



King County

KING COUNTY

1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

Signature Report

June 23, 2008

R&R

Proposed No. BOH08-03.1

1 A RULE AND REGULATION for the protection of the
2 public health against the spread of disease from sewage;
3 amending R&R 3, Part 1, Section 2, as amended, and BOH
4 13.04.020, R&R 3, Part 13, Section 1, as amended, and
5 BOH 13.04.050, R&R 99-01, Section 2 (part), and BOH
6 13.04.054, R&R 3, Part 13, Section 2, as amended, and
7 BOH 13.04.060, R&R 3, Part 13, Section 3, as amended,
8 and BOH 13.04.070, R&R 99-01, Section 2 (part), and
9 BOH 13.08.018, R&R 99-01, Section 2 (part), and BOH
10 13.08.084, R&R 99-01, Section 2 (part), and BOH
11 13.08.086, R&R 3, Part 1, Section 5 (part), as amended,
12 and BOH 13.08.090, R&R 99-01, Section 2 (part), and
13 BOH 13.08.114, R&R 3, Part 1, Section 5 (part), as
14 amended, and BOH 13.08.120, R&R 3, Part 1, Section 5
15 (part), as amended, and BOH 13.08.130, R&R 99-01,
16 Section 2 (part), and BOH 13.08.132, R&R 3, Part 1,
17 Section 5 (part), as amended, and BOH 13.08.140, R&R

18 99-01, Section 2 (part), and BOH 13.08.152, R&R 3, Part
19 1, Section 5 (part), as amended, and BOH 13.08.170, R&R
20 3, Part 1, Section 5 (part), as amended, and BOH
21 13.08.180, R&R 99-01, Section 2 (part), and BOH
22 13.08.202, R&R 99-01, Section 2 (part), and BOH
23 13.08.214, R&R 99-01, Section 2 (part), and BOH
24 13.08.218, R&R 3, Part 1, Section 5 (part), as amended,
25 and BOH 13.08.220, R&R 3, Part 1, Section 5 (part), as
26 amended, and BOH 13.08.280, R&R 99-01, Section 2
27 (part), and BOH 13.08.284, R&R 99-01, Section 2 (part),
28 and BOH 13.08.322, R&R 99-01, Section 2 (part), and
29 BOH 13.08.324, R&R 3, Part 1, Section 5 (part), as
30 amended, and BOH 13.08.350, R&R 3, Part 1, Section 5
31 (part), as amended, and BOH 13.08.360, R&R 3, Part 1,
32 Section 5 (part), as amended, and BOH 13.08.370, R&R
33 99-01, Section 2 (part), and BOH 13.08.372, R&R 3, Part
34 1, Section 5 (part), as amended, and BOH 13.08.400, R&R
35 3, Part 1, Section 5 (part), as amended, and BOH
36 13.08.420, R&R 3, Part 1, Section 5 (part), as amended,
37 and BOH 13.08.470, R&R 99-01, Section 2 (part), and
38 BOH 13.08.472, R&R 3, Part 1, Section 5 (part), as
39 amended, and BOH 13.08.480, R&R 99-01, Section 2
40 (part), and BOH 13.08.484, R&R 99-01, Section 2 (part),

41 and BOH 13.08.496, R&R 3, Part 1, Section 5 (part), and
42 BOH 13.08.500, R&R 3, Part 10, Section 3 (E), as
43 amended, and BOH 13.12.090, R&R 3, Part 12, Section 1,
44 as amended, and BOH 13.16.010, R&R 3, Part 2, Section 1,
45 as amended, and BOH 13.20.010, R&R 3, Part 2, Section 2
46 (A), as amended, and BOH 13.20.020, R&R 3, Part 2,
47 Section 2 (B), as amended, and BOH 13.20.030, R&R 99-
48 01, Section 2 (part), and BOH 13.20.035, R&R 3, Part 2,
49 Section 3, as amended, and BOH 13.20.040, R&R 3, Part 3,
50 Section 1, as amended, and BOH 13.24.010, R&R 3, Part 3,
51 Section 2, as amended, and BOH 13.24.020, R&R 3, Part 3,
52 Section 3, as amended, and BOH 13.24.030, R&R 3, Part 3,
53 Section 4, as amended, and BOH 13.24.040, R&R 3, Part 3,
54 Sections 1 and 4, as amended, and BOH 13.28.010, R&R 3,
55 Part 4, Section 2, as amended, and BOH 13.28.020, R&R 3,
56 Part 4, Section 3, as amended, and BOH 13.28.030, R&R 3,
57 Part 4, Section 4, as amended, and BOH 13.28.040, R&R 3,
58 Part 4, Section 5, as amended, and BOH 13.28.050, R&R 3,
59 Part 4, Section 6, as amended, and BOH 13.28.060, R&R 3,
60 Part 4, Section 7, as amended, and BOH 13.28.070, R&R 3,
61 Part 5, Section 1 (A) (4), as amended, and BOH 13.32.050,
62 R&R 3, Part 5, Section 1 (A) (5), as amended, and BOH
63 13.32.060, R&R 3, Part 5, Section 2 (A), as amended, and

64 BOH 13.36.010, R&R 3, Part 5, section 2 (B), as amended,
65 and BOH 13.36.020, R&R 3, Part 5, Section 2 (C), as
66 amended, and BOH 13.36.030, R&R 99-01, Section 2
67 (part), and BOH 13.40.001, R&R 99-01, Section 2 (part),
68 and BOH 13.40.005, R&R 3, Part 5, Section 3 (A), as
69 amended, and BOH 13.40.010, R&R 3, Part 5, Section 3
70 (C), as amended, and BOH 13.40.030, R&R 3, Part 5,
71 Section 3 (D), as amended, and BOH 13.40.040, R&R 3,
72 Part 5, Section 3 (E), as amended, and BOH 13.40.050,
73 R&R 3, Part 5, Section 4, as amended, and BOH 13.44.010,
74 R&R 3, Part 5, Section 6, as amended, and BOH 13.48.010,
75 R&R 3, Part 5, Section 6, as amended, and BOH 13.48.020,
76 R&R 3, Part 5, Section 7, as amended, and BOH 13.48.030,
77 R&R 99-01, Section 2 (part), and BOH 13.48.060, R&R 3,
78 Part 6, Section 1, as amended, and BOH 13.52.010, R&R 3,
79 Part 6, Section 2, as amended, and BOH 13.52.020, R&R 3,
80 Part 6, Section 3, as amended, and BOH 13.52.030, R&R
81 99-01, Section 2 (part), and BOH 13.52.040, R&R 3, Part
82 6, Section 5, as amended, and BOH 13.52.050, R&R 99-01,
83 Section 2 (part), and BOH 13.52.054, R&R 3, Part 6,
84 Section 6, as amended, and BOH 13.52.060, R&R 3, Part 7,
85 Section 1, as amended, and BOH 13.56.010, R&R 3, Part 7,
86 Section 2, as amended, and BOH 13.56.020, R&R 3, Part 7,

87 Section 3, as amended, and BOH 13.56.030, R&R 3, Part 7,
88 Section 4, as amended, and BOH 13.56.040, R&R 3, Part 7,
89 Section 5, as amended, and BOH 13.56.050, R&R 99-01,
90 Section 2 (part), as amended, and BOH 13.56.054, R&R 3,
91 Part 7, Section 6, as amended, and BOH 13.56.060, R&R
92 99-01, Section 2 (part), and BOH 13.60.005, R&R 3, Part
93 8, Section 1, as amended, and BOH 13.60.010, R&R 3, Part
94 8, Section 2, as amended, and BOH 13.60.020, R&R 3, Part
95 9, Section 1, as amended, and BOH 13.64.010, R&R 3, Part
96 9, Section 2, as amended, and BOH 13.64.020 R&R 3, Part
97 11, Section 1, as amended, and BOH 13.68.010, R&R 3,
98 Part 11, Section 3, as amended, and BOH 13.68.030, R&R
99 99-01, Section 2 (part), and BOH 13.68.036 and R&R 99-
100 01, Section 2 (part), as amended, and BOH 2.18.020,
101 adding a new section to BOH chapter 13.04, adding new
102 sections to BOH chapter 13.08, adding a new section to
103 BOH chapter 13.56, adding new sections to BOH chapter
104 13.52, adding a new section to BOH chapter 13.60;
105 recodifying 13.08.086 and 13.20.050 and repealing R&R 3,
106 Part 1 Section 5 (part) and BOH 13.08.030, R&R 99-01,
107 Section 2 (part), and BOH 13.08.034, R&R 99-01, Section
108 2 (part), and BOH 13.08.046,. R&R 99-01, Section 2 (part),
109 and BOH 13.08.048, R&R 99-01, Section 2 (part) and

110 BOH 13.08.088, R&R 99-01, Section 2 (part), and BOH
111 13.08.118, R&R 3, Part 1 Section 5 (part), and BOH
112 13.08.150, R&R 99-01, Section 2 (part), and BOH
113 13.08.262, R&R 99-01, Section 2 (part), and BOH
114 13.08.434, R&R 99-01, Section 2 (part), and BOH
115 13.08.492, R&R 99-01, Section 2 (part), and BOH
116 13.08.494 and R&R 99-01, Section 2 (part), and BOH
117 13.08.495; and making technical corrections; enacted
118 pursuant to RCW 43.20.050 and 70.05.060, including the
119 latest amendments or revisions thereto.

120

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

122 SECTION 1. R&R 3, Part 1, Section 2, as amended, and BOH 13.04.020 are each
123 hereby amended to read as follows:

124 **Declaration of purpose and policy.**

125 A. In compliance with (~~WAC 246-272~~) chapter 246-272A WAC, this title is
126 enacted as an exercise of the Board of Health power of King County to protect and
127 preserve the public health. Its provisions shall be liberally construed for the
128 accomplishment of this purpose.

129 B. It is expressly the purpose of this title to provide for and promote the health of
130 the general public, and not to create or otherwise establish or designate any particular
131 class or group of persons who will or should be especially protected or benefited by the
132 terms of this title.

133 C. It is the specific intent of this title to place the obligation of complying with its
134 requirements upon the owner (~~(and/)~~) or operator of premises and (~~(/or)~~) other persons
135 designated by this title within its scope, and no provision of (~~(nor)~~) or term used in this
136 title is intended to impose any duty whatsoever upon King County or any of its officers or
137 employees, for whom the implementation or enforcement of this title shall be
138 discretionary and not mandatory.

139 D. Nothing contained in this title is intended to be nor shall be construed to create
140 or form the basis for any liability on the part of King County, or its officers, employees or
141 agents, for any injury or damage resulting from the failure of the owner (~~(and/)~~) or
142 operator of any premises to comply with the provisions of this title, or by reason or in
143 consequence of any act or omission in connection with the implementation or
144 enforcement of this title on the part of King County by its officers, employees or agents.

145 SECTION 2. R&R 3, Part 13, Section 1, as amended, and BOH 13.04.050 are
146 each hereby amended to read as follows:

147 **Connection to public sewer.**

148 A. The owner or occupant of lands or premises located within the Urban Growth
149 Area (~~(f)~~), as defined in the King County Comprehensive Plan(~~(h)~~), undertaking new
150 residential or non(~~(-)~~)residential construction, short subdivision or subdivision from
151 which sewage will originate shall connect the construction to a public sewer(~~(, provided)~~)
152 if the sewer utility permits such connection. Within unincorporated King County such
153 connection shall be in accordance with King County Code Section 13.24.136. Within
154 incorporated cities such connection shall be in accordance with the policies of that city or

155 the local sewer utility. The connection shall be made by connecting the building drain
156 with an approved side sewer, and the side sewer to the public sewer.

157 B. For existing development located within or outside the Urban Growth Area
158 and which is within two hundred feet ~~((200'))~~ of a public sewer, where an on-site
159 sewage system is operating, ~~((connection to the public sewer is required))~~ the owner shall
160 abandon the on-site sewage system in accordance with WAC 246-272A-0300 and
161 connect the sanitary drainage system to the public sewer when the sewerage authority
162 permits such connection and when:

163 1. Repair, modification or replacement of the on-site sewage system is
164 necessary, or the existing ~~((OSS))~~ on-site sewage system has failed and an ~~((OSS))~~ on-
165 site sewage system fully conforming to this title cannot be designed and installed, or

166 2. ~~((At such time that additional))~~ Additional construction which in any way
167 affects the on-site sewage system is proposed.

168 C. The distances set forth in subsection B₂ of this section shall be calculated
169 along the shortest route in road rights-of-way and easements, consistent with the compre-
170 hensive planning and sewer extension practices of the sewer utility involved, from the
171 existing sewer to the nearest point of the lands or premises to be served.

172 D. Every plumbing fixture and every sanitary drainage system not connected to a
173 public sewer, or not required by law to be connected to a public sewer, shall be connected
174 to an ~~((OSS))~~ on-site sewage system.

175 SECTION 3. R&R 99-01, Section 2 (part), and BOH 13.04.054 are each hereby
176 amended to read as follows:

177 **Abandonment.**

178 A. Persons permanently removing a septic tank, seepage pit, cesspool((;)) or
179 other OSS wastewater tanks from service shall within ((30)) thirty days:

- 180 1. Have the septage removed by an approved pumper; and
- 181 2. Remove or destroy the lid; and
- 182 3. Fill the void with compacted soil or gravel; and
- 183 4. Report the abandonment to the health officer on a form obtained from the
184 health officer and accompanied by the fee specified in the fee schedule.

185 B. Contaminated rock, sand and gravel material from repairs to failing OSS shall
186 be properly disposed of by either burying at an appropriate location approved by the
187 health officer or transported to an approved sanitary landfill. The process of disposal
188 shall be supervised by a licensed master installer.

