each bedroom in an accessory building shall be included in the

1099 total number of bedrooms to be served by the OSS in addition to the bedrooms in the
1100 primary residence. An accessory building with no bedroom shall be deemed equivalent
1101 to one bedroom within the single-family primary residence associated with the accessory
1102 building. In medical hardship cases as described in K.C.C. 21A.32.170, the health officer
1103 may allow the temporary connection of a mobile home or temporary dwelling to an
1104 existing OSS designed only for a single-family residence provided that neither public
1105 health nor groundwater quality are negatively affected.

1106 N. Pump lines shall be installed at a depth which precludes disruption or damage
1107 by installation of other utilities or freezing.

1108 O. No part of an OSS shall be constructed in the (~~zero rise~~) FEMA floodway of
1109 a flood hazard area as described by K.C.C. Title 21A. New OSS to serve new
1110 subdivisions shall be located outside the limits of a flood hazard area. The installation of
1111 new OSS within the flood fringe area of the one-hundred-year flood plain, as determined
1112 by (~~DDES~~) DLS or the local building official, may be allowed if the applicant
1113 demonstrates that:

- 1114 1. The proposed building parcel is an existing legal building site;
- 1115 2. No feasible alternative site outside the flood hazard area is available;
- 1116 3. Wastewater tanks and electrical components will be flood-proofed to the
1117 flood protection elevation;
- 1118 4. A conforming subsurface soil absorption system can be installed; and
- 1119 5. (~~DDES~~) DLS or the local building official permits the development which
1120 is proposed to be served by the OSS.

1121 P. No part of a SSAS including the drainrock shall be located in fill material or
 1122 disturbed soils.

1123 Q. SSAS shall be constructed with observation ports terminating within utility
 1124 boxes adjustable to final grade over the ends of the drainfield pipes, or other methods of
 1125 drainfield detection approved by the health officer to aid in the future locating of these
 1126 components.

1127 R. OSS shall not be permitted where a minimum vertical separation of three feet
 1128 of permeable soil below the infiltrative surface cannot be maintained except as provided
 1129 in Table 13.28-1. The health officer may require greater vertical separation as needed to
 1130 protect public health when the aquifer is used for a potable water supply.

1131 **Table 13.28-1**

1132 **Minimum Treatment Level, Bacteria Level, and Effluent Distribution Method**
 1133 **Required by Various Soil Types, Vertical Separation and Original Soil Depth**
 1134 **Conditions**

Vertical Separation in inches	Soil Type			
	1	2	3-4	5-6
	<u>Minimum Treatment Level, Bacteria Level, and Effluent Distribution Method</u>			
	<u>Method</u>			
$12 < 18^{1,2}$	A & BL1 - pressure with timed dosing	B & BL2 - pressure with timed dosing	B & BL2 - pressure with timed dosing	B & BL2 - pressure with timed dosing
$((>18 < 24)) \geq 18 < 24$	B & BL2 - pressure with timed dosing	B & BL2 - pressure with timed dosing	B & BL2 - pressure with timed dosing	B & BL2 - pressure with timed dosing
$((>24 < 36)) \geq 24 < 36$	B & BL2 - pressure with timed dosing	C & BL3 - pressure with timed dosing	E-pressure with timed dosing	E-pressure with timed dosing
$((>36 < 60)) \geq 36 < 60$	B & BL2 - pressure with timed dosing	E-pressure with timed dosing	E-pressure with timed dosing	E-pressure with timed dosing

((≥)) ≥60	C & BL3 - pressure with timed dosing	E-pressure with timed dosing	E-pressure with timed dosing	E-pressure with timed dosing
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Table 13.28-1 Explanatory Notes

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1. Except as provided in footnote 2, the minimum required original, undisturbed, permeable soil depth is eighteen inches.

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2. For existing lots of record where the original undisturbed soil depth above a restrictive layer is between 12 and 18 inches the following is required:

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a. Minimum lot size is 5 acres. Any lot area placed into a separate sensitive area protection tract in accordance with King County Code Section 21A.24.180 may also be included in the computation of the minimum five (5) acre lot size required by this section.

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b. The owner shall file a covenant with the King County records and elections division agreeing not to subdivide the parcel utilizing the OSS to less than 5 acres until public sewer service is provided.

1141

c. A water table study shall be conducted during a time of high seasonal water table to establish available soil depth.

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d. A system meeting treatment level A, or two treatment level B systems in combination meeting treatment level A without the use of disinfection, such as a mound preceded by an intermittent sandfilter, shall be used.

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S. Disinfection may not be used:

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1. To achieve the fecal coliform requirements to meet treatment levels A or B in Type 1 soils; or treatment level C; or

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2. On lots with less than eighteen inches of soil; or

3. In a critical aquifer recharge area.

T. The coarsest textured soil within the vertical separation selected determines the minimum treatment level and method of distribution.

U. Based upon the treatment capacity and design flow the designer of an OSS shall establish the operational capacity of the system. This information shall be included with the design application and record drawing submission.

V. Any reduction in horizontal separation for a pressure sewer line crossing a surface water source shall meet the requirements of the publication, Granting Waivers

1165 from State On-site Sewage System Regulations, chapter 246-272A WAC, as amended,
1166 published by the Washington state Department of Health.

1167 W. All OSS must comply with the applicable treatment levels contained in Table
1168 13.28-1 and applicable setbacks contained in Table 13.28-2; though the health officer
1169 may grant any setback reduction authorized under Table 13.28-2 only in response to a
1170 written request for such reduction from the designer of record if the request includes all
1171 reasons for the proposed reduction and describes all mitigation measures required under
1172 this title or as may be required by the health officer in the exercise of reasonable
1173 discretion for the protection of the public health.

1174 X. In preparing any OSS site design application, the designer shall consider:

- 1175 1. CBOD5, TSS and O and G;
- 1176 2. Other parameters that can adversely affect treatment anywhere along the
1177 treatment sequence. Examples include pH, temperature and dissolved oxygen;
- 1178 3. The sensitivity of the site where the OSS will be installed, such as shellfish
1179 growing areas, designated swimming areas, and other areas identified in the management
1180 plan.

1181 Y. (~~Nitrogen contributions, where nitrogen has been identified as a contaminant~~
1182 ~~of concern by the management plan, shall be addressed through either lot size or~~
1183 ~~treatment, or both.)) The applicant for development in a critical aquifer recharge area
1184 shall include, in the application, evidence of compliance with K.C.C. 21A.24.316, as
1185 amended, including evidence of compliance with the critical aquifer recharge area
1186 requirements.~~

1187 Z. Design and installation of OSS with electrical components shall include a
 1188 readily accessible control panel exterior to the structure served by the OSS and meeting
 1189 the following standards:

1190 1. Located in an external location between three and five feet in elevation above
 1191 finished grade, meeting state of Washington Department of Labor and Industry's
 1192 electrical safety requirements;

1193 2. Includes an electrical power control switch to enable power shutoff to the
 1194 OSS for maintenance or repair without the need for access to any circuit breaker panels
 1195 or other power controls within the structure served by the OSS;

1196 3. Connected to dedicated electrical circuits with the alarm and pump circuits
 1197 independent of one another;

1198 4. Contains audible and visual alarms to alert the owner or occupant of a system
 1199 deficiency or malfunction; and

1200 5. Includes a remote notification device for the alarm system when the OSS
 1201 alarm notification device is located over 100 feet from the building it serves, such as an
 1202 auto-dialer or telemetry notification system, to notify the respective monitoring and
 1203 maintenance service provider or the property owner or occupant of alarm events.

Table 13.28-2

Minimum Horizontal Separations

(Setbacks)

	MEASURE FROM		
Items Requiring Setback	Edge of soil dispersal component trench or reserve area	Septic tank, holding tank, containment vessel, pump	Building sewer, collection, and

		chamber, and distribution box	nonperforated distribution line ¹
Potable Water Source ²			
-- Private well	100 ft.	100 ft.	100 ft.
-- Public drinking water well	100 ft.	100 ft.	100 ft.
-- Drinking water spring/dug well ³	200 ft.	200 ft.	200 ft.
<u>Non-potable water source ²</u>	<u>100 ft</u>	<u>100 ft</u>	<u>100 ft</u>
Pressurized water supply line ⁴	10 ft.	10 ft.	10 ft.
Properly decommissioned well ⁵	10 ft.	10 ft.	N/A
Surface water ^{2, 6, 7}	100ft.	50 ft.	10 ft.
Seasonal water ^{2, 7}	30 ft.	15 ft.	
Swimming Pools			
A. Down-gradient ⁸	A. 15ft + height of the cut. Need not exceed 30 ft.	5 ft.	2 ft.
B. Up-gradient ⁸	B. 10 ft.	5 ft.	2 ft.
C. If underdrains are present, either down-gradient or up-gradient	C. 30 ft.	N/A	N/A
Building foundation:			
A. Down-gradient ⁸	A. 15 ft. + height of foundation cut. Need not exceed 30 ft. ^{8, 9}	5 ft.	2 ft.
B. Up-gradient ⁸	B. 10 ft.	5 ft.	2 ft.
Property or easement line	10 ft. ^{10, 11}	5 ft.	N/A
Decks (first floor) with post and pier supports	5 ft.	5 ft.	N/A ¹⁵
Decks – post and block (2nd Floor at least 6 ft. high)	2 ft. Outside a line from any pier supports	Not under any pier supports	N/A
Decks Cantilevered (at least 6 ft. high)	0 ft.	0 ft.	N/A
Septic tanks, pump tanks, treatment tanks, sandfilter containment vessels			
A. Down-gradient ⁸	A. 15 ft. + height of excavation. Need not exceed 30 ft. ⁹	N/A	N/A
B. Up-gradient ⁸	B. 5 ft.		
Interceptor/curtain drains/footing drains.			
-- Down-gradient ⁸	30 ft.	5 ft.	N/A
-- Up-gradient ⁸	10 ft.	N/A	N/A

<u>Lined¹⁶ stormwater detention pond¹⁷</u>			
-- <u>Down-gradient</u>	<u>100 ft (may be reduced to no less than 30 ft)</u>	<u>N/A</u>	<u>N/A</u>
-- <u>Up-gradient</u>	<u>100 ft (may be reduced to no less than 10 ft)</u>	<u>N/A</u>	<u>N/A</u>
<u>Unlined¹⁶ stormwater infiltration pond¹⁷</u>	<u>100 ft.</u>	<u>50 ft.</u>	<u>10 ft.</u>
<u>Irrigation canal or irrigation pond¹⁷</u>	<u>100 ft.</u>	<u>50 ft.</u>	<u>10 ft.</u>
<u>Subsurface stormwater infiltration or dispersion component¹⁷</u>			
-- <u>Down-gradient</u>	<u>100 ft (may be reduced to no less than 30 ft)</u>	<u>10 ft.</u>	<u>N/A</u>
-- <u>Up-gradient</u>	<u>100 ft (may be reduced to no less than 30 ft)</u>	<u>10 ft.</u>	<u>N/A</u>
((Infiltration and Dispersion Trenches			
A. Down gradient	30 ft.	10 ft.	5 ft.
B. Up gradient	100 ft.¹⁴	30 ft.	5 ft.)
Down-gradient cuts or banks 5 ft. or less in vertical height	15 ft. + height of bank ^{9, 13}		
Down-gradient cuts or banks greater than 5 ft. in vertical height with at least 5 ft of original, undisturbed soil above a restrictive layer due to a structural or textural change ⁸	15 ft. + height of bank but shall not be less than 25 ft. ^{9, 12}	N/A	N/A
Down-gradient cuts or banks greater than 5 ft. in vertical height with less than 5 ft. of original, undisturbed soil above a restrictive layer due to a structural or textural change ⁸	15 ft. + height of bank but shall not be less than 25 ft. ¹²	N/A	N/A

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Table 13.28-2 Explanatory Notes

1. "Building sewer" as defined by the most current edition of the Uniform Plumbing Code. "Nonperforated distribution" also includes pressure sewer transport lines.
2. With excessively permeable soils or other sites where conditions indicate a greater potential for ground or surface water contamination or pollution such as unconfined aquifers, shallow or saturated soils, dug wells, and improperly abandoned wells, the distance from any water supply or surface water may be increased by the health officer.
3. Setbacks from private or public springs and from shallow wells without intact casings or those wells which are not constructed in accordance with chapter 173-160 WAC and are utilized as a source of drinking water shall comply with BOH 13.04.070.C.
4. The health officer may approve a sewer transport line crossing a water supply line [if the sewer line when there is no other reasonable means to keep them from crossing and if the sewer line is constructed in accordance with Section 2.4 of the Department of Ecology's Criteria for Sewage Works Design, revised November 2007 or equivalent.
5. Before any component may be placed within one hundred feet of a well, the designer shall submit a "decommissioned water well report" completed by a licensed well driller, which verifies that appropriate decommissioning procedures noted in chapter 173-160 WAC were followed.
6. Setback measured from ordinary high water mark of surface water. Greater setback may be required to prevent pollution. The health officer will state reasons for greater setback to applicant in writing.
7. This separation may not be reduced by culverting of streams without prior written approval for the culverting from King County or applicable building official, but in no case shall this separation be less than fifteen feet plus the height of the excavation which contains the culvert. Need not exceed thirty feet.
8. The item is down-gradient when liquid will flow toward it upon encountering a water table or a restrictive layer. The item is up-gradient when liquid will flow away from it upon encountering a water table or restrictive layer.
9. May be reduced to ten feet by the health officer when bottom of infiltrative surface is downgradient from the base of the foundation cut or wastewater tank excavation, or there is at least five feet of original undisturbed unsaturated soil above a restrictive layer formed due to a structural or textural change.
10. May be reduced five feet by the health officer in repairs to existing systems, in setbacks to easements or where a confirmed property line is up-gradient from the soil absorption component. A survey may be required by the health officer to ensure compliance with setback requirements.
11. This distance may be increased to thirty feet by the health officer where cuts or construction on neighboring properties may affect the system.
12. Need not exceed one hundred feet.
13. May be reduced to ten feet when the bottom of the infiltrative surface is below the base of the cut or bank and no restrictive layer or layer formed due to a structural or textural change is intersected or there is at least five feet of original, undisturbed soil above a restrictive layer or layer due to a structural change.
14. The health officer may reduce this setback to thirty feet if the soil depth is four feet or greater and is soil type 1, 2 or 3.
15. Any sewer clean-out shall be accessible for OSS maintenance or repair.
16. "Lined" means any component that has the intended function of detaining the stormwater with no intention of dispersal into surrounding soil.
17. Infiltration or discharge from stormwater management facilities must be located downgradient of the primary and reserve drainfield areas unless the site design application submitted to the health officer clearly demonstrates that site topography prevents discharged flows from stormwater management facilities from intersecting the OSS drainfield and the design is consistent with local stormwater management authority rules and policies.

1256 SECTION 30. R&R No. 3, Part 4, Section 7, as amended, and BOH 13.28.070

1257 are each hereby amended to read as follows:

1258 **Required absorption area.**

1259 A. Single-family dwellings.

1260 1. For design purposes a minimum design flow of one hundred fifty
1261 gallons/bedroom/day shall be utilized in determining unit volume with a minimum of
1262 three bedrooms.

1263 2. For each additional bedroom OSS designs must use at least an additional one
1264 hundred twenty gallons/bedroom/day.

1265 3. For single-family residences with one additional dwelling served by the same
1266 OSS, the minimum design flow for one additional dwelling is one hundred fifty gallons
1267 per bedroom.

1268 4. For three or more dwellings served by the same OSS, the minimum design
1269 flow for the first dwelling is one hundred fifty gallons per bedroom per day. The
1270 minimum design flow for each additional dwelling is one hundred fifty gallons per
1271 bedroom.

1272 5. Loading rates shall be determined according to soil texture type as outlined in
1273 Table 13.28-4. The finest textured soil in the selected vertical separation establishes the
1274 loading rate.

1275 **Table 13.28-4**

1276 **Maximum Hydraulic Loading Rate for Residential Sewage¹**

		Loading Rate for Residential Effluent
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Soil Type	Soil Textural Classification Description	Using Gravity or Pressure Distribution (gal./sq.ft./day) ⁵
1	Gravelly and very gravelly ² coarse sands, all extremely gravelly ³ soils excluding Soil types 5 & 6, all soil type with greater than or equal to 90% rock fragments	1.0 ⁴
2	Coarse sands	1.0
3	Medium sands, loamy coarse sands, loamy medium sands.	0.8
4	Fine sands, loamy fine sands, sandy loams, loams.	0.6 ⁶
5	Very fine sands, loamy very fine sands; or silt loams, sandy clay loams, clay loams and silty clay loams with a moderate structure or strong structure (excluding a platy structure).	0.4 ⁶
6	Other silt loams, sandy clay loams, clay loams, silty clay loams.	0.2 ^{6,7}
7	Sandy clay, silty clay and strongly cemented firm soils, soil with a moderate or strong platy structure, any soil with a massive structure, any soil with appreciable amounts of expanding clays	Not suitable

Table 13.28-4 Explanatory Notes

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1. Compacted soils, cemented soils, and/or poor soil structure may require a reduction of the loading rate or render the soil unsuitable for OSS.
 2. Very Gravelly = >35% and 60% gravel and coarse fragments, by volume.
 3. Extremely Gravelly = >60% gravel and coarse fragments, by volume.
 4. Due to the highly permeable nature of type 1 soil, only systems which meet or exceed the treatment levels required in Table 13.28-1 may be installed.
 5. The loading rate listed for the soil type present in the nongravel portion is to be used for calculating the minimum absorption area required. The value is to be determined from this table.
 6. OSS installed in soil texture type 4, type 5 or type 6 shall be constructed during dry weather (defined as at least two consecutive weeks without appreciable rainfall) and dry soil conditions to minimize compaction and smearing during excavation, as verified at the site.
 7. SSAS in soil type 6 must utilize pressure distribution.
- B. Buildings other than single-family residences.**
1. Soil dispersal components having daily design flow between one thousand and three thousand five hundred gallons of sewage per day shall:
 - a. be located only on soil types 1 through 5;
 - b. be located only on slopes of less than thirty percent, or seventeen degrees;
 and
 - c. have pressure distribution and timed dosing.

1299 2. Schools with OSS and who use laboratories and shop facilities shall have
1300 plumbing drains for these facilities directed to holding tanks separate from the common
1301 wastewater drains to the OSS.

1302 3. For OSS treating sewage from a nonresidential source, the designer shall
1303 provide the following:

1304 a. information showing that none of the chemicals or other materials listed in
1305 BOH 13.04.058 will be introduced into the OSS; and

1306 b. a site-specific design providing the treatment level equal to or greater than
1307 the treatment level required of sewage from a residential source.