189 SECTION 4. R&R 3, Part 13, Section 2, as amended, and BOH 13.04.060 are
190 each hereby amended to read as follows:

191 ~~((Surface discharge prohibited. Sewage, including treated effluent from an OSS~~
192 ~~(or side sewer), including septic tank waste as per WAC 246-272-19501 (Septage~~
193 ~~Management), shall not be discharged to surface water or upon the surface of the~~
194 ~~ground)) **Failure prohibited.** An owner may not allow an on-site sewage system or
195 component or side sewer to remain in a condition of failure as defined in BOH chapter
196 13.08. The owner must cause the system, component or side sewer to be repaired or
197 replaced, or the property served by the system to be connected to public sewer, as
198 applicable, in accordance with the requirements of this title.~~

199 SECTION 5. R&R 3, Part 13, Section 3, as amended, and BOH 13.04.070 are
200 each hereby amended to read as follows:

201 **Domestic water supply source.** No on-site sewage system ~~((shall))~~ may be
202 constructed~~((, maintained or used))~~ or expanded if the plumbing fixtures draining to the
203 system are not supplied with water ~~((under pressure pursuant to KCC 13.24.138 or~~
204 ~~13.24.140 and))~~ from an approved source. An approved water source consists of one
205 ~~((+))~~ of the following:

206 A. Public ~~((W))~~water ~~((S))~~source: A public water source currently in compliance
207 with ~~((WAC))~~ chapter 246-290 or ~~((WAC))~~ 246-291 WAC and BOH Title 12 ~~((of this~~
208 ~~code))~~.

209 B. Private ~~((I))~~individual ~~((W))~~well ~~((S))~~source: A private well on a lot five (5)
210 acres or greater in size~~((⁺))~~ or a lot created prior to May 18, 1972, which complies with
211 all of the following conditions:

212 1. Source ~~((L))~~location ~~((A))~~approval: Any proposed new or replacement
213 individual private well location shall be submitted to the health officer and receive
214 approval prior to construction of the water source.

215 ~~((a))~~ a. All private water system development in the Urban Growth Area or in
216 the Rural Area as defined by the King County Comprehensive Plan is subject to the
217 provisions of King County Code 13.24.140 and 13.24.138, respectively.

218 ~~((b))~~ b. Proposed new initial water source locations shall be accurately
219 specified upon an OSS site design application and shall be submitted for review by the
220 health officer in conjunction with evaluation of the proposed OSS design. If the

~~((1. For new lots created after February 2, 1995 lot area placed into a separate sensitive
area protection tract in accordance with KCC 21A.24.180 may be included in the
computation of the minimum five (5) acre lot size required by this section.))~~

221 protective well radius is within ten feet of any lot line, easement line or any source of
222 contamination, the health officer may require the well site to be surveyed.

223 ~~((e))~~ c. Application for replacement water source locations shall be made on
224 forms obtained from the health officer and shall be accompanied by a review fee as
225 specified in the fee ~~((table))~~ schedule.

226 ~~((d))~~ d. The new or replacement well location shall be clearly identified at the
227 site.

228 e. Information shall be provided as part of the source location application to
229 include, at minimum~~((;A))~~, a completely dimensioned plot plan, drawn to a scale not
230 smaller than one inch ~~((1"))~~ equals one-hundred feet ~~((100'))~~ accurately showing the
231 location of the proposed water source relative to property boundary lines, existing and
232 proposed OSS components including OSS reserve area, existing and proposed structures,
233 roads and driveways, surface water, direction of surface drainage, a designated source
234 protection sanitary control area and any other features relevant to the siting of a water
235 source location.

236 ~~((e) Within thirty (30) days of receiving a complete application the health~~
237 ~~officer shall approve or deny said application or notify the applicant that the application~~
238 ~~is approved, denied or pending. Reasons for denial or pendency of the application will be~~
239 ~~in writing.~~

240 ~~((f))~~ f. A well source site approval is valid for ~~((a period of))~~ two ~~((2))~~ years
241 from the date of approval or until the expiration of a building permit issued by the
242 building official for construction of the primary structure to be served by the new well,
243 whichever period is longer.

244 2. Source ~~((P))~~protection ~~((C))~~covenant: The property owner shall establish a
245 source protection sanitary control area by providing a recorded protective covenant
246 prohibiting, within a horizontal distance of not less than one hundred feet ~~((100'))~~ of the
247 well, potential sources of contamination as described in ~~((the Code of the King County
248 Board of Health Title 12, Section))~~ BOH 12.24.010 and WAC ~~((sections 173-160-020
249 and 173-160-205))~~ 173-160-171.

250 3. Demonstrate adequate water quantity by ~~((either))~~:

251 ~~((a))~~ a. Drilling, in known or suspected areas of low production, the well and
252 conducting a ~~((4))~~ four hour pump test ~~((which))~~ that demonstrates that the proposed
253 source well is capable of providing water to a residential dwelling in the amount of not
254 less than ~~((400))~~ four hundred gallons per day. ~~((Section 4, Individual Water Supply
255 Systems, Guidelines for Determining Water Availability for New Buildings, April, 1993,
256 Ecology Publications 93-27).))~~ This pump test may be required to be performed during
257 the months of August, September or October at the health officer's discretion; or

258 ~~((b))~~ b. Providing, in all other areas, adequate information to the satisfaction
259 of the health officer to demonstrate the aquifer's capability to provide four hundred
260 gallons per day. This information may include well logs or pumping reports from
261 neighboring wells utilizing the same aquifer. The neighboring well or wells shall be
262 shown on a map of the surrounding area identifying both the subject property and the
263 location of the well or wells identified as neighboring. The map shall be included with
264 the OSS site design application submittal.

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

267 ~~((a))~~ a. ~~((at))~~ At least one ~~((+))~~ bacteriological analysis from the source
268 water which does not exceed the maximum contaminant level prescribed in WAC 246-
269 291-320 ~~((-))~~; and

270 ~~((b))~~ b. At least one ~~((+))~~ chemical test for nitrate and arsenic from the
271 source water described in table 1, WAC 246-291-330 which does not exceed the max-
272 imum contaminant level per WAC 246-291-330.

273 5. Provide a copy of well driller's report per requirements of WAC 173-160-
274 050.

275 6. Construction of the well must meet Washington ~~((S))~~ state Department of
276 Ecology's construction standards as per requirements of WAC ~~((E))~~ chapter 173-160.

277 C. A private spring on a lot five ~~((S))~~ acres~~((+))~~ or greater or a lot created prior
278 to May 18, 1972, ~~((which))~~ that complies with all of the following conditions prior to
279 application for OSS site design approval:

280 1. Application for an individual private spring water source shall be made on
281 forms provided by the health officer and shall be accompanied by a fee as specified in the
282 fee ~~((table))~~ schedule.

283 2. The application shall include: a recorded protective covenant of no less
284 than two hundred feet ~~((200'))~~ up slope and one hundred feet ~~((100'))~~ down slope from
285 the spring prohibiting any potential sources of contamination as described in BOH
286 13.04.070 B.2~~((-))~~, a spring location plot plan, a detailed spring construction plan~~((;))~~ and
287 information demonstrating acceptable water quality and quantity as specified ~~((by the~~
288 ~~Code of the King County Board of Health))~~ in ~~((section))~~ BOH 12.20.040 and ~~((WAC~~
289 ~~E))~~ chapter 246-291 WAC.

290 ((

291 1. ~~For new lots created after February 2, 1995 lot area placed into a separate sensitive~~
292 ~~area protection tract in accordance with KCC 21A.24.180 may be included in the~~
293 ~~computation of the minimum five (5) acre lot size required by this section.))~~

294 3. ~~Within 30 days of receiving a complete application the health officer shall~~
295 ~~approve, deny or notify the applicant that the application is pending. Reasons for denial~~
296 ~~or pendency of the application shall be stated in writing.))~~

297 D. Lot area designated in whole or in part as a critical area may be included in
298 the computation of the minimum five-acre lot size required by this section.

299 NEW SECTION. SECTION 6. There is hereby added a new section to BOH
300 chapter 13.04 to read as follows:

301 **Enforcement and rulemaking authority.** Except as specifically otherwise
302 provided in this title, the health officer shall have the authority to enforce the provisions
303 of this title in accordance with BOH chapter 1.08. The health officer is also authorized to
304 adopt rules consistent with this title for the purpose of enforcing and carrying out this
305 title.

306 SECTION 7. R&R 99-01, Section 2 (part), and BOH 13.08.018 are each hereby
307 amended to read as follows:

308 **Abbreviations.**

309 A. "ASTM" means American Society of Testing Material.

310 B. "ATU" means Aerobic Treatment Unit.

311 C. "BOD₅" means biochemical oxygen demand, typically expressed in mg/L.

- 312 D. "CBOD₅" means carbonaceous biochemical oxygen demand, typically
313 expressed in mg/L. For purposes of approximate conversion from BOD₅ to CBOD₅,
314 multiply the BOD₅ by 0.83.
- 315 E. "CEU" means continuing education unit.
- 316 F. "DDES" means King County ((~~D~~))department of ((~~D~~))development and
317 ((~~E~~))environmental ((~~S~~))services.
- 318 ((~~D~~)) G. "DOH" means the Washington ((~~S~~))state Department of Health.
- 319 H. "FC" means fecal coliform, typically expressed in number of colonies/ml.
320 ((E. "LOSS" means large on-site sewage system.))
- 321 ((~~F~~)) I. "mg/L" means milligrams per liter.
- 322 J. "NSF" means National Sanitation Foundation International.
- 323 K. "O and G," means oil and grease, a component of sewage typically originating
324 from foodstuffs, which are animal fats or vegetable oils, or consisting of compounds of
325 alcohol or glycerol with fatty acids, which are soaps and lotions. The quantity of O and
326 G is typically expressed in mg/L.
- 327 ((G. "OSS" means on-site sewage system.
328 H. ">" means greater than.
- 329 I. "<" means less than.
- 330 K. "SAS" means soil absorption system.
331 L. "SSAS" means subsurface soil absorption system.))
- 332 L. "TN" means total nitrogen, typically expressed in mg/L.
- 333 M. "TSS" means total suspended solids, a measure of all suspended solids in a
334 liquid, typically expressed in mg/L.

335 N. ">" means greater than.

336 O. "<" means less than.

337 SECTION 8. R&R 3, Part 1 Section 5 (part) and BOH 13.08.030 are each hereby
338 repealed.

339 SECTION 9. R&R 99-01, Section 2 (part), and BOH 13.08.034 are each hereby
340 repealed.

341 SECTION 10. R&R 99-01, Section 2 (part), and BOH 13.08.046 are each hereby
342 repealed.

343 SECTION 11. R&R 99-01, Section 2 (part), and BOH 13.08.048 are each hereby
344 repealed.

345 NEW SECTION. SECTION 12. There is hereby added a new section to BOH
346 chapter 13.08 to read as follows:

347 "Bed" means a soil dispersal component consisting of an excavation with a width
348 greater than three feet.

349 SECTION 13. R&R 99-01, Section 2 (part), and BOH 13.08.084 are each hereby
350 amended to read as follows:

351 "Conforming system" means any on-site sewage system(~~(, except an experimental~~
352 ~~system,)) meeting any of the following criteria:~~

353 A. Systems in full compliance with new construction requirements under this
354 title; or

355 B. Systems approved, installed and operating in accordance with requirements of
356 the previous edition of this title in force when the system was constructed or;

357 C. Systems or repairs permitted through the waiver process of WAC 246-272A-
358 0420 or this title and ~~((which))~~ that assure public health protection by higher treatment
359 performance or other methods.

360 SECTION 14. BOH 13.08.086, as amended by this rule, is hereby recodified as a
361 new section in BOH chapter 13.08.

362 SECTION 15. R&R 99-01, Section 2 (part), and BOH 13.08.086 are each hereby
363 amended to read as follows:

364 ~~((Conventional g))~~Gravity system. ~~(("Conventional g))~~"Gravity system" means an
365 on-site sewage system consisting of a septic tank and subsurface soil absorption system
366 with gravity conveyance and distribution of the effluent and excluding any alternative
367 system components.

368 SECTION 16. R&R 99-01, Section 2 (part) and, BOH 13.08.088 are each hereby
369 repealed.

370 SECTION 17. R&R 3, Part 1, Section 5 (part), as amended, and BOH 13.08.090
371 are each hereby amended to read as follows:

372 "Cover" means soil material that is used to cover a subsurface soil absorption
373 system area composed predominately of mineral material with no greater than ten percent
374 organic content. "Cover" material may contain an organic surface layer for establishing a
375 vegetative landscape to reduce soil erosion.

376 NEW SECTION. SECTION 18. There is hereby added a new section to BOH
377 chapter 13.08 to read as follows:

378 "Critical aquifer recharge area" means a critical area designated by the county or a
379 city under the Washington state Growth Management Act, Chapter 36.70A RCW, as
380 having a critical recharging effect on aquifers used for potable water

381 NEW SECTION. SECTION 19. There is hereby added a new section to BOH
382 chapter 13.08 to read as follows:

383 "Critical areas" means areas designated as critical areas under the Washington
384 state Growth Management Act, Chapter 36.70A RCW, including the following areas and
385 ecosystems: wetlands, areas with a critical recharging effect on aquifers used for potable
386 water, fish and wildlife habitat conservation areas, frequently flooded areas and
387 geologically hazardous areas.

388 NEW SECTION. SECTION 20. There is hereby added a new section to BOH
389 chapter 13.08 to read as follows:

390 "Department of Ecology" means the Washington state Department of Ecology.

391 NEW SECTION. SECTION 21. There is hereby added a new section to BOH
392 chapter 13.08 to read as follows:

393 "Design flow" means the maximum volume of sewage a residence, structure, or
394 other facility is estimated to generate in a twenty-four-hour period. It incorporates both
395 an operating capacity and a surge capacity for the system during periodic heavy use
396 events. The sizing and design of the on-site sewage system components are based on the
397 design flow. An OSS is not meant to operate continuously at this capacity.

398 SECTION 22. R&R 99-01, Section 2 (part), and BOH 13.08.114 are each hereby
399 amended to read as follows:

400 "Designer" means a person (~~((approved by the health officer, or an engineer))~~) who
401 matches site and soil characteristics with appropriate on-site sewage technology and who
402 holds either an on-site sewage treatment system designers license under chapter 18.210
403 RCW or is a professional engineer licensed under chapter 18.43 RCW.

404 NEW SECTION. SECTION 23. There is hereby added a new section to BOH
405 chapter 13.08 to read as follows:

406 "Disinfection" means the process of destroying pathogenic microorganisms in
407 sewage through the application of ultraviolet light, chlorination or ozonation.

408 SECTION 24. R&R 99-01, Section 2 (part), and BOH 13.08.118 are each hereby
409 repealed.

410 SECTION 25. R&R 3, Part 1, Section 5 (part), as amended, and BOH 13.08.120
411 are each hereby amended to read as follows:

412 "Dosing systems" means on-site sewage systems using a pump or siphon to
413 transport, control flow and/or delivery volume of effluent to the final treatment and
414 ~~((disposal))~~ soil dispersal component.

415 SECTION 26. R&R 3, Part 1, Section 5 (part), as amended, and BOH 13.08.130
416 are each hereby amended to read as follows:

417 "Drainfield" means a subsurface soil absorption system (~~((consisting of trenches,~~
418 ~~together with the piping and gravel,))~~ or other soil dispersal component designed and
419 installed (~~((in original undisturbed soil for the purpose of receiving septic tank or other~~
420 ~~pre-treated effluent and transmitting it into the soil))~~ to release effluent from a treatment
421 component into the soil for dispersal, final treatment and recycling.

422 NEW SECTION. SECTION 27. There is hereby added a new section to BOH
423 chapter 13.08 to read as follows:

424 "Drainrock" means clean washed gravel ranging in size from three-quarters to two
425 and one half inches, and containing no more than two percent by weight passing a US
426 No. 8 sieve and no more than one percent by weight passing a US No. 200 sieve.

427 SECTION 28. R&R 99-01, Section 2 (part), and BOH 13.08.132 are each hereby
428 amended to read as follows:

429 "Effluent" means liquid discharged from a septic tank or other OSS component
430 ~~((providing primary treatment. Also see "typical residential effluent"))~~.

431 SECTION 29. R&R 3, Part 1, Section 5 (part), as amended, and BOH 13.08.140
432 are each hereby amended to read as follows:

433 "Excessively permeable soils" means soils with a soil texture type 1((A)) or other
434 textures as defined by the United States Department of Agriculture standards and where
435 conditions are such that the treatment potential is ineffective in retaining ~~((and/))~~or
436 removing substances of public health significance to underground sources of drinking
437 water and soils with a percolation rate of one and one-half ~~((1.5))~~ minutes per inch or
438 ~~((slower))~~ faster.

439 NEW SECTION. SECTION 30. There is hereby added a new section to BOH
440 chapter 13.08 to read as follows:

441 "Expanding clay" means a clay soil with the mineralogy of clay particles, such as
442 those found in the Montmorillonite/Smectite Group, that causes the clay particles to
443 expand when they absorb water, closing the soil pores and contract when they dry out.

444 SECTION 31. R&R 3, Part 1 Section 5 (part), and BOH 13.08.150 are each
445 hereby repealed.

446 NEW SECTION. SECTION 32. There is hereby added a new section to BOH
447 chapter 13.08 to read as follows:

448 "Extremely gravelly" means soil with sixty percent or more, but less than ninety
449 percent, rock fragments by volume.

450 SECTION 33. R&R 99-01, Section 2 (part), and BOH 13.08.152 are each hereby
451 amended to read as follows:

452 "Failure" means a condition of an on-site sewage system or side sewer that
453 threatens the public health by inadequately treating sewage or by creating a potential for
454 direct or indirect human contact between sewage and the public. Examples of failure
455 include:

456 A. Sewage, septage or effluent on the surface of the ground;

457 B. Sewage, septage or effluent backing up into a structure caused by slow soil
458 absorption of septic tank effluent;

459 C. Sewage, septage or effluent leaking from a septic tank, pump chamber,
460 holding tank, conveyance or collection system;

461 D. Cesspools, seepage pits and pit privies;

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

463 and

464 F. Failure to meet conditions of a permit.

465 NEW SECTION. SECTION 34. There is hereby added a new section to BOH
466 chapter 13.08 to read as follows:

467 "Fecal coliform" means bacteria common to the digestive systems of warm-
468 blooded animals that are cultured in standard tests. Counts of these organisms are
469 typically used to indicate potential contamination from sewage or to describe a level of
470 needed disinfection, and are generally expressed as colonies per one hundred milliliters.

471 NEW SECTION. SECTION 35. There is hereby added a new section to BOH
472 chapter 13.08 to read as follows:

473 "Fee schedule" means the fee schedule in BOH chapter 2.18.

474 SECTION 36. R&R 3, Part 1, Section 5 (part), as amended, and BOH 13.08.170
475 are each hereby amended to read as follows:

476 "Food(~~-service~~) establishment" means, for the purpose of this title, any
477 commercial establishment in which food is processed or otherwise prepared, packaged, or
478 repackaged into another container for consumption or for resale.

479 NEW SECTION. SECTION 37. There is hereby added a new section to BOH
480 chapter 13.08 to read as follows:

481 "Gravelly" means soil with fifteen percent or more, but less than thirty five
482 percent rock fragments by volume.

483 SECTION 38. R&R 3, Part 1, Section 5 (part), as amended, and BOH 13.08.180
484 are each hereby amended to read as follows:

485 "Greywater" means sewage having the consistency and strength of residential
486 domestic type wastewater. Greywater includes wastewater from sinks, showers,
487 bathtubs, dishwashers and laundry fixtures, but does not include toilet or urinal waters.

488 SECTION 39. R&R 99-01, Section 2 (part), and BOH 13.08.202 are each hereby
489 amended to read as follows:

490 "Holding tank sewage system" means an on-site sewage system which
491 incorporates a ~~((watertight holding tank))~~ sewage tank without a discharge outlet, the
492 services of a sewage pumper~~((/))~~ or hauler, and the off-site treatment and disposal of the
493 sewage generated.

494 NEW SECTION. SECTION 40. There is hereby added a new section to BOH
495 chapter 13.08 to read as follows:

496 "Hydraulic loading rate" means the amount of effluent applied to a given
497 treatment step, expressed as gallons per square foot per day.

498 NEW SECTION. SECTION 41. There is hereby added a new section to BOH
499 chapter 13.08 to read as follows:

500 "Infiltrative surface" means the surface within a treatment component or soil
501 dispersal component to which effluent is applied and through which effluent moves into
502 original, undisturbed soil or other porous treatment media.

503 SECTION 42. R&R 99-01, Section 2 (part), and BOH 13.08.214 are each hereby
504 amended to read as follows:

505 "Installer" means a qualified person approved by the health officer to install or
506 repair on-site sewage systems or components. ~~((See Section 213.08.260, Master
507 installer, and Section 13.08.050, Associate installer.)))~~

508 SECTION 43. R&R 99-01, Section 2 (part), and BOH 13.08.218 are each hereby
509 amended to read as follows:

510 "Kitchen or kitchen facility" means an area within a building intended for the
511 preparation and storage of food and containing(~~(:~~

512 ~~a. An appliance for the refrigeration of food or;~~

513 b. ~~An appliance for the cooking or heating of food; and~~

514 ~~e. A) a sink.~~

515 SECTION 44. R&R 3, Part 1, Section 5 (part), as amended, and BOH 13.08.220

516 are each hereby amended to read as follows:

517 "Large on-site system" (or "LOSS") means any on-site sewage system with design
518 flows, at any common point, greater than three thousand five hundred ~~((3,500))~~ gallons
519 per day.

520 NEW SECTION. SECTION 45. There is hereby added a new section to BOH
521 chapter 13.08 to read as follows:

522 "Maintenance" means the actions necessary to keep the on-site sewage system
523 components functioning as designed and approved.

524 NEW SECTION. SECTION 46. There is hereby added a new section to BOH
525 chapter 13.08 to read as follows:

526 "Marine recovery area" means an area of definite boundaries where, in
527 accordance with chapter 70.118A RCW, the health officer or the Washington state
528 Department of Health in consultation with the health officer, determines that additional
529 requirements for existing on-site sewage disposal systems may be necessary to reduce
530 potential failing systems or minimize negative impacts of on-site sewage disposal
531 systems.

532 NEW SECTION. SECTION 47. There is hereby added a new section to BOH
533 chapter 13.08 to read as follows:

534 "Massive structure" means the condition of a soil layer in which the layer appears
535 as a coherent or solid mass not separated into peds of any kind.

536 SECTION 48. R&R 99-01, Section 2 (part), and BOH 13.08.262 are each hereby
537 repealed.

538 NEW SECTION. SECTION 49. There is hereby added a new section to BOH
539 chapter 13.08 to read as follows:

540 "Moderate structure" means well-formed distinct peds evident in undisturbed soil.
541 When disturbed, soil material parts into a mixture of whole peds, broken peds and
542 material that is not in peds.

543 NEW SECTION. SECTION 50. There is hereby added a new section to BOH
544 chapter 13.08 to read as follows:

545 "Monitoring" means periodic or continuous checking of an on-site sewage
546 system, which is performed by observations and measurements, to determine if the
547 system is functioning as intended and if system maintenance is needed. Monitoring also
548 includes maintaining accurate records that document monitoring activities.

549 NEW SECTION. SECTION 51. There is hereby added a new section to BOH
550 chapter 13.08 to read as follows:

551 "Neighboring well" means an existing well on a parcel adjoining or within one-
552 quarter mile of the boundary line of a separate parcel on which a new well is proposed for
553 construction.

554 NEW SECTION. SECTION 52. There is hereby added a new section to BOH
555 chapter 13.08 to read as follows:

556 "Nonconforming" means an on-site sewage system that does not meet applicable
557 standards for new construction of an on-site sewage system.

558 SECTION 53. R&R 3, Part 1, Section 5 (part), as amended, and BOH 13.08.280
559 are each hereby amended to read as follows:

560 "On-site sewage system" (or "OSS") means an integrated ~~((arrangement for~~
561 ~~premises not connected to a public sewer system which:~~

562 ~~A. Conveys))~~ system of components, located on or nearby the property it serves,
563 that conveys, stores, treats(, and/)or provides subsurface soil treatment and ((disposal of
564 residential)) dispersal of sewage ((on the property where it originates; and

565 ~~B. Includes piping, treatment devices, other accessories, and soil underlying the~~
566 ~~disposal component of the initial and reserve areas. May also be referred to as an on-site~~
567 ~~system or septic tank system)).~~ It consists of a collection system, a treatment component
568 or treatment sequence, and a soil dispersal component. An on-site sewage system also
569 refers to a holding tank sewage system or other system that does not have a soil dispersal
570 component.

571 SECTION 54. R&R 99-01, Section 2 (part), and BOH 13.08.284 are hereby
572 amended to read as follows:

573 "On-site system maintainer" ("OSM") means a qualified person approved by
574 the health officer to conduct performance monitoring inspections of, diagnose causes of
575 malfunction and failure of, ~~((and/))~~or perform preventive maintenance on and make
576 limited repairs to on-site sewage systems.

577 NEW SECTION. SECTION 55. There is hereby added a new section to BOH
578 chapter 13.08 to read as follows:

579 "Operating capacity" means the average daily volume of sewage an OSS can treat
580 and disperse on a sustained basis. The operating capacity, which is lower than the design
581 flow, is an integral part of the design and is used as an index in OSS monitoring.

582 NEW SECTION. SECTION 56. There is hereby added a new section to BOH
583 chapter 13.08 to read as follows:

584 "Ped" means: a unit of soil structure such as blocks, column, granule, plate or
585 prism formed by natural processes.

586 NEW SECTION. SECTION 57. There is hereby added a new section to BOH
587 chapter 13.08 to read as follows:

588 "Platy structure" means: soil that contains flat peds that lie horizontally and often
589 overlap. This type of structure will impede the vertical movement of water.

590 SECTION 58. R&R 99-01, Section 2 (part), and BOH 13.08.322 are each hereby
591 amended to read as follows:

592 "Pressure distribution" means: a system of small diameter pipes equally
593 distributing effluent throughout a ~~((trench or bed, as described in the Guidelines for~~
594 ~~Pressure Distribution Systems issued by DOH. (See also Section 13.08.088,~~
595 ~~Conventional pressure distribution system.))) subsurface soil absorption system, as
596 described in the Department of Health's Recommended Standards and Guidelines for
597 Pressure Distribution Systems, 2001. A subsurface drip system may be used wherever
598 this title requires pressure distribution.~~

599 SECTION 59. R&R 99-01, Section 2 (part), and BOH 13.08.324 are each hereby
600 amended to read as follows:

601 "Proprietary (~~(device or method)~~) product" means a (~~(device or method classified~~
602 ~~as an alternative system, or a component thereof, held under a patent, trademark or~~
603 ~~copyright)) sewage treatment and distribution technology, method or material subject to a
604 patent or trademark.~~

605 NEW SECTION. SECTION 60. There is hereby added a new section to BOH
606 chapter 13.08 to read as follows:

607 "Public domain technology" means: a sewage treatment and distribution
608 technology, method, or material not subject to patent or trademark.