1308 4. The owner of an OSS for a commercial development not classified as a
1309 community on-site system shall file a covenant declaring that the owner is responsible for
1310 the operation, monitoring and maintenance of the OSS in accordance with this title.

1311 5. Required absorption area must be determined by using one of the following
1312 methods:

1313 a. by using the figures given in Table 13.28-5, or the Onsite Wastewater
1314 Treatment Systems Manual, EPA/625/R-00/008, as amended, then using the appropriate
1315 application rate from Table 13.28-4; or

1316 b. by determining average water meter readings for one year from at least three
1317 similar establishments and adding a minimum safety factor of fifty percent. Both
1318 operating capacity and surge capacity must be determined.

1319 6. The minimum SSAS area must be not less than two hundred square feet.

1320

Table 13.28-5

Type of Establishment¹	Gallons Per Person Per Day
Multiple Family Dwelling (per person – 2 per bedroom – Minimum of 2 bedrooms per unit)	75
Factories, office buildings, etc. (add 100 gallons/day for each utility sink per shift; food establishment not included)	20
Food Establishments – with food preparation	50 (gallons per seat)
Taverns – no food preparation (estimate patrons per day and add 15 gallons/employee)	5
Mobile Home Parks (figure minimum 3 bedrooms, 2 people per bedroom)	75
Resort Camps	50
Work or Construction Camps	50
Day Camps (no meals served)	15
Swimming Pools and Bathhouse (sanitary facilities only)	15
Country Clubs (per member present, add 15 gallons/day per employee)	130
Motels with kitchen (figure 2 persons per bed space)	50
Motels (figure 2 persons per bed space)	40
Theaters (per auditorium seat)	5
Airports (per passenger)	5
Retail Stores (per toilet room for customer use)	650
Retail Stores (per employee per shift – add 100 gallons/day for each utility sink)	15
Service Stations (per vehicle served)	15
Churches without kitchen (seating capacity)	5
Churches with kitchen (seating capacity)	15
Recreational Vehicle Parks (without sewer and water hookups – with central toilets and showers – per space)	50
Recreational Vehicle Parks (with sewer and water hookups – with central toilets and showers – per space)	100
Boarding Houses (per person)	50
Campgrounds (with central comfort station – with flush toilets and showers – per space)	50
Campground (with central comfort station – without showers – per space)	25
Picnic Parks (flush toilets only – per person)	5
Picnic Parks (with flush toilets – bathhouse and showers – per person)	10
For uses not listed in this table, the upper range values in Onsite Wastewater Treatment Systems Manual, February 2002, EPA/625/R-00/008, as amended, United States Environmental Protection Agency, shall be used. If the type of facility is not listed in the EPA design manual, design flows from one of the following shall be used: (A) Design Standards for Large On-site Sewage Systems, 1993, Washington State Department of Health (available upon request to the department); or (B) Criteria for Sewage Works Design, revised November 2007, Washington State Department of Ecology (available online).	

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¹For buildings other than single-family residences the requirements of Section 13.28.020(B) shall be met.

1323 SECTION 31. R&R No. 3, Part 5, Section 2(A), as amended, and BOH

1324 13.36.010 are each hereby amended to read as follows:

1325 **Design standards.**

1326 A. No septic tank, effluent pump tank, sewage holding tank, grease trap or any
1327 other sewage tank may be installed in King County unless:

1328 1. The tank is included on the DOH publication, List of Approved On-site
1329 Sewage Tanks;

1330 2. The tank conforms to the DOH publication, Recommended Standards and
1331 Guidance for Performance, Application, Design, Construction, Installation and Testing
1332 On-site Sewage System Tanks, July 1, 2007, as amended; and

1333 3. The health officer has approved plans for the tank installation. Such plans
1334 shall show all dimensions, reinforcing, structural details and other pertinent data as
1335 required by the health officer. Upon approval by the health officer, the plans will be
1336 assigned an official number.

1337 B. ~~((Tanks made of materials other than concrete shall be approved by the
1338 secretary prior to approval by the health officer.~~

1339 ~~€))~~) No pre-cast wastewater tank may be installed except those which are
1340 included on the registered list and have been clearly and legibly marked on the upper
1341 surface of the lid showing the number assigned by the health officer, name of the
1342 manufacturer, tank model number, tank capacity in gallons and date of manufacture.

1343 ~~((D-))~~ C. No metal septic tanks shall be installed in areas under the jurisdiction of
1344 the department.

1345 ~~((E.))~~ D. All septic tanks, whether they are installed or used singly, in series or in
 1346 a divided system, must be designed according to waste load and in no case shall have a
 1347 total capacity of less than one thousand five hundred gallons, except by written
 1348 permission of the health officer.

**Minimum Capacities for
 Single-Family Residence Septic Tanks**

Number of Bedrooms	Minimum Liquid Capacity Below Outlet Invert (Gallons)
4 or less	1500
Each additional bedroom, add	250
Garbage grinder installed, add ¹	250

1351 1. Use of garbage grinders increases settleable and floatable solids accumulations in the septic tank,
 1352 increases wastewater strength and thus increases the potential for system failure especially if frequent and
 1353 regular tank monitoring and maintenance is not performed. Therefore, use of garbage grinders is not
 1354 recommended (See Section 13.60.005(a)(3)).
 1355

1356 ~~((F.))~~ E. No septic tank with a compartment smaller than two hundred fifty
 1357 gallons liquid capacity may be installed.

1358 ~~((G.))~~ F. A septic tank designed to service any facility except a single-family
 1359 residence or multiple family housing shall have a liquid capacity at least equal to three
 1360 times the projected design flow, with a minimum of one thousand five hundred gallons.
 1361 Septic tanks serving multiple family housing shall have a minimum liquid capacity equal
 1362 to two times the projected design flow but not less than one thousand five hundred
 1363 gallons.

1364 ~~((H.))~~ G. All septic tanks or combinations of tanks installed shall provide at least
 1365 two compartments. No wastewater tanks may be joined below the normal inverts unless
 1366 otherwise preapproved by the health officer.

1367 ~~((F))~~ H. When multi-compartment tanks or two or more tanks in series are used,
1368 the first compartment or tank shall have a liquid capacity of two-thirds to three quarters
1369 of total required liquid capacity.

1370 ~~((J))~~ I. The minimum liquid capacity of a tank receiving intermittent use shall be
1371 determined from the maximum expected daily waste load, but shall in no case be less
1372 than one thousand five hundred gallons.

1373 ~~((K))~~ J. The plan review fee shall be as specified in the fee schedule, payable at
1374 the time of initial plan submission. In addition to the initial plan review fee, a revision
1375 review fee shall be assessed as specified in the fee schedule, payable at the time of
1376 completion of the plan review, for review of any resubmissions, corrections or additions
1377 required.

1378 SECTION 32. R&R No. 3, Part 5, Section 3(C), and BOH 13.40.030, are each
1379 hereby amended to read as follows:

1380 **Size requirement.** The dosing tank shall be of sufficient size so as to provide the
1381 total volume required ~~((one day's total dosing gallonage plus one day's estimated waste
1382 volume but))~~ for two days of the design flow and shall not be less than one thousand five
1383 hundred gallons.

1384 SECTION 33. R&R No. 3, Part 5, Section 5, and BOH 13.48.010 are each hereby
1385 amended to read as follow:

1386 A. No OSS may be constructed unless there has first been a soil evaluation for
1387 the site completed in the manner described in BOH 13.28.050 to determine type, size and

1388 location of the OSS. SSAS design and construction shall be in accordance with the
1389 following:

1390 1. Maximum bottom width of trenches shall be twenty-four inches except a
1391 maximum width of up to thirty-six inches may be allowed provided that:

1392 a. for soil types 1 through 4 the SSAS is at least pressure distribution in
1393 accordance with BOH 13.48.060 (pressure distribution systems); and

1394 b. for soil types 5 and 6 the effluent shall meet the next higher treatment level
1395 as indicated in table 13.28-1 unless treatment level B is already required prior to
1396 discharge to the SSAS; and c. the slope does not exceed thirty percent.

1397 2. Beds are allowed only in excessively permeable soils consisting of very
1398 gravelly coarse sands or coarser, extremely gravelly soils. SSAS installed in beds must be
1399 pressure distribution and meet treatment level B or greater.

1400 3. The maximum depth of soil cover over the top of SSAS drainrock shall not
1401 exceed twenty-four inches except by written permission of the health officer. The
1402 infiltrative surface or bottom of the drainfield shall not be deeper than thirty-six inches
1403 below the finished grade.

1404 4. The minimum depth of soil cover over drainrock shall not be less than twelve
1405 inches unless otherwise authorized by the health officer.

1406 5. Minimum depth of drainrock under drainfield lines shall not be less than six
1407 inches.

1408 6. The amount of drainrock over drainfield lines shall not be less than two
1409 inches.

1410 7. Drainrock shall be clean, washed, uniformly graded, nondeteriorating gravel,
1411 size three-eighths inches to seven-eighths inches or three-quarters inches to one-and-one-
1412 half inches with no visible fine particles adhering to gravel surfaces and with the percent
1413 by weight passing the U.S. No. 200 sieve not greater than 0.5 percent.