609 NEW SECTION. SECTION 61. There is hereby added a new section to BOH
610 chapter 13.08 to read as follows:

611 "Record drawing" means an accurate graphic and written record of the location
612 and features of the OSS that are needed to properly monitor, operate and maintain that
613 system.

614 NEW SECTION. SECTION 62. There is hereby added a new section to BOH
615 chapter 13.08 to read as follows:

616 "Registered list" means the list of registered on-site treatment and distribution
617 products as established in Chapter 246-272A WAC On-site Sewage Systems, updated
618 periodically and maintained by the Washington state Department of Health and
619 containing the following:

- 620 A. Categories of treatment product and treatment levels;
- 621 B. List of manufacturers of registered proprietary on-site products;
- 622 C. List of registered on-site treatment and distribution products;
- 623 D. List of specific systems meeting treatment levels A, B, C, D, E and N;

624 E. List of septic tanks, pump chambers, and holding tanks approved by the
625 Washington state Department of Health; and

626 F. List of Approved On-site Sewage Tanks.

627 SECTION 63. R&R 3, Part 1, Section 5 (part), as amended, and BOH 13.08.350
628 are each hereby amended to read as follows:

629 "Repair" means the replacement, ~~((addition))~~ reconstruction or relocation of, or
630 ~~((alternation of))~~ addition or alteration to, a sewage tank, distribution box, tight line, or
631 other appurtenances of an existing OSS, and including any replacement, ~~((addition))~~
632 reconstruction or relocation of, or addition or alteration to a soil absorption system.

633 SECTION 64. R&R 3, Part 1, Section 5 (part), as amended, and BOH 13.08.360
634 are each hereby amended to read as follows:

635 "Reserve area" means an area of land approved for the installation of a
636 conforming OSS ~~((and dedicated))~~ that is protected and maintained for replacement of the
637 OSS upon its failure.

638 SECTION 65. R&R 3, Part 1, Section 5 (part), as amended, and BOH 13.08.370
639 are each hereby amended to read as follows:

640 "Resident owner" means a person who ~~((designs, repairs, monitors and/or installs~~
641 ~~an OSS for))~~ owns and occupies a single-family dwelling ~~((which is owned and occupied~~
642 ~~by that person))~~.

643 SECTION 66. R&R 99-01, Section 2 (part), and BOH 13.08.372 are each hereby
644 amended to read as follows:

645 "Residential sewage" means sewage having the consistency and strength typical
 646 of wastewater from domestic households. See Table 13.08-1 for residential sewage
 647 strength parameters.

648 **Table 13.08-1**

649 **Residential Sewage Strength Parameters**

<u>Parameter</u>	<u>Septic Tank Effluent Range(mg/L)</u>
<u>BOD₅</u>	<u>130-230</u>
<u>CBOD₅</u>	<u>Approximately 108-191</u>
<u>TSS</u>	<u>49-150</u>
<u>O and G</u>	<u>10-25</u>

650 SECTION 67. R&R 3, Part 1, Section 5 (part), as amended, and BOH 13.08.400
 651 are each hereby amended to read as follows:

652 "Secretary" means the Secretary of the Washington ((S))tate Department of
 653 Health or ((an)) the secretary's authorized representative.

654 SECTION 68. R&R 3, Part 1, Section 5 (part), as amended, and BOH 13.08.420
 655 are each hereby amended to read as follows:

656 "Sewage" means any liquid or liquid-borne waste from the ordinary living
 657 processes, and includes any urine, feces, and the water carrying human wastes, including
 658 kitchen, bath, and laundry wastes from residences, buildings, industrial establishments, or
 659 other places. For the purposes of these regulations, "sewage" is generally synonymous
 660 with domestic wastewater. (((See also Section 13.08.372, Residential sewage.)))

661 NEW SECTION. SECTION 69. There is hereby added a new section to BOH
 662 chapter 13.08 to read as follows:

663 "Sewage quality" means contents in sewage that include:

664 A. CBOD₅, TSS and O and G;

665 B. Other parameters that can adversely affect treatment, including but not limited
666 to pH, temperature and dissolved oxygen; and

667 C. Other constituents that create concerns due to specific site sensitivity.

668 Examples include fecal coliform and nitrogen.

669 SECTION 70. R&R 99-01, Section 2 (part), and BOH 13.08.434 are each hereby
670 repealed.

671 SECTION 71. R&R 3, Part 1, Section 5 (part), as amended, and BOH 13.08.470
672 are each hereby amended to read as follows:

673 "Soil log" means (~~(an excavation in soil of sufficient size and depth made to~~
674 ~~adequately determine the soil's characteristics together with the)) a detailed description of~~
675 the soil's texture, structure, color, bulk density or compaction, water absorption
676 capabilities or permeability, extent of disturbance (~~(and/)~~) or any other characteristics
677 providing information as to the soil's capacity to act as an acceptable treatment and
678 disposal medium for sewage.

679 NEW SECTION. SECTION 72. There is hereby added a new section to BOH
680 chapter 13.08 to read as follows:

681 "Soil dispersal component" means a technology that releases effluent from a
682 treatment component into the soil for dispersal, final treatment and recycling.

683 SECTION 73. R&R 99-01, Section 2 (part), and BOH 13.08.472 are each hereby
684 amended to read as follows:

685 "Soil type" means ~~((a numerical classification))~~ one of seven numerical
686 classifications of fine earth particles and coarse fragments as described in WAC ~~((246-~~
687 ~~272-11001(2)(e)))~~ 246-272A-0220(2)(e).

688 NEW SECTION. SECTION 74. There is hereby added a new section to BOH
689 chapter 13.08 to read as follows:

690 "Strong structure" means peds that are distinct in undisturbed soil, having the
691 characteristic of separating cleanly when soil is disturbed, resulting in soil material
692 separating mainly into whole peds when removed.

693 SECTION 75. R&R 3, Part 1, Section 5 (part), as amended, and BOH 13.08.480
694 are each hereby amended to read as follows:

695 "Subdivision" means a division of land ~~((into lots, tracts, parcels, sites, or~~
696 ~~divisions))~~ or creation of lots or parcels, described under ~~((€))~~chapter 58.17 RCW, now or
697 as hereafter amended, including both long and short subdivisions, planned unit
698 developments~~((,))~~ and mobile home parks.

699 NEW SECTION. SECTION 76. There is hereby added a new section to BOH
700 chapter 13.08 to read as follows:

701 "Subsurface drip system" (or "SDS") means an efficient high pressurized
702 wastewater distribution system that can deliver small, precise doses of effluent to soil
703 surrounding the drip distribution piping (called "dripline") as described in DOH's
704 "Recommended Standards and Guidance for Subsurface Drip Systems."

705 SECTION 77. R&R 99-01, Section 2 (part), and BOH 13.08.484 are each hereby
706 amended to read as follows:

707 "Subsurface soil absorption system" (or "SSAS") means a ~~((system of trenches~~
708 ~~three feet (3') or less in width, or beds between three feet (3') and ten feet (10') in width,))~~
709 soil dispersal component of trenches or beds containing either a distribution pipe within a
710 layer of ((clean gravel or other approved material)) drainrock covered with a geotextile,
711 or an approved gravelless distribution technology, designed and installed in original,
712 undisturbed, unsaturated soil ((for the purpose of receiving effluent and transmitting it
713 into the soil)) providing at least minimal vertical separation as established in this title,
714 with either gravity or pressure distribution of the treatment component effluent.

715 NEW SECTION. SECTION 78. There is hereby added a new section to BOH
716 chapter 13.08 to read as follows:

717 "Timed dosing" means the delivery of discrete volumes of sewage at prescribed
718 time intervals controlled by a timer device specifically designed for wastewater systems.

719 NEW SECTION. SECTION 79 There is hereby added a new section to BOH
720 chapter 13.08 to read as follows:

721 "Treatment component" means a technology that treats sewage in preparation for
722 further treatment or dispersal, or both, into the soil environment. Some treatment
723 components, such as mound systems, incorporate a soil dispersal component in lieu of
724 separate treatment and soil dispersal components.

725 NEW SECTION. SECTION 80. There is hereby added a new section to BOH
726 chapter 13.08 to read as follows:

727 "Treatment level" means one of six levels, which are A, B, C, D, E and N, used to
728 match site conditions of vertical separation and soil type with treatment components.

729 They are not intended to be applied as field compliance standards. The following chart

730 provides values for each treatment level so that the relationship between the different
 731 levels can be understood.

Level	Parameters				
	CBOD ⁵	TSS	O and G	FC	TN
	(mg/L)	(mg/L)	(mg/L)	(#/100 ml)	(mg/L)
A	10	10	----	200	----
B	15	15	----	1,000	----
C	25	30	----	50,000	----
D	25	30	----	----	----
E	125	80	20	----	----
N	----	----	----	----	20

732 NEW SECTION. SECTION 81. There is hereby added a new section to BOH
 733 chapter 13.08 to read as follows:

734 "Treatment sequence" means any series of treatment components that discharges
 735 treated sewage to the soil dispersal component.

736 SECTION 82. R&R 99-01, Section 2 (part), and BOH 13.08.492 are each hereby
 737 repealed.

738 SECTION 83. R&R 99-01, Section 2 (part), and BOH 13.08.494 are each hereby
 739 repealed.

740 SECTION 84. R&R 99-01, Section 2 (part), and BOH 13.08.495 are each hereby
 741 repealed.

742 SECTION 85. R&R 99-01, Section 2 (part), and BOH 13.08.496 are each hereby
 743 amended to read as follows:

744 "Unit volume of sewage" means:

745 A. ((A)) Flow from a single-family residence with not more than three (((3)))

746 bedrooms;

747 B. ((A)) Flow from a mobile home site in a mobile home park; or

748 C. ((450)) Four hundred fifty gallons of sewage per day where the proposed

749 development is not single-family residences or a mobile home park.

750 SECTION 86. R&R 3, Part 1, Section 5 (part), and BOH 13.08.500 are each

751 hereby amended to read as follows:

752 "Vertical separation" means the depth of unsaturated original, undisturbed soil of

753 Soil Types ((1B-5)) 1 through 6 that exists between the bottom infiltrative surface of a

754 soil ((absorption)) dispersal component and a restrictive layer ((ø)), highest seasonal

755 water table or soil type 7 ((1A, as illustrated in Figure 13.08-2)).

756 NEW SECTION. SECTION 87. There is hereby added a new section to BOH

757 chapter 13.08 to read as follows:

758 "Very gravelly" means soil containing thirty five percent or more, but less than

759 sixty percent rock fragments by volume.

760 NEW SECTION. SECTION 88. There is hereby added a new section to BOH

761 chapter 13.08 to read as follows:

762 "Well" means an excavation that is constructed when the intended use of the well

763 is for the location, diversion, artificial recharge, observation, monitoring, dewatering or

764 withdrawal of ground water for agricultural, municipal, industrial, domestic((5)) or

765 commercial use. Excluded are:

766 A. A temporary observation or monitoring well used to determine the depth to a
767 water table for locating an OSS;

768 B. An observation or monitoring well used to measure the effect of an OSS on a
769 water table; and

770 C. An interceptor or curtain drain constructed to lower a water table.

771 SECTION 89. R&R 3, Part 10, Section 3 (E), as amended, and BOH 13.12.090
772 are each hereby amended to read as follows:

773 **Appeal for Reconsideration--Variance expiration.** Any variance granted by
774 the health officer shall unless otherwise specified by the health officer, expire after two
775 ~~((2))~~ years from the date such variance is issued, unless the on-site sewage system is
776 installed and approved prior to the expiration date. An extension not to exceed one year
777 may be granted provided that the applicant provides reasonable justification for the
778 extension as determined by the sole discretion of the health officer. Application for
779 variance approval shall be made on forms provided by the health officer.

780 SECTION 90. R&R 3, Part 12, Section 1, as amended, and BOH 13.16.010 are
781 each hereby amended to read as follows:

782 **Membership.** There is established an on-site wastewater treatment and disposal
783 stakeholders technical advisory committee(~~(, the members of which shall be the health~~
784 ~~officer, ex officio, and sixteen (16) appointive members: one from each of the following~~
785 ~~except where otherwise indicated:)).~~

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

- 789 ~~((A.))~~ 1. Sanitary, agricultural or civil engineer licensed by the state of
790 Washington~~((.))~~;
- 791 ~~((B.))~~ 2. On-site sewage system designer~~((.~~
792 ~~C. King County Department of Natural Resources representative, ex officio.~~
793 ~~D. Washington State Department of Health representative, ex officio.~~
794 ~~E. United States Department of Agriculture, Natural Resources Conservation~~
795 ~~Service representative, ex officio.~~
- 796 ~~F. Washington State Department of Ecology representative, ex officio.)~~
797 ~~G.))~~;
- 798 3. Seattle Master Builders Association representative~~((.))~~;
- 799 ~~((H.))~~ 4. Seattle-King County Board of Realtors representative~~((.))~~;
- 800 ~~((I.))~~ 5. A representative of a nonprofit, nonpartisan public affairs or
801 environmental affairs organization~~((.))~~;
- 802 ~~((J.))~~ 6. On-site sewage system maintainer~~((.))~~;
- 803 ~~((K.))~~ 7. ~~((Two (2) consumers))~~ A consumer representing the King County
804 Unincorporated Area Councils~~((.))~~;
- 805 ~~((L.))~~ 8. Representative of incorporated cities~~((.))~~;
- 806 ~~((M.))~~ 9. Representative of a sewer utility district~~((.))~~;
- 807 ~~((N.))~~ 10. On-site sewage system installer~~((.))~~;
- 808 ~~((O.))~~ 11. On-site sewage system pumper~~((.))~~; and
809 12. Field Sanitarian.
- 810 B. In addition to the voting members, any combination of the following may be
811 appointed by the health officer to serve as ex officio members of the committee:

- 812 1. A King County department of natural resources and parks representative;
- 813 2. A Washington state Department of Ecology representative.
- 814 3. A Washington state Department of Heath representative; and
- 815 4. A United States Department of Agriculture, Natural Resource Conservation
- 816 Service representative.

817 SECTION 91. R&R 3, Part 2, Section 1, as amended, and BOH 13.20.010 are
818 each hereby amended to read as follows:

819 **Permits--General.**

820 A. Unless otherwise specified in this title, it is unlawful to construct, install,
821 repair or modify an OSS without an OSS construction permit. Such permit shall be
822 posted on the building or premises where the work permitted is being done, before the
823 work is begun, and unless revoked, shall not be removed until such work has been finally
824 approved by the health officer.

825 B. ~~((Except for a limited repair, the))~~ The application submitted for an OSS
826 construction permit shall be accompanied by an approved site design application or
827 approved repair proposal. The permit application for a new OSS to serve a building shall
828 be accompanied by evidence that the responsible building official has issued a building
829 permit authorizing construction of that building.

830 C. The fee for an OSS construction permit shall be as set forth in the fee
831 schedule.

832 D. OSS construction permits shall expire two ~~((2))~~ years from date of issue.

833 E. Unless otherwise provided in this title, the applicant for an OSS construction
834 permit shall be a certified master installer and shall be responsible for all work done
835 under that permit.

836 F. The applicant for an OSS construction permit may not also be the designer
837 named on the site application unless the work to be done consists solely of OSS failure
838 repair.

839 G. Application for an OSS construction permit shall be made in writing in a
840 manner prescribed by the health officer and shall be accompanied by a fee as set forth in
841 the fee schedule. The health officer may deny the application (~~((or revoke the permit))~~) if
842 in the health officer's judgment operation of the system will result in a public health
843 hazard. The health officer may consider any relevant health and safety factors in making
844 such a determination. If an application is denied on the grounds of a hazard to public
845 health, the health officer at the time of the denial shall inform the applicant in writing of
846 the reasons for the denial and the applicant's right to appeal the denial.

847 H. (~~((The authority to issue permits shall not be delegated by the health officer))~~)
848 Each construction permit issued pursuant to this title for an OSS installation or repair is
849 nontransferable and is valid only for the designer or installer named thereon and for the
850 type of OSS construction or repair for which the permit has been issued. A new
851 construction permit shall be obtained in the event of change of designer or installer
852 performing the work, or in the type of OSS for which a permit has previously been
853 issued.

854 SECTION 92. R&R 3, Part 2, Section 2 (A), as amended, and BOH 13.20.020
855 are each hereby amended to read as follows:

856 **Designer ((eertification)) license.**

857 ((A.)) Persons designing OSS must possess a valid on-site sewage system
858 designer's ((eertificate of competency)) license issued by the Washington state
859 Department of Licensing in accordance with chapter 18.210 RCW, or be licensed and in
860 good standing under ((RCW C))chapter 18.43 RCW as a sanitary, civil or agricultural
861 engineer, except as provided in ((Section)) BOH 13.20.040.

862 ((B. Application for an OSS designer's certificate of competency shall be made to
863 the health officer and be accompanied by a fee as set forth in the fee schedule and
864 evidence of successful completion within the previous twelve (12) months of a health
865 officer recognized course of instruction which includes soils and site evaluation, OSS
866 design, OSS operation and basics of OSS monitoring and maintenance. The health
867 officer will examine the applicant, and may deny the application if in the health officer's
868 judgment the applicant is for any reason, including previous finding of negligence,
869 incompetence, misrepresentation or failure to comply with this title, not qualified to
870 design on-site sewage systems.

871 C. The fee for an OSS designer's certificate of competency is as specified in the
872 fee table.

873 D. As a condition of maintaining certification the designer shall consistently
874 demonstrate reasonable care, skill, accuracy and completeness in disclosing site
875 conditions while performing work governed by this title and shall comply with all the
876 terms and conditions of these and all other applicable rules and regulations.

877 E. The health officer may suspend or revoke any OSS designer's certificate of
878 competency, pursuant to Chapter 1.08 of this code.

879 ~~F. The certificate of competency shall expire December 31st of each year. The~~
880 ~~designer may not submit designs after December 31st unless the certification has been~~
881 ~~renewed. The holders of such a certificate may renew the certificate at any time prior to~~
882 ~~February 4th of the year following expiration without taking the examination specified by~~
883 ~~this section provided that:~~

884 ~~1. A renewal application accompanied by a fee as specified in the fee table is~~
885 ~~submitted to the health officer. A late fee of twenty five percent (25%) of the renewal~~
886 ~~amount will be charged by the health officer for renewal applications received after~~
887 ~~January 15th.~~

888 ~~2. The applicant submits evidence that at least one (1) CEU credit has been~~
889 ~~earned by the applicant during the previous calendar year.~~

890 ~~G. The health officer may hold, as necessary, informational/educational meetings~~
891 ~~for all holders of a designer's certificate of competency. A minimum of four (4) weeks'~~
892 ~~notice of the meeting time and location shall be sent to each designer. Except as~~
893 ~~provided by the health officer, attendance at the meetings shall be mandatory for all~~
894 ~~designers. Failure to attend the required meetings, without prior approval of the health~~
895 ~~officer, shall be cause for the health officer to withhold recertification until an~~
896 ~~examination administered under the provisions of subsection B of this section is retaken.~~
897 ~~A designer who is also a certified installer will not be required to attend both designers~~
898 ~~and installers meetings providing the content of both meetings is in the judgment of the~~
899 ~~health officer essentially the same.~~

900 ~~H. Designers shall be accessible to their clients, the installers, and the department~~
901 ~~during normal working hours. This is to be accomplished by either maintaining office~~

902 personnel, a phone answering service, a phone answering device, or any other method
903 acceptable to the health officer.

904 1. Certified designers shall notify the health officer in writing of the name of the
905 designer who will complete their work as needed during absences of more than three (3)
906 working days such as, for example, during each vacation and illness.))

907 SECTION 93. R&R 3, Part 2, Section 2 (B), as amended, and BOH 13.20.030 are
908 each hereby amended to read as follows:

909 **Installer certification.**

910 A. Except as provided in ((Sections)) BOH 13.20.035 and 13.20.040, it is
911 unlawful to install, modify or repair OSS without a currently valid installer's certificate of
912 competency.

913 B. ((Application for installer certification:))1. Application for a master installer's
914 or associate installer's certificate of competency shall be made to the health officer and
915 shall be accompanied by a fee as set forth in the fee schedule.

916 2. The application shall be accompanied by evidence of successful completion
917 within the previous twelve (((12))) months of a health officer-recognized course of
918 instruction in the basics of OSS and installation of OSS.

919 3. The health officer shall examine the applicant, shall charge an exam fee as set
920 forth in the fee schedule and may deny the application if in the health officer's judgment
921 the applicant is for any reason, including previous finding of negligence, incompetence,
922 misrepresentation or failure to comply with this title, not qualified to install on-site
923 sewage systems.

924 C. ~~((Provisions for Certification.))~~ 1. As a condition of certification the master
925 installer applicant shall submit evidence of and maintain at all times compliance with
926 ~~((S))~~state of Washington minimum performance bonding requirements as stated in
927 ~~((RCW-C))~~chapter 18.27 RCW.

928 2. The health officer may suspend or revoke any master or associate installer's
929 certificate of competency, pursuant to BOH ~~((C))~~chapter 1.08 ~~((of this code))~~.

930 3. The installer's certificate of competency shall expire December 31 of each
931 year. The installer may not obtain installation permits or construct or repair any OSS
932 after December 31~~((st))~~ unless the certification has been renewed. The holder of such a
933 certificate may renew the certificate ~~((at any time prior to February 4))~~ on or before
934 January 15 of the year following expiration without taking the examination specified by
935 this section ~~((provided that))~~, but only if:

936 a. A renewal application accompanied by a fee as specified in the fee ~~((table))~~
937 schedule in BOH ~~((C))~~chapter 2.18 ~~((of this code, as amended,))~~ is submitted to the
938 health officer. A late fee of twenty five percent ~~((25%))~~ of the renewal amount will be
939 charged by the health officer for renewal applications received after January 15~~((th))~~; and

940 b. The applicant provides evidence that at least one ~~((1))~~ CEU credit has been
941 earned by the master installer applicant and the associate installer applicant during the
942 previous calendar year.

943 4. The health officer may hold, as necessary, informational/educational
944 meetings for all holders of installer's certificates of competency. A minimum of four
945 ~~((4))~~ weeks notice of the meeting time and location shall be sent to each installer.
946 Except as provided by the health officer attendance at the meetings shall be mandatory

947 for all installers. Failure to attend the required meetings, without prior approval of the
948 health officer, shall be cause for the health officer to withhold recertification until an
949 examination administered under the provisions of subsection B. of this section is retaken.
950 ~~((An installer who is also a certified designer may not be required to attend both meetings
951 providing the content of both meetings is, in the judgment of the health officer essentially
952 the same.))~~

953 SECTION 94. R&R 99-01, Section 2 (part), and BOH 13.20.035 are each hereby
954 amended to read as follows:

955 **Maintainer certification.**

956 A. ~~((On-Site System Maintainer (OSM) Certification.))~~ Unless otherwise
957 specified in this title, including ~~((Chapter))~~ BOH 13.20.040 and 13.60.010 relating to
958 homeowners, it is unlawful to conduct performance monitoring inspections of and/or
959 perform preventive maintenance service, to include making limited repairs to on-site
960 sewage systems, without a currently valid OSM certificate of competency.

961 B. ~~((Application for OSM certification.))~~ 1. Application for an OSM certificate
962 of competency shall be made to the health officer and shall be accompanied by a fee as
963 set forth in the fee schedule.

964 2. The application shall be accompanied by evidence of ~~((2))~~ two years of
965 relevant OSS experience.

966 3. The application shall be accompanied by evidence of successful completion
967 within the previous twelve ~~((12))~~ months of a health officer-recognized course of
968 instruction in the operation, monitoring and maintenance of on-site sewage systems.

969 4. The health officer shall examine the applicant except that the health officer
970 may waive the examination for the designer who is performing monitoring of only these
971 systems designed by that person. The health officer may deny the application if in the
972 health officer's judgment the applicant is for any reason, including previous findings of
973 negligence, incompetence, misrepresentation or failure to comply with this title, not
974 qualified to monitor and maintain on-site sewage systems.

975 C. ~~((Provisions for certification.))~~ 1. As a condition of certification the
976 maintainer shall:

977 a. Submit evidence of and maintain at all times compliance with ~~((S))~~state of
978 Washington minimum performance bonding requirements as stated in ~~((RCW C))~~chapter
979 18.27 RCW((-)); and

980 b. Consistently demonstrate reasonable care and skill in performing work
981 governed by this title and shall comply with all the terms and conditions of these and all
982 other applicable rules and regulations.

983 2. The health officer may suspend or revoke any OSM certificate of
984 competency, pursuant to BOH ~~((C))~~chapter 1.08 ~~((of this code))~~.

985 3. The OSM certificate of competency shall expire December 31~~((st))~~ of each
986 year. The holder of such certificate may renew the certificate ~~((any time prior to~~
987 February 4)) on or before January 15 of the year following expiration without taking the
988 examination specified by this section ~~((provided that))~~, but only if:

989 a. A renewal application accompanied by a fee as specified in the fee ~~((table))~~
990 schedule is submitted to the health officer. A late fee of ~~((25%))~~ twenty-five percent of

991 the renewal amount will be charged by the health officer for renewal applications
992 received after January 15^(th); and

993 b. The applicant submits evidence of bonding as specified by BOH 13.20.035
994 C.1(-); and

995 c. The applicant submits evidence that at least one ~~((+))~~ CEU credit has been
996 earned by the OSM applicant during the previous calendar year.

997 ~~((d))~~ 4. The on-site system maintainer may not conduct performance
998 monitoring inspections or perform preventive maintenance of on-site sewage systems
999 after December 31~~((st))~~, unless the certification has been renewed.

1000 ~~((4))~~ 5. The health officer may hold informational/educational meetings for all
1001 holders of OSM certificates of competency. A minimum of four ~~((4))~~ weeks notice of
1002 the meeting time and location shall be sent to each maintainer. Unless otherwise
1003 specified by the health officer, attendance at the meeting shall be mandatory for all
1004 maintainers. Failure to attend the required meetings, without prior approval of the health
1005 officer, shall be cause for the health officer to withhold recertification until an OSM
1006 examination is successfully completed.

1007 SECTION 95. R&R 3, Part 2, Section 3, as amended, and BOH 13.20.040 are
1008 each hereby amended to read as follows:

1009 **Resident owner design, construction and monitoring.**

1010 A. A resident owner may personally design a system for ~~((his/her))~~ the resident
1011 owner's own single-family residence, ~~((provided that))~~ but only if the site application
1012 submitted by the homeowner demonstrates that:

- 1013 1. The area where the drainfield and reserve area are to be located has a
1014 minimum of four feet ~~((4))~~ of original permeable soil, and a minimum vertical
1015 separation of three feet ~~((3))~~ is maintained.
- 1016 2. Not more than one ~~((1))~~ system is designed in any twelve~~((12))~~-month~~((-))~~
1017 period.
- 1018 3. A ~~((conventional))~~ gravity soil absorption system is proposed; and
- 1019 4. The property is not adjacent to a marine shoreline.