1414 8. Minimum separation between drainfield trench side walls shall not be less
1415 than four feet of undisturbed soil ~~for soil texture types 1, 2, and 3 and shall not be less~~
1416 ~~than six feet for soil texture type 4, 5 and 6.~~

1417 9. Individual laterals greater than one hundred feet in length must use pressure
1418 distribution.

1419 10. No gravelless drainfield system may be installed unless it satisfies the
1420 requirements of BOH 13.52.054.

1421 11. The designer shall specify, in the OSS design, the SSAS cover material to be
1422 used and shall verify, in the record drawing, that the cover material used conforms with
1423 the design specifications.

1424 B. Horizontal separations shall be maintained in accordance with BOH
1425 13.28.030W and Table 13.28- 2.

1426 C. No drainfield pipes shall be installed unless all fittings are rigidly joined together in
1427 accordance with the pipe manufacturer's directions.

1428 D. Approved rigid drainfield pipe, such as PVC, shall be used, but only if stakes are
1429 placed in the trench center at not more than five-foot intervals to maintain grade and a
1430 transit level laser or equally accurate instrument shall be used to assure that proper grade
1431 is maintained.

1432 E. No drainfield shall be installed that requires a change in grade and earth cover unless
1433 terracing is accomplished by the use of a suitable plastic or concrete drop box or by use
1434 of rigid plastic pipe with glued joints (overflow stepdown). Such installation shall have
1435 an earth dam twenty-four inches thick preceding terracing. Earth dams shall consist of
1436 original undisturbed soil.

1437 F. Not less than one drainfield trench monitoring port of at least four inches in diameter,
1438 which is anchored, with an easily removable cover that extends to finished grade, shall be
1439 installed down to the infiltrative surface in each drainfield lateral.

1440 G. No OSS shall be installed unless the pipe lines between the building and the septic
1441 tank, the septic tank and the distribution box, under paved areas, and within ten feet of
1442 any buildings, shall be constructed of plastic, or cast-iron pipe laid with watertight joints.
1443 The pipe materials shall conform to material specifications of the Uniform Plumbing
1444 Code.

1445 H. No drainfield shall be installed that, after installation of the gravel over the pipe, is
1446 not then covered with a geotextile barrier material that meets the specifications of Section
1447 5, Design Standards for Large On-site Sewage Systems, December 1993, amended July
1448 1994, Washington State Department of Health, as amended.

1449 I. No drainfield shall be installed under driveways, roadways, parking areas, paved areas
1450 or under areas subject to compaction by vehicular traffic.

1451 J. Pipe used for construction of gravity drainfield lines shall be a minimum of four
1452 inches inside diameter and constructed of rigid materials conforming with ASTM F481-
1453 02, as amended.

1454 K. Pipe used for construction of tightline must comply with the current Uniform
1455 Plumbing Code.

1456 L. SSAS shall be installed in undisturbed native soil. Trees or tree stumps greater than
1457 eighteen inches in diameter, when measured two feet above grade, shall be left standing,
1458 cut at ground level, burned in place, or managed by other methods acceptable to the
1459 health officer that will avoid disturbing the soil.

1460 SECTION 34. R&R No. 3, Part 6, Section 1, as amended, and BOH 13.52.010
1461 are each hereby amended to read as follows:

1462 **Holding tanks.**

1463 A. Sewage holding tanks may be permitted only for controlled, nonresidential
1464 usage or as an interim method to handle emergency situations or to correct existing
1465 problem systems; provided, that an on-site system management program satisfactory to
1466 the health officer has been established to assure on-going operation and maintenance.

1467 B. ~~((In addition, the))~~ The applicant ((must)) for a holding tank shall provide a
1468 no-protest agreement with the sewerage authority or a signed petition supporting
1469 formation of a ULID if the property is within a sewer service area.

1470 C. ~~((Design plans shall be submitted))~~ The applicant shall submit holding tank
1471 design plans in conformance with this title to the health officer for review. The ~~((design~~
1472 ~~and))~~ owner shall ensure that holding tank maintenance and operation ((shall be in
1473 ~~accordance))~~ conform with this title and with Guidelines for Holding Tank Sewage
1474 Systems, July 2007, Washington State Department of Health, as amended. The
1475 application shall include specifications for the anticipated daily sewage load, the tank

1476 capacity, the alarm device, the overflow elevation, the location of the tank, and any other
1477 information pertinent to the installation.

1478 D. ~~((A minimum bond of five thousand dollars must be filed with the health
1479 officer or management authority to guarantee cleanup in case of accidental spill and/or
1480 repair of the system.~~

1481 E. ~~A copy of a pumping contract with a certified OSS pumper must be filed with
1482 the department)) The owner shall enter into an active pumping contract with a certified
1483 OSS pumper and file a copy of the contract with the health officer. The owner shall
1484 maintain the contract at all times until the holding tank has been decommissioned. The
1485 pumper shall notify the health officer if the contract is at any time canceled or not
1486 renewed by either party to the contract.~~

1487 F. ~~((An))~~ The owner or applicant shall obtain an OSS installation permit ((must
1488 be obtained)) prior to installation of the tank.

1489 G. ~~((Monitoring))~~ The owner shall cause monitoring and maintenance ((shall)) of
1490 the tank to be performed in accordance with BOH 13.60.010. The owner shall ensure
1491 that pumping of the holding tank occurs at least as frequently as specified under the
1492 approved holding tank design, or, alternatively, that the holding tank installation includes
1493 technology to monitor septage levels in the tank and notify the owner and contracted
1494 pumper if ninety percent of the tank capacity is exceeded.

1495 SECTION 35. R&R No. 3, Part 7, Section 5, and BOH 13.56.050 are each hereby
1496 amended to read as follows:

1497 **Record drawing.**

1498 A. (~~Whenever a designer approves an installation,)~~ Within thirty days after
1499 approving an OSS installation and notifying the health officer of system completion, the
1500 designer shall prepare, sign, and submit electronically to the health officer a completely
1501 scaled and dimensioned record drawing and certification of the approved OSS (~~shall be~~
1502 ~~prepared in triplicate by the designer of the system on forms provided by the health~~
1503 ~~officer. These forms shall then be signed by the designer and within thirty days of~~
1504 ~~notifying the health officer of system completion all three complete copies shall be~~
1505 ~~submitted~~). Where an installation, alteration or repair is undertaken without a design
1506 prepared by a designer, the installer or OSM performing the installation, alteration or
1507 repair shall provide a reconciled record drawing to the health officer and the OSS owner
1508 at the time of final inspection.

1509 B. The following details are required for all record drawings:

- 1510 1. An accurate plot plan, with measurements and directions accurate to within
1511 one-half of one foot, showing the locations of the essential components of the OSS
1512 including:
- 1513 a. all sewage tanks, tank pump out lids, tank inspection access ports and depth
1514 of tank burial.
 - 1515 b. all plumbing stub outlets.
 - 1516 c. building sewer line between building and septic tank.
 - 1517 d. effluent transport line between septic tank and distribution box or inspection
1518 box.

1519 e. the ends, and all changes in direction, of installed and found buried pipes
1520 and electrical cables that are part of the OSS.

1521 f. the distribution/inspection box.

1522 g. all soil absorption system laterals and permanent visible marker locations.

1523 The length and width of each individual drainfield lateral shall be shown to scale and the
1524 total number of lineal feet and square footage of laterals specified on the drawing. A
1525 dimensioned reserve soil absorption system area shall be included. h.

1526 h. the location of any unusual construction features such as step downs, in the
1527 drainfield laterals, must be clearly indicated.

1528 i. distance between any drainfield laterals and the edges of any fill soils, cuts,
1529 banks, terraces, foundations, property lines, lakes, streams, wells or other water sources,
1530 water lines, driveways and impermeable surfaces.

1531 j. the location and detail of soil absorption system inspection ports.

1532 k. location and depth of permeable cover added after installation.

1533 l. if a pump system, the pump size, manufacturer, model, pump cycle duration,
1534 dose in gallons/cycle and pump timer settings.

1535 m. location, size, shape, and placement of all buildings on the building site
1536 showing their relation to the OSS and to any easements, underground oil storage tanks,
1537 utility lines and property lines.

1538 n. location, direction of flow, and discharge point of all ground and/or surface
1539 water interceptor drains and on-site stormwater infiltration systems.

1540 o. orientation of drawing with north direction by arrow.

- 1541 p. location of private water supply (well, spring, etc.).
- 1542 q. location of design control point.
- 1543 2. Clearly Indicated Scale using the appropriate scaled increments shown on a
- 1544 typical engineering scale. Recommended scale of one inch equals twenty feet. Scales
- 1545 utilizing ratios smaller than one inch equals thirty feet are not acceptable.
- 1546 3. One copy of an OSS owner's operating, maintenance and technical
- 1547 specifications manual which includes:
- 1548 a. system performance specifications, including initial settings of electrical or
- 1549 mechanical devices needed to operate the system as intended by the designer and
- 1550 installer;
- 1551 b. system operating instructions, including, for proprietary products,
- 1552 manufacturer's standard product literature;
- 1553 c. system preventive maintenance instructions and service schedule;
- 1554 d. make, model and/or performance specifications of all system components;
- 1555 ((and))
- 1556 e. check list and schedule for routine monitoring inspections, effluent sampling
- 1557 and reports((-)); and
- 1558 f. record that materials and equipment meet the specifications contained in the
- 1559 design.
- 1560 4. Copy of recorded "notice on title" required by BOH 13.56.054, and an
- 1561 operation and maintenance services agreement as applicable.
- 1562 5. Copy of OSS installation permit.