1020 B. A resident owner may personally construct, install, or repair a ~~((conventional))~~
1021 gravity system for ~~((his/her))~~ the resident owner's own single family dwelling, ((provided
1022 that)) but only if:

- 1023 1. The area where the drainfield and reserve area are located has a minimum of
1024 four feet ~~((4))~~ of original permeable soil and a minimum vertical separation of three
1025 feet ~~((3))~~ is maintained~~((-))~~;
- 1026 2. The resident owner constructs and installs not more than one system in any
1027 twelve~~((12))~~-month period~~((-))~~; and
- 1028 3. The property is not adjacent to a marine shoreline.

1029 C. The requirement for soil depths as required in this subsection ~~((f))B((g))~~, and
1030 subsection A, ~~((above))~~ of this section may be waived by the health officer when the
1031 resident owner is making repairs or additions to an existing gravity system or repairing or
1032 replacing the building sewer component of an alternative system.

1033 ~~((C))~~ D. A resident owner of a single family residence may monitor the
1034 performance of and perform prescribed preventive maintenance services for a
1035 ~~((conventional))~~ gravity OSS and for the septic tank component of an alternative OSS or,

1036 upon approval from the health officer for a ~~((conventional))~~ low pressure distribution
1037 system.

1038 SECTION 96. BOH 13.20.050 should be recodified in BOH chapter 13.56.

1039 SECTION 97. R&R 3, Part 3, Section 1, as amended, and BOH 13.24.010 are
1040 each hereby amended to read as follows:

1041 **Application.**

1042 A. Application for subdivision or short subdivision approval shall be made to the
1043 health officer on forms provided for this purpose, shall be accompanied by a fee as set
1044 forth in the fee schedule and shall be in sufficient detail to allow evaluation of the
1045 suitability of the proposed means of on-site sewage treatment and disposal. If a commu-
1046 nity on-site system is proposed, the preliminary report and plans and specifications shall
1047 be in accordance with ~~((Section))~~ BOH 13.28.040 ~~((of this title))~~. If any soils work is
1048 required or evaluation of an existing OSS is necessary the application must be submitted
1049 to the health officer by a licensed septic system designer or qualified professional
1050 engineer.

1051 B. Department review is not required for those subdivisions within the Urban
1052 Growth Area where Group A public water and public sewer service will be used for all of
1053 the resultant lots.

1054 C. The application for any development, including but not limited to
1055 subdivisions, short subdivisions, mobile home parks, multi-family housing, and
1056 commercial establishments, shall include evidence that suitable site and soil conditions as
1057 required by this title, to adequately treat and dispose of sewage on-site are present. After

1058 review of the proposed development, the health officer shall either approve, deny((;)) or
1059 hold the proposal pending submittal of additional information.

1060 SECTION 98. R&R 3, Part 3, Section 2, as amended, and BOH 13.24.020 are
1061 each hereby amended to read as follows:

1062 **Determination of minimum lot size.**

1063 A. The minimum lot size when creating new lots utilizing OSS shall be
1064 established by the health officer on the basis of the information submitted and any on-site
1065 inspections by the health officer.

1066 1. All lots created must be at least twelve((-)) thousand five hundred
1067 ((~~12,500~~)) square feet and shall not exceed a maximum flow density of one((-)
1068 thousand five((-)) hundred seventy ((~~1,570~~)) gallons of sewage per acre per day.

1069 2. Lots utilizing an individual private water source shall be at least five ((~~5~~))
1070 acres.

1071 B. Factors that may be considered when determining type of on-site system,
1072 connection to sewers, or establishing minimum lot size area include, but are not limited
1073 to, the following:

1074 1. Availability of public sewers, as determined by the King County

1075 Comprehensive Plan;

1076 2. Soil type and depth;

1077 3. Area drainage((;)) and lot drainage;

1078 4. Protection of surface and ground water;

- 1079 5. Setbacks from property lines, water supplies, ~~((ete.))~~ rights of way and
1080 easements, including but not limited to easements for drainfields, utilities and
1081 telecommunications;
- 1082 6. Source of domestic water;
- 1083 7. Topography, geology and ground cover;
- 1084 8. Climatic conditions;
- 1085 9. Activity or land use, present and anticipated;
- 1086 10. Growth patterns;
- 1087 11. Individual and accumulated gross effects on water quality;
- 1088 12. Availability of a one hundred percent ~~((100%))~~ reserve area for system
1089 replacement~~((-))~~;
- 1090 13. Anticipated sewage volume - as determined by number of lots and
1091 development;
- 1092 14. Effect on other properties;
- 1093 15. Compliance with zoning, critical area development restrictions including the
1094 critical aquifer recharge area and other code requirements of the governing agency as
1095 applicable.
- 1096 C. The minimum lot size requirement for creating subdivisions involving single-
1097 family residences or mobile home parks shall be determined by the soil type as outlined
1098 in Table 13.24-1.

TABLE 13.24-1

Minimum Land Area Requirement ~~((for))~~

Single Family Residence or Unit ~~((volume))~~ Volume of Sewage ~~((by Soil Type))~~

1102

	((Soil Type (defined by Table 13.28-3 of this title)				
	1A, 1B-⊕	2A, 2B	3	4	5-⊕
Minimum Lot Size	½ acre	12,500 sq. ft.	15,000 sq. ft.	18,000 sq. ft.	20,000 sq. ft.

1103 ⊕ For soil type 1A and type 5 an OSS providing at least treatment standard 2 shall be
 1104 required.))

<u>Type of Water Supply</u>	<u>Soil Type</u>					
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
<u>Public Water System</u>	<u>0.5</u> <u>acre</u>	<u>12,500</u> <u>sq. ft.</u>	<u>15,000</u> <u>sq. ft.</u>	<u>18,000</u> <u>sq. ft.</u>	<u>20,000</u> <u>sq. ft.</u>	<u>22,000</u> <u>sq. ft.</u>
<u>Individual/Private Well*</u>	<u>5 acres</u>	<u>5 acres</u>	<u>5 acres</u>	<u>5 acres</u>	<u>5 acres</u>	<u>5 acres</u>

1105 * Requirements for public wells may preclude use of private wells in certain instances.

1106 See RCW 19.27.097.

1107 Note: Well location and construction must be consistent with the King County
 1108 Comprehensive Plan, as amended.

1109 SECTION 99. R&R 3, Part 3, Section 3, as amended, and BOH 13.24.030 are
 1110 each hereby amended to read as follows:

1111 **Evaluation process.** ((The department's review of development proposals shall
 1112 consist of a two-stage review process. 1. The applicant must obtain the health officer's
 1113 pre-application review prior to submittal of the development proposal to the King County
 1114 DDES. 2. The applicant must obtain the health officer's final approval prior to final
 1115 recording of the development proposal.

1116 ~~The applicant must provide the following information:))~~ The applicant for
1117 subdivision or short subdivision approval shall obtain the health officer's review of the
1118 development proposal in accordance with this section.

1119 A. ~~((Preapplication Review.))~~ The applicant shall obtain the health officer's
1120 preapplication or preliminary review before submitting the development proposal to
1121 DDES or other building official, as applicable, and shall include the following
1122 information in the application submittal:

- 1123 1. A vicinity map providing precise directions to the parcel or parcels;
1124 2. Signage or flagging at the identified entry point to the parcel or parcels;
1125 3. Critical areas review, including critical aquifer recharge area classification,
1126 with all buffers and setbacks shown on the plot plan;

1127 ~~((1.))~~ 4. A minimum of two ~~((2))~~ soil logs per proposed lot shall be provided
1128 prior to department preliminary review. Such soil logs shall be excavated in accordance
1129 with the requirements of ~~((Section))~~ BOH 13.28.050. The soil log~~((s))~~ or logs must
1130 clearly show that within the lot area designated for the OSS the vertical separation
1131 specified in Table 13.28-1, and minimum lot sizes specified in Table 13.24-1 are
1132 provided.

1133 ~~((2.))~~ 5. A scaled plot plan of the proposed subdivision depicting the land area
1134 proposed for an initial on-site system and a contiguous one hundred percent (100%)
1135 system reserve area and soil log locations. The plot plan shall also identify any wells,
1136 surface water bodies and other features relevant to the siting of an on-site sewage system
1137 on the proposed and adjacent parcels.

1138 B. ~~((Final Review.))~~ The applicant shall submit the following information to the
1139 health officer and obtain the health officer's final approval of the development proposal:

1140 1. A minimum of four ~~((4))~~ soil logs per proposed lot shall be provided. Such
1141 soil logs shall be excavated in accordance with ~~((the requirements of Section))~~ BOH
1142 13.28.050. Each soil log shall clearly show that the vertical separation specified in Table
1143 13.28-1 is provided.

1144 2. A scaled plot plan identifying sufficient area for a drainfield and a contiguous
1145 one hundred percent ~~((100%))~~ reserve area for each lot shall be submitted after road
1146 cuts have been made, any plat development site grading affecting the OSS area
1147 completed, and drainage plan completed. Such a plot plan shall also include any soil log
1148 locations, road cuts, wells, surface water features, utility easements, storm and surface
1149 water retention and disposal facilities and other features relevant to the design and
1150 installation of an OSS.

1151 3. The applicant shall submit site designs for those proposed lots where the
1152 health officer determines that it is unclear that there is sufficient area for an on-site
1153 system and one hundred percent ~~((100%))~~ reserve area.

1154 4. If existing homes are on any of the proposed lots then the applicant must
1155 demonstrate all of the following:

1156 a. The existing OSS is in substantial conformance with this title;

1157 b. There is adequate reserve area available for repair or replacement of the
1158 system in accordance with this title; and

1159 c. The continued operation of the system does not pose a threat to public health
1160 or groundwater quality.

1161 SECTION 100. R&R 3, Part 3, Section 4, as amended, and BOH 13.24.040 are
1162 each hereby amended to read as follows:

1163 **Rezones and boundary line adjustments.**

1164 A. The general procedures ~~((and fees))~~ for review of subdivisions outlined in
1165 ~~((Sections))~~ BOH 13.24.010, 13.24.020 and 13.24.030 shall apply to proposed rezones,
1166 boundary line adjustments, and other land use changes where department review is
1167 requested by the building or planning official.

1168 B. The applicant for a boundary line adjustment shall submit a scaled plot plan
1169 containing at a minimum the following additional information for the health officer's
1170 review:

1171 1. The location of any structure or structures or residence or residences with
1172 OSS and a reserve area identified;

1173 2. All lot line boundaries with the lines that are being adjusted clearly marked in
1174 a different color or delineation;

1175 3. All easements and water lines;

1176 4. Parcel numbers for all lots involved, and parcel sizes before and after
1177 adjustment of lot lines;

1178 5. A record drawing of any existing OSS, or detailed on-site work to verify the
1179 location of all septic system components and drain lines and designated 100% reserve
1180 area;

1181 6. Water source for each lot, location of all wells drilled or dug or if the source
1182 is a spring; and

1183 7. An updated record drawing showing the new property boundaries in relation to the
1184 drainfield.

1185 SECTION 101. R&R 3, Part 3, Sections 1 and 4, as amended, and BOH
1186 13.28.010 are each hereby amended to read as follows:

1187 **Application submittal.**

1188 A. Application for site design approval for a proposed new OSS installation,
1189 repair or replacement of an existing failed soil absorption system, or modification,
1190 connection to or expansion of an OSS shall be made on forms provided by the health
1191 officer and be accompanied by 1. a plan review fee as set forth in the fee schedule and 2.
1192 a plan that demonstrates that the standards required in this title are met.

1193 B. Approval of plans shall expire two ~~((2))~~ years from date of approval unless a
1194 valid building permit ~~((is issued))~~ application has been accepted for review by the
1195 building official for construction of the building for which the OSS has been designed.
1196 Upon expiration of plan approval or building permit the applicant shall submit a complete
1197 new application with fees for review and approval by the health officer.

1198 C. After review of a site design application, the health officer may deny the
1199 application if in the health officer's judgment the physical features of the property on
1200 which it is proposed to locate the OSS, or the design of the proposed OSS, are not
1201 adequate for effective operation of such a system.

1202 D. ~~((The health officer may revoke or withdraw a previously issued site design~~
1203 ~~application approval upon determining that:~~

1204 ~~1. Development and use of the OSS as designed may threaten public health.~~

1205 ~~2. Omission, misrepresentation or concealment of material fact occurred in~~
1206 ~~information submitted to the health officer.~~

1207 ~~3. The OSS cannot be installed as designed and approved~~

1208 E.) Each site application denial or withdrawal of a previously issued approval
1209 shall be in writing citing the reason(~~((s))~~) or reasons and shall include a notice of the
1210 applicant's right to appeal for reconsideration pursuant to this title.

1211 SECTION 102. R&R 3, Part 4, Section 2, as amended, and BOH 13.28.020 are
1212 each hereby amended to read as follows:

1213 **Design support materials.** Design of OSS shall be in accordance with this title
1214 and shall accommodate all sewage from the buildings and premises to be served. The
1215 type of system required shall be determined by a soil and site evaluation conducted by the
1216 designer, which shall include location, soil type, vertical separation and other relevant
1217 conditions. All design control points shall be located within the designated drainfield
1218 areas and remain in place until the health officer has issued final approval for the
1219 installed OSS.

1220 A. The OSS site design application shall include the following:

1221 1. A completed site design application form for the individual OSS that includes
1222 the following information(~~((;))~~):

1223 a. Approximate address of property;

1224 b. Parcel number and legal description of property;

1225 c. Type and size of building the system will support;

1226 d. Name and address of property owner, applicant and system designer;

1227 e. Size of the parcel;

1228 f. Whether the property is within the urban area or rural area as designated by
1229 the King County Comprehensive Plan; and, if located within the urban area, the distance
1230 of the nearest property line to the closest public sewer line;

1231 g. Designation of an approved domestic water supply source;

1232 h. Type of development for which site design application is being
1233 made, for example single-family, multi-family or commercial, and type of permit, for
1234 example: new installation, or repair, or limited repair of an existing OSS;

1235 i. The presence of ~~((sensitive areas))~~ critical area or areas, including critical
1236 aquifer recharge areas, to be delineated on the scaled plot plan;

1237 j. Date of testing;

1238 k. ~~((Signature))~~ Original signature in blue ink and Washington state
1239 Department of Licensing certificate of competency number of designer or professional
1240 engineer's registration number; and

1241 1. All other information requested on the site application for on-site sewage
1242 disposal system form.