1563 6. Documentation describing the waste strength range within which the OSS is
1564 designed to operate.

1565 SECTION 36. R&R No. 99-01, Section 2 (Part), as amended, and BOH
1566 13.56.054 are each hereby amended to read as follows:

1567 **Notice on title.**

1568 A. New Systems. The owner shall record a notice on title with the King County
1569 records and election division. This notice shall include all of the owner's responsibilities
1570 described in BOH 13.60.005 and Table 13.60-1.

1571 B. Existing systems.

1572 1. Prior to sale or transfer of property ownership, if the building is served by an
1573 OSS and the notice on title required by this section has not been recorded, then the owner
1574 shall record the notice as set forth in BOH 13.56.054.A. At the time of sale the seller
1575 shall obtain the buyer's signature acknowledging receipt of a copy of this recorded notice.

1576 2. At the time of sale or transfer of property ownership, the buyer or transferee
1577 of a property served by an OSS shall forward to the health officer a fee as set forth in the
1578 fee schedule and submit a signed copy of the notice on title as set forth in BOH
1579 13.56.054.A.

1580 ~~((3. At the time a building is remodeled or expanded, if it is not connected to
1581 public sewer and the notice on title required by this section has not been recorded, then
1582 the owner shall record the notice as set forth in BOH 13.56.054.A.))~~

1583 SECTION 37. R&R No. 99-01, Section 2 (part), as amended, and BOH
1584 13.60.005 are each hereby amended to read as follows:

1585 **Operation and maintenance.**

1586 A. The OSS owner is responsible for the continuous proper operation and
1587 maintenance of the OSS, and shall:

1588 1. Determine the level of solids and scum in the septic tank at least once every
1589 three years for residential systems with no garbage grinder and once every year if a
1590 garbage grinder is installed and, unless otherwise provided in writing by the health
1591 officer, once every year for commercial systems.

1592 2. Employ an approved pumper to remove the septage from the tank when the
1593 level of solids and scum indicates that removal is necessary.

1594 3. Cause preventive maintenance/system performance monitoring inspections to
1595 be conducted and any indicated service to be performed by an approved person at a
1596 minimum frequency in accordance with Table 13.60-1 unless otherwise established by
1597 the health officer.

1598 4. Secure and renew contracts, as needed, to fulfill the OSS operation and
1599 maintenance requirements of Table 13.60-1.

1600 5. Operate and maintain all OSS in accordance with this title, with pertinent
1601 alternative system guidelines issued by the DOH and with the approved OSS owner's
1602 operating and maintenance instruction manual.

1603 6. Protect the OSS area including the reserve area from:

1604 a. cover by structures or impervious material;

1605 b. surface drainage;

1606 c. soil compaction, for example, by vehicular traffic or livestock; and

- 1607 d. damage by soil removal and grade alteration.
- 1608 7. Maintain the flow of sewage to the OSS at or below the approved operating
1609 capacity and sewage quality standards for residential strength waste water.
- 1610 8. Direct drains, such as footing or roof drains away from the area where the
1611 OSS is located.
- 1612 9. At time of property transfer, provide the buyer with maintenance records, if
1613 available, in addition to the completed seller disclosure statement in accordance with
1614 chapter 64.06 RCW for residential real property transfers.
- 1615 10. Ensure that all tank access lids are secured to minimize risk of injury or
1616 unauthorized access.

- 1617 B. The owner shall not allow:
- 1618 1. Use or introduction of strong bases, strong acids or organic solvents into an
1619 OSS for the purpose of system cleaning;
- 1620 2. Use of a sewage system additive unless it is specifically approved by the
1621 DOH; or
- 1622 3. Use of an OSS to dispose of waste components atypical of residential
1623 wastewater, for example, but not limited to, petroleum products, paints, solvents, or
1624 pesticides.

1625 SECTION 38. R&R No. 3, Part 8, Section 1, as amended, and BOH 13.60.010
1626 are each hereby amended to read as follows:

1627 **Monitoring of residential, community or commercial systems.**

1628 A. The owner shall cause (~~(monitoring of the)~~) performance monitoring and
1629 preventive maintenance inspections of any OSS at a frequency and by a qualified person
1630 as specified in Table 13.60-1.

1631 B. For all system types, service access and monitoring ports to finished grade are
1632 required for all system components. Specific component requirement include the
1633 following:

1634 1. Septic tanks shall have service access maintenance ports and monitoring ports
1635 for the inlet and outlet. If effluent filters are used, access to the filter at finished grade is
1636 required;

1637 2. Surge, flow equalization or other sewage tanks shall be accessible for
1638 monitoring and maintenance;

1639 3. All pretreatment units shall have service access maintenance ports and
1640 monitoring ports;

1641 4. Pump chambers, tanks and vaults shall have service access maintenance
1642 ports;

1643 5. Disinfection units shall have service access and be installed to facilitate
1644 complete maintenance and cleaning;

1645 6. Soil dispersal components shall have monitoring ports for both distribution
1646 devices such as valves or other controls and the infiltrative surface; and

1647 7. Any person providing service to an OSS shall secure tank access lids after
1648 servicing the OSS or provide clearly visible marking and notification to the property
1649 owner and occupants before leaving the site.

1650 C. Systems using pumps shall have accessible controls and warning devices.

1651 D. To facilitate maintenance and safety, control panels shall be located in line of
 1652 sight of the pump tank.

1653 E. OSS serving food establishments require, at a minimum, an annual
 1654 performance monitoring and preventive maintenance inspection and periodic pumping as
 1655 needed.

1656 F. ~~((Operation and maintenance))~~ Performance monitoring and preventive
 1657 maintenance inspections of any OSS in a marine recovery area shall be performed by a
 1658 licensed OSS maintainer and at a frequency determined by the health officer based upon
 1659 type, size, age, system condition, and system location, but not less than once per year. If
 1660 no accurate record drawing for the OSS has been prepared and filed with the department,
 1661 the licensed OSS maintainer performing the ~~((maintenance and performance monitoring))~~
 1662 inspection shall prepare and submit to the health officer a reconciled record drawing
 1663 together with the ~~((system))~~ operation((/)) and performance monitoring report required
 1664 under this chapter.

1665 **Table 13.60-1**
 1666 **Minimum Frequency of ~~((Preventive Maintenance/))~~ Performance Monitoring and**
 1667 **Preventive Maintenance Inspections**

	Gravity System without Pump ⁴	Public Domain Technology ²	Proprietary Technology ^{3,5}	Commercial and Food Establishment	Non-Discharging Toilets ⁶
Initial¹ Inspection	6 months	6 months	45 days	45 days	N/A
Regular Inspection frequency	Every 3 years	Annually	((Every 6 months)) <u>Annually</u>	Annually ((or 6 months depending on Technology used))	Annually

Who May Perform the Inspection	Owner or Licensed Maintainer or Licensed OSS Pumper	Licensed Maintainer	Licensed Maintainer	Licensed Maintainer	Owner
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Table 13.60-1 Explanatory Notes

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1. The initial inspection is to be performed at the time interval indicated following occupancy.
2. Public domain technology includes such systems as: mounds, intermittent sand filters and pressure distribution.
3. Proprietary Technology includes such systems as: ATUs, Glendon up-flow filters, Advantex pack bed filters and subsurface drip.
4. At least an annual septic tank ~~((maintenance check))~~ inspection is required if the structure served is equipped with a garbage grinder waste disposal unit. If a screened outlet baffle is present an annual ~~((check))~~ inspection is recommended. Pumpers shall report each pumping event to the health officer in accordance with BOH chapter 13.68.
5. Table 13.60-1 specifies the minimum required monitoring frequency. A more stringent monitoring frequency shall be used if recommended by the manufacturer.
6. This monitoring is in addition to that required for the OSS receiving the building's nontilet liquid waste.

G. The person conducting the ~~((maintenance and))~~ performance monitoring and preventive maintenance inspection shall submit ~~((a system))~~ an operation ~~((and maintenance/))~~ performance monitoring report, on forms provided by the health officer, to the owner at the time of the inspection and to the health officer accompanied by a filing fee as specified in the fee schedule within thirty days of the inspection.

H. Any person holding a King County OSS certificate of competency or Washington state on-site sewage system designer or professional engineer license who observes an OSS failure shall report the failure on forms provided by the health officer within five business days of observing the failure.

~~((H.))~~ I. The fee for each ~~((OSS monitoring))~~ operation~~((/))~~ and performance ~~((inspection))~~ monitoring report required by the health officer shall be in accordance with the fee schedule.

~~((I.))~~ J. ~~((Preventive maintenance and monitoring))~~ For any commercial development using OSS, performance monitoring and preventive maintenance inspection

1697 of the OSS (~~(performance and)~~), including quality of effluent, shall be required (~~(for any~~
1698 ~~commercial development using OSS)~~).

1699 1. The minimum frequency and the type of inspection required shall be in
1700 accordance with Table 13.60-1 unless otherwise established by the health officer.

1701 2. At least an annual inspection of OSS serving food establishments shall be
1702 conducted.

1703 ~~((J))~~ K. For properties where required (~~(monitoring and/or)~~) performance
1704 monitoring and preventive maintenance inspections are at least thirty days overdue the
1705 health officer may notify the owner that the OSS is not in compliance with these rules.
1706 The health officer may, in addition to provisions of BOH chapter 1.08 of this code, cause
1707 a notice of noncompliance to be recorded with the real property records for the subject
1708 lot.

1709 SECTION 39. R&R 08-03, Section 145, and BOH 13.60.030 are each hereby
1710 amended to read as follows:

1711 **Operation and maintenance at time of sale.**

1712 A. The seller or grantor of any single family or multiple family residential
1713 property served by an OSS shall, prior to transfer of title to the property, have a property
1714 transfer monitoring and performance inspection performed by a licensed OSM. The
1715 licensed OSM shall file with the department an on-site system report and applicable fee
1716 in accordance with the fee schedule.

1717 1. If no record drawing is on file with the department, the OSM shall prepare a
1718 record drawing and include it with the O&M report submitted to the department.

1719 2. If a record drawing is on file with the department but does not accurately
1720 depict the OSS, the OSM shall prepare a reconciled record drawing and include it with
1721 the O&M report submitted to the department.

1722 3. A property transfer monitoring and performance inspection is not required if
1723 such an inspection was performed within the previous ~~((6 months))~~ twelve months,
1724 provided the property has not been transferred since the most recent inspection.

1725 4. At the time of property transfer, the owner shall provide, to the buyer,
1726 maintenance records, if available, in addition to the completed seller disclosure statement
1727 in accordance with chapter 64.06 RCW for residential real property transfers.

1728 SECTION 40. R&R No. 3, Part 9, Section 1, as amended, and BOH 13.64.010
1729 are each hereby amended to read as follows:

1730 **Repairs of failing OSS.**

1731 A. This title shall be applied to the maximum extent permitted by the site for any
1732 repair necessitated by the failure of an existing OSS. The health officer may waive
1733 compliance with these requirements if a conforming repair is not feasible and if in the
1734 health officer's judgment the repaired system will not have an adverse effect on public
1735 health, but the repaired system shall not discharge onto the surface of the ground, into
1736 surface waters, or otherwise fail.

1737 B. The health officer may require a site design in accordance with BOH chapter
1738 13.28 for the repair or replacement of a failing soil absorption component and if deemed
1739 necessary for a ~~((limited))~~ repair. Prior to designing the repair system, the designer shall
1740 consider the contributing factors of the failure to enable the repair to address identified

1741 causes of the failure, and shall include this information in any design or repair proposal to
 1742 the department. (~~The health officer shall require a site design in accordance with chapter~~
 1743 ~~13.28 for the repair or replacement of a failing soil absorption component and if deemed~~
 1744 ~~necessary for a limited repair.))~~

1745 C. It is unlawful to repair an OSS without an OSS (~~limited~~) repair permit,
 1746 except that a permit is not required for a minor repair as defined under BOH chapter
 1747 13.08.

1748 **Table 13.64-1**

1749 **Minimum Treatment Level and Bacteria Level Required for Repair or Replacement**
 1750 **of Soil Absorption Components on Sites not Meeting Vertical and/or Horizontal**
 1751 **Separation Requirements of this Title**

Vertical Separation (in inches)	Horizontal Separation ¹											
	<25 feet ^{2,3}			25<50 feet ^{2,3}			50 < 100 feet ^{2,3}			> 100 feet		
	Soil Type			Soil Type			Soil Type			Soil Type		
	1	2	3-6	1	2	3-6	1	2	3-6	1	2	3-6
	<u>Minimum Treatment Level and Bacteria Level</u>											
< 12	A & BL1	A & BL1	A & BL1	A & BL1	A & BL1	A & BL1	A & BL1	A & BL1	A & BL1	B & BL2	B & BL2	B & BL2
((≥12 < 18)) ≥ 12 < 18	A & BL1	A & BL1	A & BL1	A & BL1	B & BL2	B & BL2	A & BL1	B & BL2	B & BL2	Conforming Systems		
((≥18 < 24)) ≥ 18 < 24	A & BL1	A & BL1	A & BL1	A & BL1	B & BL2	B & BL2	A & BL1	B & BL2	C & BL3			
((≥24 < 36)) ≥ 24 < 36	A & BL1	B & BL2	B & BL2	B & BL2	C & BL3	C & BL3	B & BL2	C & BL3	C & BL3			
((≥36)) ≥ 36	A & BL1	B & BL2	B & BL2	B & BL2	C & BL3	C & BL3	B & BL2	C & BL3	E			

1752 **Table 13.64-1 Explanatory Notes**

1753 The horizontal separation indicated in this table is the distance between the soil dispersal
 1754 component and the surface water, well, or spring. If the soil dispersal component is up-gradient of a
 1755 surface water, well, or spring to be used as a potable water source, or beach where shellfish are harvested,
 1756 the next higher treatment level shall apply unless treatment level A is already required.

1757 1. The Treatment Levels refer to effluent quality achieved before discharge to unsaturated
 1758 subsurface soil.

1759 2. Alternative systems which meet the Treatment Level without disinfection are required when
1760 the repair OSS is adjacent to fresh water bodies.

1761 3. When adjacent to fresh surface water bodies the next higher Treatment Level A shall be
1762 provided unless Treatment Level A is already provided.

1763

1764 D. The treatment level required for repair or replacement of soil absorption
1765 components of an existing failed OSS when conforming vertical separation and
1766 conforming horizontal separation to surface water and/or to individual private wells is not
1767 possible shall be in accordance with Table 13.64-1.

1768 E. Alterations or repairs to an OSS shall be documented in a repair record
1769 drawing submitted to the health officer for final approval at time of final inspection,
1770 unless a full design application was submitted for the repair.

1771 F. The owner receiving a Table 13.64-1 repair permit where treatment Level A or
1772 B is required shall:

1773 1. Immediately report any OSS failure to the health officer;

1774 2. Continuously operate, maintain and monitor the OSS performance in
1775 accordance with the appropriate recommended standards and guidance for the technology
1776 in use; and

1777 3. Report the results of the OSS maintenance and monitoring to the health
1778 officer quarterly when Treatment Level A is required and annually when Treatment Level
1779 B is required.

1780 G. The owner receiving a permit shall file a "notice on title" in accordance with
1781 13.56.054 and the notice shall include:

1782 1. A notarized agreement to comply with the conditions of BOH 13.64.010_F
1783 above; and

1784 2. A disclosure that a nonconforming OSS has been installed to correct a failure
1785 because a conforming OSS is not feasible due to site and soil limitations and that due to
1786 the OSS nonconformity the system is not authorized to support new building construction
1787 or expansions or major alterations of the existing structure.

1788 H. The health officer may authorize in writing a horizontal separation of not less
1789 than seventy-five feet between an OSS dispersal component and an individual private
1790 drilled well, but only if:

1791 1. the well is located on the same parcel as the property served by the OSS;
1792 2. the OSS is designed and operated to provide treatment level A or treatment
1793 performance beyond that accomplished by meeting the vertical separation and effluent
1794 distribution requirements described in Table 13.64-1; and

1795 3. the owner monitors drinking water quality for coliform and nitrate and
1796 periodically submits drinking water quality reports to the health officer at least annually.

1797 I. For any designed repair, the designer shall include, on the record drawing
1798 document, the operating capacity of the repaired OSS and provide a copy of the record
1799 drawing document to the owner.

1800 J. For any repair required to be performed in accordance with Table 13.64-1 of
1801 this title, disinfection may not be used to achieve the fecal coliform requirements to meet:

1802 1. Treatment levels A or B where there is less than eighteen inches of vertical
1803 separation:

1804 2. Treatment levels A or B in type 1 soils; or

1805 3. Treatment level C.

1806 K. Except as provided in BOH 13.20.040, OSS repairs shall be supervised by an
1807 OSS master installer certified pursuant to BOH 13.20.020 and 13.20.030.

1808 L. When the work of repairing an existing OSS has been completed, but before it
1809 is closed and covered, the installer shall notify the owner and the person who designed
1810 the repair ((and owner shall be notified)) that the work has been completed. The person
1811 who designed the repair shall then proceed as described in BOH 13.56.030, subsections
1812 B. and C. The person designing the repair shall then call for the health officer to inspect
1813 the system.

1814 M. For a ~~((limited))~~ minor repair the installer or maintainer shall submit a
1815 ~~((limited))~~ minor repair report to the health officer within five working days after
1816 completing the repair with a site sketch documenting any changes in OSS components.

1817 ~~((M.))~~ N. Unless otherwise directed by the health officer, OSS repairs shall not be
1818 covered until the health officer has given approval.

1819 SECTION 41. R&R 3, Part 9, Section 2, as amended, and BOH 13.64.020 are
1820 each hereby amended to read as follows:

1821 **Remodeling – approval required.**

1822 A. Existing buildings or structures to which additions, alterations, or
1823 improvements which would impact the operation of the OSS are made after the effective
1824 date of this title shall be served by an OSS complying with this title ~~((; provided,~~
1825 ~~however)), except that the health officer may waive compliance with these requirements
1826 for existing buildings or structures when the addition, alterations, repairs, or
1827 improvements to the building or structure are compatible with and do not adversely~~

1828 impact the OSS including the potential reserve area, do not affect the adequacy of the
1829 system to treat the sewage over the remaining useful life of the building or structure, and
1830 do not adversely affect the ability of the continued operation of the system to protect
1831 public health, surface water quality, or groundwater quality.