1243 2. Results of a soil and site evaluation conducted by the designer. The designer
1244 shall:

1245 a. Provide soil logs that accurately describe subsurface soil conditions present
1246 within the primary and reserve soil absorption areas;

1247 b. Use soil and site evaluation procedures and terminology in accordance with
1248 Chapter 3 and Appendix A of the Design Manual: On-Site Wastewater Treatment and
1249 Disposal Systems, United States Environmental Protection Agency, EPA-625/1-80-012,
1250 October, 1980 or as amended, except where modified by, or in conflict, with this title;

1251 c. Use the soil names and particle size limits of the United States Department
1252 of Agriculture Soil Conservation Service classification system;

1253 d. Determine texture, structure, compaction and other soil characteristics that
1254 affect the treatment and water movement potential of the soil by using normal field
1255 and/or laboratory procedures such as particle size analysis;

1256 e. Classify the soil as in Table 13.28-3, Soil Textural Classification;

1257 f. Describe ground water conditions, including the date(((s))) of the
1258 observation(((s))) or observations, and the probable maximum water table height;

1259 g. Describe existence of structurally deficient soils, such as slide zones and
1260 dunes, or those soils subject to major wind or water erosion events;

1261 h. Describe the existence and location of ((sensitive)) critical areas, for
1262 example designated flood plains and incorporate into design drawings; and

1263 i. Describe the location of any encumbrances affecting system placement, such
1264 as:

1265 (1) Wells, other water sources and water supply lines;

1266 (2) Surface water and storm water infiltration areas;

1267 (3) Abandoned wells;

1268 (4) Outcrops of bedrock and restrictive layers;

1269 (5) Buildings;

1270 (6) Property lines and lines of easements;

1271 (7) Drainage structures such as footing drains, curtain drains, and drainage
1272 ditches;

1273 (8) Cuts, banks, and fills;

- 1274 (9) Driveways and parking areas;
- 1275 (10) Existing OSS; and
- 1276 (11) Underground utilities.
- 1277 3. A completely dimensioned overall parcel plot plan, drawn to a one inch
- 1278 ~~((1"))~~ equals twenty feet ~~((20'))~~ scale, or the largest scale ~~((which))~~ that will allow the
- 1279 parcel plot plan to be presented on a single ~~((eight and one-half inch by eleven inch))~~
- 1280 page, no smaller than eight and one-half by eleven inches and no larger than eleven by
- 1281 seventeen inches, accurately showing:
- 1282 a. site drainage characteristics including direction of surface drainage;
- 1283 b. an arrow indicating north;
- 1284 c. topographical contours at two-foot ~~((2'))~~ intervals over the OSS area and
- 1285 all other areas containing features relevant to the design and installation of an adequate
- 1286 and efficient OSS;
- 1287 d. maximum building footprints, wastewater tanks and primary and reserve
- 1288 soil absorption system locations;
- 1289 e. ~~((location of all soil logs))~~ all locations of and routes to soil log excavations,
- 1290 with such locations and routes clearly identified by appropriate signage or flagging on the
- 1291 property;
- 1292 f. locations of and routes to potable water sources near property lines (drilled
- 1293 wells within one hundred feet ~~((100'))~~ and all other sources within two hundred feet
- 1294 ~~((200'))~~), and all well heads, with such locations and routes clearly identified by
- 1295 appropriate signage or flagging on the property;
- 1296 g. location of property and easement lines;

1297 h. location and description of design control point(((s))) or points within the
1298 designated drainfield area; ((²)) and

1299 i. The boundaries of the SSAS detail drawing.

1300 4. Construction plans and specifications showing:

1301 a. plumbing stub elevation; and

1302 b. vertical section detail drawings depicting dimensions of wastewater tank
1303 details to include minimum and maximum elevation of installation, maximum depth of
1304 cover over tanks, acceptable seasonal groundwater table elevation at all tank locations,
1305 and depth of required bedding material((;)). For drainfields, minimum and maximum
1306 drainfield width and depth, vertical separation and amount of cover material and
1307 placement if any, and any other OSS components to be constructed at the site.

1308 5. A SSAS detail drawing scaled one inch (((1"))) equals twenty feet (((20')))
1309 (or one inch equals thirty feet on larger lots) depicting design control point(((s))) or
1310 points, the dimensions and location of all components of the proposed primary and
1311 reserve systems including trench widths, lengths and horizontal separations. If the
1312 location of the reserve area is at an elevation above the outlet of the septic tank, the
1313 design shall include all tanks, dosing chambers and piping necessary to allow distribution
1314 of the effluent to the reserve area with a minimum of disruption to the original subsurface
1315 field and other property of the owner. The health officer may require the installation of
1316 the dosing chamber, pressure lines and distribution box/inspection box where the future

~~((2- The design control point(s) shall remain in place at least until the installed system receives final approval from the health officer.))~~

1317 access to the reserve area will be severely limited. Drawings may be submitted
1318 electronically in a format acceptable to and with the prior agreement of the health officer.

1319 6. Location of pump tank controls in plain view of the pump tank shall be
1320 included on the design drawings.

1321 7. Construction details for and location of any proposed footing drains, curtain
1322 drains((;)) and interceptor drains.

1323 ((7;)) 8. Calculations and observations supporting the proposed design,
1324 including:

1325 a. Soil type; and

1326 b. Hydraulic loading rate in the soil absorption component.

1327 ((8;)) 9. An accurate vicinity location sketch and route map to the property,
1328 including written directions to the property from the last named street or road. Signage
1329 shall be displayed at the entrance to the property and include the names of the designer
1330 and applicant. A cleared and flagged route to the soil log and well site locations must be
1331 provided from the property entrance.

1332 ((9;)) 10. Proof of availability of an approved domestic water supply source.

1333 ((10;)) 11. Such other information as the health officer may require((; provided
1334 however if a design is rejected by the health officer due solely to this subsection (10.), an
1335 additional design review fee shall not be required)).

1336 B. Additional requirements for an application for an OSS serving buildings other
1337 than or in addition to single family residences:

1338 1. Information to establish that the sewage is not industrial wastewater((-);

1339 2. Information to establish that the sewage effluent applied to the infiltrative
1340 surface does not exceed typical residential effluent characteristics by providing waste
1341 strength characteristics and parameters((-));

1342 3. For all commercial developments not classified as community on-site
1343 systems, recorded covenants (~~(stipulating that the property will remain under one (1)~~
1344 ~~ownership.))~~ declaring that the owner or owners of the property or properties served by
1345 the OSS are responsible for the operation, monitoring, and maintenance of the OSS in
1346 accordance with this title; and

1347 4. Proof of a system operation monitoring, and maintenance plan in accordance
1348 with requirements of BOH ((C))chapter 13.60.

1349 SECTION 103. R&R 3, Part 4, Section 3, as amended, and BOH 13.28.030 are
1350 each hereby amended to read as follows:

1351 **General design requirements.**

1352 A. Collection systems will be designed to comply with criteria set forth in
1353 Criteria for Sewage Works Design, Washington ~~((State))~~ state Department of Ecology,
1354 ~~((October 1985))~~ November 2007 or as thereafter amended.

1355 B. Maximum slopes.

1356 1. OSS shall not be allowed on slopes exceeding forty percent ~~((40%))~~.

1357 2. On slopes exceeding ~~((30%))~~ thirty percent, the SSAS shall be pressure
1358 distribution and have a maximum SSAS trench width of two feet ~~((2'))~~.

1359 C. SSAS reserve area~~((s))~~ or areas shall be designated equal to at least one
1360 hundred percent ~~((100%))~~ of the primary SSAS area. One or more areas may be
1361 designated as SSAS reserve areas. If more than ~~((two areas are))~~ one area is designated

1362 ((then)) or if access is limited, at the discretion of the health officer the reserve system
1363 ((shall)) may be required to be installed along with the primary SSAS. At least ((2)) two
1364 soil log excavations shall be installed in each designated reserve area. Construction plans
1365 for the SSAS reserve area may be required by the health officer.

1366 D. OSS for lots created after July 1, 1984, shall be located on the same lot as the
1367 buildings they are designed to serve. Any existing OSS which is failing and for which
1368 there is insufficient area on the lot to repair the system may be replaced by an OSS
1369 located off-site provided proof of easements is submitted to the health officer. Proof of
1370 lot creation date must be provided when requesting use of a drainfield easement for new
1371 construction. All drainfield easements shall be surveyed and permanently marked, and
1372 the soils within the easements protected against disturbance. Approval shall be subject to
1373 such additional conditions as deemed necessary by the health officer to protect public
1374 health.

1375 E. Any application for site design approval for OSS in a critical area shall include
1376 documentation from the applicable jurisdictional authority indicating critical area review
1377 has been completed. All critical areas and their buffers shall be identified and drawn to
1378 scale on the design drawing submittals. OSS shall not be located on landforms that are
1379 unstable. ~~((Such unstable areas may include those areas identified as Class III landslide~~
1380 ~~hazards in the King County Sensitive Critical Area folio or identified as such under King~~
1381 ~~County Code Chapter 21A.24. Final determination of area stability is made by the~~
1382 ~~responsible building official during the building permit review process.))~~

1383 F. Where any type of drain is to be installed for the purpose of intercepting
1384 subsurface water and channeling, concentrating, focusing or directing its flow onto a

1385 downstream property not under the ownership or agency of the applicant or King County,
1386 a release of damages holding King County and its employees harmless for any
1387 subsequent erosion or loss or limitation of use of such property must be executed and
1388 filed with the King County records and elections division and which shall run with the
1389 land, prior to approval of any site application.

1390 G. All types of drains installed for the purpose of affecting vertical separation
1391 shall be verified as effective during the winter water table season as outlined in
1392 ((Section)) BOH 13.28.060.C.

1393 H. No downspout or footing drain shall be directly or indirectly connected to an
1394 OSS and the OSS shall be so constructed and installed that surface water or groundwater
1395 will not interfere with the operation of ((said)) the system.

1396 I. Seepage pits shall not be used for the disposal of septic tank effluent.

1397 J. The installation and use of cesspools and pit privies for disposal of sewage is
1398 not permitted.

1399 K. When grease traps are used, the design and installation will comply with
1400 criteria set forth in the Uniform Plumbing Code, ((1997)) 2006 Edition, International
1401 Association of Plumbing and Mechanical Officials, as amended. In addition the design
1402 application shall include a grease trap maintenance schedule.

1403 L. When siphon systems are used, they shall comply with ((Design Manual,
1404 Onsite Wastewater Treatment and Disposal Systems, United States Environmental
1405 Protection Agency, EPA 625/1-8-012, October, 1980, as amended)) Recommended
1406 Standards and Guidance for Pressure Distribution Systems, Washington State Department
1407 of Health, July 1, 2007.

1408 M. The connection of ~~((an))~~ accessory living quarters as defined in this ~~((Title))~~
1409 title to ~~((a system))~~ an OSS designed for or in use by a single-family residence or com-
1410 mercial structure may be permitted provided that public health and groundwater quality
1411 are not affected, and the ~~((system))~~ OSS is designed for the anticipated increased flow.
1412 In medical hardship cases as described in ~~((King County Code Section))~~ K.C.C.
1413 21A.32.170, the health officer may allow the temporary connection of a mobile home or
1414 temporary dwelling to an existing OSS designed only for a single-family residence
1415 provided that neither public health nor groundwater quality are negatively affected.

1416 N. Pump lines shall be installed at a depth which precludes disruption or damage
1417 by installation of other utilities or freezing.

1418 O. No part of an OSS shall be constructed in the zero rise floodway of a flood
1419 hazard area as described by K.C.C. Title 21A. New OSS to serve new subdivisions shall
1420 be located outside the limits of a flood hazard area. The installation of new OSS within
1421 the flood fringe area of the ~~((100))~~ one-hundred-year year flood plain, as determined by
1422 DDES or the local building official, may be allowed if the applicant demonstrates that:

- 1423 1. The proposed building parcel is an existing legal building site;
- 1424 2. No feasible alternative site outside the flood hazard area is available;
- 1425 3. Wastewater tanks and electrical components will be flood-proofed to the
1426 flood protection elevation;
- 1427 4. A conforming subsurface soil absorption system can be installed; and
- 1428 5. DDES or the local building official permits the development which is
1429 proposed to be served by the OSS.

1430 P. No part of a SSAS including the ~~((filter material))~~ drainrock shall be located in
 1431 fill material or disturbed soils.

1432 Q. SSAS shall be constructed with observation ports terminating within utility
 1433 boxes adjustable to final grade over the ends of the drainfield pipes, or other methods of
 1434 drainfield detection approved by the health officer to aid in the future locating of these
 1435 components.

1436 ~~((R. All OSS constructed in excessively permeable soils shall meet or exceed
 1437 treatment standard 2. This requirement will also apply to lots with a soil texture type 1
 1438 A.))~~

1439 ((S)) R. OSS shall not be permitted where a minimum vertical separation of three
 1440 feet ~~((3'))~~ of permeable soil below the infiltrative surface cannot be maintained except
 1441 as provided in Table 13.28-1. The health officer may require greater vertical separation
 1442 as needed to protect public health when the aquifer is used for a potable water supply.