1832 B. Applications for approval by the health officer of existing OSS serving
1833 existing buildings undergoing addition, alteration, repair, or improvement shall be made
1834 as provided in this section. The application shall be made on forms furnished by the
1835 health officer.

1836 C. The health officer will review all applications to determine the compatibility
1837 of the proposed addition, alteration, repair, or improvement with the existing OSS.

1838 1. Factors that the health officer may consider include, but are not limited to, the
1839 following:

- 1840 a. location of SSAS in relation to foundation and existing improvements;
- 1841 b. size of SSAS in relation to proposed use;
- 1842 c. condition of the existing OSS;
- 1843 d. ~~((useful anticipated life of the existing on-site sewage disposal system;~~
- 1844 e.)) potential for reconstruction and repair of the existing on-site sewage
1845 disposal system;
- 1846 ~~((f.))~~ e. ultimate purpose of the remodeling; and
- 1847 ~~((g.))~~ f. approved source of water.

1848 2. The health officer may require the applicant to furnish such exhibits and
1849 information as may be deemed relevant and necessary to the application.

1850 D. Any applicant (~~for a permit for a change~~) changing (~~(to)~~) use in a
1851 commercial structure served by an OSS, or for a change of use from residential to
1852 commercial in a structure served by an OSS, shall obtain the health officer's review and
1853 approval of the OSS before the OSS may be utilized to serve the new use in the structure.
1854 Any such applicant for a change in use approval for the continued use of the OSS shall
1855 (~~submit a written~~) cause the application for approval by the health officer to be
1856 submitted by a licensed OSS designer or professional engineer on forms provided by the
1857 health officer. The application shall include information detailing the anticipated
1858 wastewater strength of the proposed use and any processes or uses which may impact the
1859 wastewater characteristics and flows of the existing OSS.

1860 E. The nonrefundable fee for such a review shall be as specified in the fee
1861 schedule, payable to the department. No charge shall be made for applications for
1862 projects that are determined to be categorically exempt by the health officer.

1863 SECTION 42. re each hereby amended to read as follows:

1864 **Pumper certification requirements.**

1865 A. It is unlawful for any person to carry on or engage in the business of pumping
1866 out the contents of septic tanks, cesspools, grease traps, seepage pits, vault privies,
1867 portable toilets and other receptacles of human sewage or to transport over the highways
1868 or to dispose of the contents therefrom in King County unless the pumper business
1869 operator and in addition, each employee of the OSS pumper who engages in OSS
1870 pumping activities, holds a valid certificate of competency and each vehicle has an
1871 annual inspection tab issued by the health officer in accordance with this title for

1872 conducting such business. The following liquid waste pumper's certificate of
1873 competency classifications are established:

- 1874 1. OSS pumper;
- 1875 2. Grease trap/interceptor pumper;
- 1876 3. Vessel sewage holding tank pumper;
- 1877 4. Portable toilet pumper; and
- 1878 5. Miscellaneous sewage pumper.

1879 B. All persons holding a valid pumper registration on the effective date of these
1880 regulations will be classified by the health officer in accordance with subsections A1
1881 through A4 of this section.

1882 C. A holder of an OSS pumper classification certificate of competency may, in
1883 addition to the pumping and transporting activity under this section, conduct routine
1884 preventive maintenance and performance monitoring inspections of gravity OSS, except
1885 that an OSS inspection at time of property sale under BOH 13.60.030 shall be performed
1886 by a licensed OSS maintainer. No liquid waste pumper of any classification may perform
1887 minor repairs on any OSS component other than lids, risers, baffles, and building sewer
1888 tightlines.

1889 D. An applicant may be issued a certificate under such terms, conditions orders
1890 and direction as the health officer may deem necessary for the protection of public health.
1891 The health officer may waive any specific condition required by this chapter for
1892 certification when, in the opinion of the health officer, the condition duplicates a
1893 requirement of another regulatory agency and which the applicant has fulfilled.

1894 E. As a condition of certification, a pumper shall consistently demonstrate
1895 reasonable care and skill in performing work governed by this title, meet the
1896 requirements of the King County OSS code of performance and ethics, and comply with
1897 all the terms and conditions of these and all other applicable rules and regulations.

1898 SECTION 43. R&R No. 3, Part 11, Section 2, as amended, and BOH 13.68.020
1899 are each hereby amended to read as follows;

1900 **Application.** ~~((All applications for pumper certification under this title shall be~~
1901 ~~submitted)) An applicant for a pumper certificate of competency shall submit the~~
1902 ~~application to the health officer and shall include the following with the application:~~
1903 ~~((The application shall state the applicant's name in full; if a partnership, then the names~~
1904 ~~of the partners, the relation of the applicant to the firm or partnership; the name of the~~
1905 ~~corporation if a corporation; the place of business and place of residence of the applicant;~~
1906 ~~each of the partners in the business, if a partnership; and the place of business of the~~
1907 ~~corporation, if a corporation. The applicant shall also provide the))~~

1908 A. If an individual, the applicant's name in full, signature, place of residence, and
1909 name and place of business;

1910 B. If a partnership or corporation, the names of the partners or officers, the
1911 relation of the applicant to the partnership or corporation, the signature of the managing
1912 partner or authorized officer, and the name and primary place of business of the
1913 partnership or corporation;

1914 C. The number and identification of all vehicles to be used; ((the))

1915 D. The type, location and name of all the sites that the applicant will use to
1916 dispose of the contents of septic tanks, cesspools, grease traps, grease interceptors,
1917 seepage pits, vault privies, portable toilets and other receptacles of human sewage;
1918 ~~((and))~~

1919 E. A valid disposal site letter of authorization including the name and address of
1920 the person, firm, or corporation who is responsible for the operation of each disposal
1921 site~~((. A valid disposal site letter of authorization must accompany the application. The~~
1922 ~~application shall be signed by the authorized officer of the corporation, if a corporation,~~
1923 ~~or by the managing partner, if a partnership, or by the individual owner, if owned by an~~
1924 ~~individual, and by the individual applicant)); and~~

1925 F. A signed attestation that the applicant for a new or renewal pumper certificate
1926 of competency is familiar with and agrees to perform all OSS services in accordance with
1927 the requirements of this title and the King County OSS code of performance and ethics.

1928 SECTION 44. R&R No. 3, Part 11, Section 3, as amended, and BOH 13.68.030
1929 are each hereby amended to read as follows:

1930 **Examination and inspection.**

1931 A. Except as described in BOH 13.68.010.B, a pumper's certificate of
1932 competency and/or vehicle inspection tab shall be issued to the applicant only after:

- 1933 1. Completion of a course of instruction given by a qualified person(s)
1934 acceptable to the health officer and which covers, as applicable to the certificate of
1935 competency classification, basic sanitation principles affecting public health, on-site
1936 sewage concepts, details of proper servicing of sewage tanks ~~((or other receptacles of~~

1937 ~~human sewage~~) and all components of a gravity OSS, and the transporting and disposing
1938 of sewage, septage, sludge, or fats, oils and grease;

1939 2. Satisfactory completion of an examination relevant to the pumper certificate
1940 of competency classification, which may include but not necessarily be limited to the
1941 applicant's knowledge of sanitation principles affecting public health, knowledge of
1942 principles of on-site sewage system operations, knowledge of sewage (~~tank and/or~~
1943 ~~portable toilet~~) tanks and all components of a gravity OSS and servicing procedures,
1944 knowledge of regulations governing disposal of septage, sewage and/or fats, oils and
1945 grease, and the reliability of the applicant in observing sanitation laws, regulations and
1946 directions, plus other pertinent information as deemed necessary by the health officer
1947 except that the grease trap/interceptor pumpers, vessel sewage holding tank pumpers(~~g~~
1948 ~~and~~) portable toilet pumpers, and miscellaneous sewage pumpers may be exempted
1949 from such examination upon satisfactory completion of an industry certification/training
1950 program acceptable to the health officer. The fee for such examination or evaluation of
1951 training documentation shall be as specified in the fee schedule payable in advance and
1952 nonrefundable;

1953 3. Annual inspection and approval of the applicant's equipment to be used in the
1954 performance of the business;

1955 4. The business operator provides the health officer with evidence of
1956 compliance with state of Washington minimum bonding requirements as stated in chapter
1957 18.27 RCW and contractor's liability insurance for at least fifty thousand dollars; and

1958 5. Business operators, other than OSS pumpers, sign and provide to the health
1959 officer a statement certifying that all employees working in contact with equipment
1960 potentially contaminated by sewage have successfully completed a course of instruction
1961 given by a qualified person or persons acceptable to the health officer which covers basic
1962 sanitation principles affecting public health.

1963 B. Certificate of competency and vehicle inspection fees shall be as specified in
1964 the fee schedule.

1965 C. After certification has been approved by the health officer, the applicant will
1966 be issued a certification of competency registration number. The business owner shall
1967 permanently affix said number preceded by the letters "KC No." on each of the
1968 applicant's collection vehicles. Said numbers must be in a contrasting color to that of the
1969 vehicle and in letters at least three inches high and placed along with the annual
1970 wastewater vehicle tab in a conspicuous place designated by the health officer. In
1971 addition, the name of the operating firm shall be conspicuously displayed on both sides of
1972 the truck.

1973 D. Certificates shall expire December 31st of each year.

1974 1. The health officer may renew certificates of competency provided that the
1975 applicant submits not later than December 31st a complete renewal application
1976 accompanied by: a fee as set forth in the fee schedule, authorization for continued use of
1977 all disposal sites, a completed annual vehicle inspection report and proof of minimum
1978 bonding and insurance requirements; and

1979 2. Complete applications for renewal submitted after January 15 shall be subject
1980 to a late fee in the amount of one-half the renewal fee, after January 31 double the
1981 renewal fee and after February 10 a renewal shall not be granted without passing a
1982 competency examination.

1983 SECTION 45. R&R No.3, Part 11, Section 5, as amended, and BOH 13.68.050
1984 are each hereby amended to read as follows:

1985 **Revocation of certificate of competency and inspection certificates.** ~~((Any~~
1986 ~~certificate of competency and inspection certificate issued under this title may be~~
1987 ~~suspended or revoked for cause by the health officer pursuant to)) The health officer may
1988 assess civil penalty fines of up to one-thousand dollars per violation against any holder of
1989 an OSS pumper's certificate of competency, or institute probationary requirements, or
1990 suspend or revoke a pumper's certificate of competency for the pumper's failure to
1991 comply with this title or the King County OSS code of performance and ethics.~~

1992 SECTION 46. R&R No. 99-01, Section 2 (part), and BOH 13.08.024 are each
1993 hereby repealed.

1994 SECTION 47. R&R No. 08-03, Section 12, and BOH 13.08.055 are each hereby
1995 repealed.

1996 SECTION 48. R&R No. 3, Part 1, Section 5 (part), as amended, and BOH
1997 13.08.060 are each hereby repealed.

1998 SECTION 49. R&R No. 3, Part 1, Section 5 (part), as amended, and BOH
1999 13.08.070 are each hereby repealed.

2000 SECTION 50. R&R No. 99-01, Section 2 (part), and BOH 13.08.072 are each
2001 hereby repealed.

2002 SECTION 51. R&R No. 99-01, Section 2 (part), as amended, and BOH
2003 13.08.084 are each hereby repealed.

2004 SECTION 52. R&R No. No. 3, Part 1, Section 5 (part), as amended, and BOH
2005 13.08.090 are each hereby repealed.

2006 SECTION 53. R&R No. 99-01, Section 2 (part), as amended, and BOH
2007 13.08.114 are each hereby repealed.

2008 SECTION 54. R&R No. No. 08-03, Section 21, and BOH 13.08.115 are each
2009 hereby repealed.

2010 SECTION 55. R&R No. 08-03, Section 23, and BOH 13.08.117 are each hereby
2011 repealed.

2012 SECTION 56. R&R No. 08-03, Section 27, and BOH 13.08.131 are each hereby
2013 repealed.

2014 SECTION 57. R&R No. 99-01, Section 2 (part), as amended, and BOH
2015 13.08.132 are each hereby repealed.

2016 SECTION 58. R&R No. 99-01, Section 2 (part), and BOH 13.08.134 are each
2017 hereby repealed.

2018 SECTION 59. R&R No. 08-03, Section 30, and BOH 13.08.141 are each hereby
2019 repealed.

2020 SECTION 60. R&R No. 08-03, Section 32, and BOH 13.08.151 are each hereby
2021 repealed.

2022 SECTION 61. R&R No. 08-03, Section 34, and BOH 13.08.154 are each hereby
2023 repealed.

2024 SECTION 62. R&R No. 09-03, Section 37, and BOH 13.08.175 are each hereby
2025 repealed.

2026 SECTION 63. R&R No. 3, Part 1, Section 5 (part), as amended, and BOH
2027 13.08.180 are each hereby repealed.

2028 SECTION 64. R&R No. 3, Part 1, Section 5 (part), as amended, and BOH
2029 13.08.190 are each hereby repealed.

2030 SECTION 65. R&R No. 99-01, Section 2 (part), as amended, and BOH
2031 13.08.202 are each hereby repealed.

2032 SECTION 66. R&R No. 08-03, Section 40, and BOH 13.08.205 are each hereby
2033 repealed.

2034 SECTION 67. R&R No. 99-01, Section 2 (part), and BOH 13.08.212 are each
2035 hereby repealed.

2036 SECTION 68. R&R No. 08-03, Section 41, and BOH 13.08.213 are each hereby
2037 repealed.

2038 SECTION 69. R&R No. 99-01, Section 2 (part), and BOH 13.08.226 are each
2039 hereby repealed.

2040 SECTION 70. R&R No. 08-03, Section 47, and BOH 13.08.257 are each hereby
2041 repealed.

2042 SECTION 71. R&R No. 08-03, Section 49, and BOH 13.08.261 are each hereby
2043 repealed.

2044 SECTION 72. R&R No. 08-03, Section 50, and BOH 13.08.263 are each hereby
2045 repealed.

2046 SECTION 73. R&R No. 3, Part 1, Section 5 (part), as amended, and BOH
2047 13.08.280 are each hereby repealed.

2048 SECTION 74. R&R No. 08-03, Section 55, and BOH 13.08.287 are each hereby
2049 repealed.

2050 SECTION 75. R&R No. 3, Part 1, Section 5 (part), as amended, and BOH
2051 13.08.290 are each hereby repealed.

2052 SECTION 76. R&R No. 08-03, Section 56, and BOH 13.08.305 are each hereby
2053 repealed.

2054 SECTION 77. R&R No. 3, Part 1, Section 5 (part), as amended, and BOH
2055 13.08.320 are each hereby repealed.

2056 SECTION 78. R&R No. 08-03, Section 57, and BOH 13.08.3215 are each hereby
2057 repealed.

2058 SECTION 79. R&R No. 99-01, Section 2 (part), as amended, and BOH
2059 13.08.322 are each hereby repealed.

2060 SECTION 80. R&R No. 99-01, Section 2 (part), as amended, and BOH
2061 13.08.324 are each hereby repealed.

2062 SECTION 81. R&R No. 08-03, Section 60, and BOH 13.08.327 are each hereby
2063 repealed.

2064 SECTION 82. R&R No. 3, Part 1, Section 5 (part), as amended, and BOH
2065 13.08.330 are each hereby repealed.

2066 SECTION 83. R&R No. 99-01, Section 2 (part), and BOH 13.08.341 are each
2067 hereby repealed.

2068 SECTION 84. R&R No. 08-03, Section 61, and BOH 13.08.346 are each hereby
2069 repealed.

2070 SECTION 85. R&R No. 3, Part 1, Section 5, as amended, and BOH 13.08.350
2071 are each hereby repealed.

2072 SECTION 86. R&R No. 99-01, Section 2 (part), as amended, and BOH
2073 13.08.372 are each hereby repealed.

2074 SECTION 87. R&R No. 99-01, Section 2 (part), and BOH 13.08.402 are each
2075 hereby repealed.

2076 SECTION 88. R&R No. 99-01, Section 2 (part), and BOH 13.08.406 are each
2077 hereby repealed.

2078 SECTION 89. R&R No. 3, Part 1, Section 5 (part), as amended, and BOH
2079 13.08.410 are each hereby repealed.

2080 SECTION 90. R&R No. 08-03, Section 69, and BOH 13.08.424 are each hereby
2081 repealed.

2082 SECTION 91. R&R No. 99-01, Section 2 (part), and BOH 13.08.426 are each
2083 hereby repealed.

2084 SECTION 92. R&R No. 08-03, Section 72, and BOH 13.08.465 are each hereby
2085 repealed.

2086 SECTION 93. R&R No. 3, Part 1, Section 5, as amended, and BOH 13.08.470
2087 are each hereby repealed.

2088 SECTION 94. R&R No. 99-01, Section 2 (part), as amended, and BOH
2089 13.08.472 are each hereby repealed.

2090 SECTION 95. R&R No. 08-03, Section 74, and BOH 13.08.477 are each hereby
2091 repealed.

2092 SECTION 96. R&R No. 08-03, Section 76, and BOH 13.08.482 are each hereby
2093 repealed.

2094 SECTION 97. R&R No. 99-01, Section 2 (part), as amended, and BOH
2095 13.08.484 are each hereby repealed.

2096 SECTION 98. R&R No. 09-03, Section 79, and BOH 13.08.493 are each hereby
2097 repealed.

2098 SECTION 99. R&R No. 08-03, Section 80, and BOH 13.08.4934 are each hereby
2099 repealed.

2100 SECTION 100. R&R No. 08-03, Section 81, and BOH 13.08.4937 are each
2101 hereby repealed.

2102 SECTION 101. R&R No. 99-01, Section 2 (part), as amended, and BOH
2103 13.08.496 are each hereby repealed.

2104 SECTION 102. R&R No. 3, Part 1, Section 5 (part), as amended, and BOH
2105 13.08.500 are each hereby repealed.

2106 SECTION 103. R&R No. 08-03, Section 87, and BOH 13.08.505 are each hereby
2107 repealed.

2108 SECTION 104. R&R No. 99-01, Section 2 (part), and BOH 13.08.512 are each
2109 hereby repealed.

2110 SECTION 105. R&R No. 99-01, Section 2 (part), and BOH 13.08.516 are each
2111 hereby repealed.

2112 SECTION 106. R&R No. 08-03, Section 88, and BOH 13.08.520 are each hereby
2113 repealed.

2114 SECTION 107. **Effective date.** This rule takes effect January 1, 2025.

2115 SECTION 108. **Severability.** If any provision of this rule or its application to
2116 any person or circumstance is held invalid, the remainder of the rule or the application of
2117 the provision to other persons or circumstances is not affected.

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