1443 **TABLE 13.28-1**

1444 **Minimum Treatment ~~((Standard))~~ Level and Effluent Distribution Method**
 1445 **Required by Various Soil Types, Vertical Separation and Original Soil Depth**
 1446 **Conditions.**

	((VERTICAL SEPARATION and (SOIL DEPTH))			
Soil Type	<1 Foot	>1 Foot to <2 Feet and (18") ⊕-⊕	>2 Foot to <3 Feet and (30") ⊕	>3 Feet and (48") ⊕
1A	Not allowed	Treatment standard	Treatment	Treatment

		No. 2 with Pressure Distribution	standard No. 2 with Pressure Distribution	standard No. 2 with Pressure Distribution
2A	Not allowed	Treatment standard No. 2 with Pressure Distribution	Conventional Pressure Distribution	Conventional Pressure Distribution
1B-4	Not allowed	Treatment standard No. 2 with Gravity Distribution	Conventional Pressure Distribution	Conventional Gravity Distribution
5	Not allowed	Treatment standard No. 2 with Gravity Distribution	Treatment standard No. 2 with Gravity Distribution	Treatment standard No. 2 with Gravity Distribution))

1447

<u>Vertical Separation in inches</u>	<u>Soil Type</u>			
	<u>1</u>	<u>2</u>	<u>3-4</u>	<u>5-</u>
<u>18</u> ^{1,2}	<u>A- pressure with timed dosing</u>	<u>B- pressure with timed</u>	<u>B- pressure with timed</u>	<u>B- pressure with timed</u>

		<u>dosing</u>	<u>dosing</u>	<u>dosing</u>
<u>>18<24</u>	<u>B- pressure with timed dosing</u>	<u>B- pressure with timed dosing</u>	<u>B- pressure with timed dosing</u>	<u>B- pressure with timed dosing</u>
<u>>24<36</u>	<u>B- pressure with timed dosing</u>	<u>C- pressure with timed dosing</u>	<u>E- pressure with timed dosing</u>	<u>E-pressure with timed dosing</u>
<u>>36<60</u>	<u>B- pressure with timed dosing</u>	<u>E- pressure with timed dosing</u>	<u>E- pressure with timed dosing</u>	<u>E- pressure with timed dosing</u>
<u>>60</u>	<u>C- pressure with timed dosing</u>	<u>E- gravity</u>	<u>E- gravity</u>	<u>E- pressure with timed dosing</u>

Table 13.28-1

Explanatory Notes

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

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:

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

1457 b. The owner shall file a covenant with the King County records and elections
1458 division agreeing not to subdivide the parcel utilizing the OSS to less than 5 acres until
1459 public sewer service is provided.

1460 c. A water table study shall be conducted during a time of high seasonal water
1461 table to establish available soil depth.

1462 d. A ~~((mound preceded by an intermittent sandfilter or equivalent treatment and
1463 disposal methods specified in Chapter 13.52 and the approved list))~~ system meeting
1464 treatment level A, or two treatment level B systems in combination meeting treatment
1465 level A without the use of disinfection, such as a mound preceded by an intermittent
1466 sandfilter, shall be used.

1467 _____
1468 ((F)) S. Disinfection may not be used:

1469 1. To achieve the fecal coliform requirements to meet treatment levels A or B in
1470 Type 1 soils; or treatment level C; or

1471 2. On lots with less than eighteen inches of soil; or

1472 3. In a critical aquifer recharge area.

1473 T. The coarsest textured soil within the vertical separation selected determines
1474 the minimum treatment level and method of distribution.

1475 U. Based upon the treatment capacity and design flow the designer of an OSS
1476 shall establish the operational capacity of the system. This information shall be included
1477 with the design application and record drawing submission.

1478 V. Any reduction in horizontal separation for a pressure sewer line crossing a
1479 surface water source shall meet the requirements of the publication, Granting Waivers

1480 from State On-site Sewage System Regulations, chapter 246-272A WAC, as amended,
1481 published by the Washington state Department of Health.

1482 W. All OSS must comply with the ((standards)) applicable treatment levels
1483 contained in Table ((13.28-2)) 13.28-1 and applicable setbacks contained in Table 13.28-
1484 2; though the health officer may grant any setback reduction authorized under Table
1485 13.28-2 only in response to a written request for such reduction from the designer of
1486 record if the request includes all reasons for the proposed reduction and describes all
1487 mitigation measures required under this title or as may be required by the health officer in
1488 the exercise of reasonable discretion for the protection of the public health.

1489 X. In preparing any OSS site design application, the designer shall consider:

1490 1. CBOD₅, TSS and O and G;

1491 2. Other parameters that can adversely affect treatment anywhere along the
1492 treatment sequence. Examples include pH, temperature and dissolved oxygen;

1493 3. The sensitivity of the site where the OSS will be installed, such as shellfish
1494 growing areas, designated swimming areas, and other areas identified in the management
1495 plan.

1496 Y. Nitrogen contributions, where nitrogen has been identified as a contaminant of
1497 concern by the management plan, shall be addressed through either lot size or treatment,
1498 or both.

1499 **TABLE 13.28-2**

1500 **Minimum Horizontal Separations**

1501 **(Setbacks)**

<u>MEASURE FROM</u>

Items Requiring Setback	Edge of ((disposal)) <u>soil</u> <u>dispersal</u> component trench or reserve area	Septic tank, holding tank, containment vessel, pump chamber, and distribution box	Building sewer, collection, and non((-))perforated distribution line ¹
Potable Water Source ² - Private well - Public drinking water well - Drinking water spring/dug well ³	100 ft. 100 ft. 200 ft.	100 ft. 100 ft. 200 ft.	100 ft. 100 ft. 200 ft.
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}	100 ft.	50 ft.	10 ft.
Seasonal water ^{2,7}	30 ft.	15 ft.	
<u>Swimming Pools</u>			
<u>A. Down-gradient⁸</u>	<u>A. 15 ft. + height of the cut. Need not exceed 30 ft.</u>	<u>5 ft.</u>	<u>2 ft.</u>
<u>B. Up-gradient⁸</u>	<u>B. 10 ft.</u>	<u>5 ft.</u>	<u>2 ft.</u>
<u>C. If underdrains are present, either down- gradient or up-gradient⁸</u>	<u>C. 30ft</u>	<u>N/A</u>	<u>N/A</u>
<u>Building foundation:</u>			
<u>A. Down-gradient⁸</u>	<u>A. 15 ft. + height of foundation cut. Need not exceed 30 ft^{8,9}</u>	<u>5 ft.</u>	<u>2 ft.</u>

B. Up-gradient ⁸	B. 10 ft.	<u>5 ft.</u>	<u>2 ft.</u>
Property or easement line	10 ft. ^{10,11}	5 ft.	N/A
Decks (<u>first floor</u>) with post and pier supports	5 ft.	5 ft.	<u>N/A¹⁵</u>
<u>Decks - post and block (2nd Floor at least 6ft high)</u>	<u>2 ft. Outside a line from any pier supports</u>	<u>Not under any pier supports</u>	<u>N/A</u>
<u>Decks Cantilevered (at least 6ft high)</u>	<u>0 ft.</u>	<u>0 ft.</u>	<u>N/A</u>
Septic tanks, pump tanks, <u>treatment tanks</u> , sandfilter containment vessels: A. Down-gradient ⁸	A. 15 ft. + height of excavation. Need not exceed	<u>N/A</u>	<u>N/A</u>

	30 ft. ⁹		
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>Infiltration and Dispersion</u>			
<u>Trenches</u>			
<u>A. Down- gradient⁸</u>	<u>30 ft</u>	<u>10 ft</u>	<u>5 ft</u>
<u>B. Up-gradient⁸</u>	<u>100 ft¹⁴</u>	<u>30 ft</u>	<u>5 ft</u>
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	15 ft. + height of bank but shall not	N/A	N/A

vertical height with at least 5 ft. of original, undisturbed soil above a restrictive layer due to a structural or textural change ⁸	be less than 25 ft. 9, 12		
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 50 ft. ¹²	N/A	N/A

Table 13.28-2

Explanatory Notes

1. "Building sewer" as defined by the most current edition of the Uniform Plumbing Code. "Non((-))perforated 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

1510 wells, the distance from any water supply or surface water may be increased by the health
1511 officer.

1512 3. Setbacks from private or public springs and from shallow wells without intact
1513 casings or those wells which are not constructed in accordance with ~~((WAC))~~ chapter
1514 173-160 WAC and are utilized as a source of drinking water shall comply with
1515 ~~((Section))~~ BOH 13.04.070.C.

1516 4. The health officer may approve a sewer transport line crossing a water supply
1517 line when there is no other reasonable means to keep them from crossing and if the sewer
1518 line is constructed in accordance with Section 2.4 of the Department of Ecology's
1519 "Criteria for Sewage Works Design," revised ~~((October, 1985))~~ November 2007 or
1520 equivalent.

1521 5. Before any component may be placed within ~~((100))~~ one hundred feet of a
1522 well, the designer shall submit a "decommissioned water well report" completed by a
1523 licensed well driller, which verifies that appropriate decommissioning procedures noted
1524 in ~~((C))~~ chapter 173-160 WAC were followed.

1525 6. Setback measured from ordinary high water mark of surface water. Greater
1526 setback may be required to prevent pollution. The health officer will state reasons for
1527 greater setback to applicant in writing.

1528 7. This separation may not be reduced by culverting of streams without prior
1529 written approval for the culverting from King County or applicable building official, but
1530 in no case shall this separation be less than fifteen ~~((15'))~~ feet plus the height of the
1531 excavation which contains the culvert. Need not exceed thirty ~~((30))~~ feet.

1532 8. The item is down-gradient when liquid will flow toward it upon encountering a
1533 water table or a restrictive layer. The item is up-gradient when liquid will flow away
1534 from it upon encountering a water table or restrictive layer.

1535 9. May be reduced to ten feet (~~((10'))~~) by the health officer when bottom of
1536 infiltrative surface is downgradient from the base of the foundation cut or wastewater
1537 tank excavation, or there is at least five feet (~~((5'))~~) of original undisturbed unsaturated
1538 soil above a restrictive layer formed due to a structural or textural change.

1539 10. May be reduced five (~~((5'))~~) feet by the health officer in repairs to existing
1540 systems, in setbacks to easements or where a confirmed property line is up-gradient from
1541 the soil absorption component. A survey may be required by the health officer to ensure
1542 compliance with setback requirements.

1543 11. This distance may be increased to thirty (~~((30'))~~) feet by the health officer
1544 where cuts or construction on neighboring properties may affect the system.

1545 12. Need not exceed one hundred feet (~~((100'))~~).

1546 13. May be reduced to ten feet (~~((10'))~~) when the bottom of the infiltrative
1547 surface is below the base of the cut or bank and no restrictive layer or layer formed due to
1548 a structural or textural change is intersected or there is at least five feet (~~((5'))~~) of original,
1549 undisturbed soil above a restrictive layer or layer due to a structural change.

1550 14. The health officer may reduce this setback to thirty feet if the soil depth is
1551 four feet or greater and is soil type 1, 2 or 3.

1552 15. Any sewer clean-out shall be accessible for OSS maintenance or repair.

1553 SECTION 104. R&R 3, Part 4, Section 4, as amended, and BOH 13.28.040 are
1554 each hereby amended to read as follows:

1555 **Community on-site systems and large on-site systems (LOSS).**

1556 A. ~~((Design.))~~ Design of ~~((these))~~ large on-site systems shall ~~((meet or exceed~~
1557 ~~the requirements specified in WAC 246-272-08001 and as hereafter specified by this~~
1558 ~~section))~~ be subject to review by DOH in accordance with chapter 246-272B WAC, as
1559 amended. Design of community on-site systems that do not otherwise qualify as LOSS
1560 shall be subject to review by the health officer in accordance with this title.

1561 B. Prior to construction, plans and specifications for community on-site systems
1562 not qualifying as LOSS shall be submitted for approval to the health officer in accordance
1563 with ~~((WAC 246-272-08001(12)))~~ this title.

1564 ~~((1-Requirements for Certification.))~~ All preliminary reports and plans and
1565 specifications for new community on-site systems, extensions or alterations shall be
1566 prepared by a sewage system designer certified as provided in ~~((Section))~~ BOH 13.20.020
1567 or by an engineer as defined by this title. Any project exceeding ((3,500)) three thousand
1568 five hundred gallons per day shall be designed by an engineer. Within sixty ~~((60))~~ days
1569 following the completion of and prior to the use of any LOSS or community on-site
1570 system project or portion thereof a certification shall be made to the department and
1571 signed by the system designer or engineer declaring that ~~((he/she))~~ he or she has
1572 inspected the physical facilities of the project, and the designed physical facilities are
1573 constructed in accordance with this title and with the plans and specifications approved
1574 by the health officer.

1575 ~~((2))~~ C. ~~((The fee for review of a new system preliminary report, plans and~~
1576 ~~specifications and an engineering report for repair or replacement of an existing system~~
1577 ~~shall be as specified in the fee schedule))~~ Management and maintenance of community

1578 on-site systems that do not qualify as LOSS shall comply with BOH 13.60.020. Before
1579 obtaining a permit for installation of such a community OSS, the applicant shall provide
1580 to the health officer proof of ownership or management of the OSS in perpetuity by an
1581 approved public entity.

1582 ((C)) D. After obtaining the health officer's approval of the preliminary report
1583 and design plans and specifications ~~((by the health officer))~~, the applicant shall obtain an
1584 OSS installation permit ~~((shall be obtained))~~ prior to installing the ~~((large on-site system~~
1585 ~~er))~~ community on-site system. In addition, the applicant shall obtain an OSS installation
1586 permit ~~((shall be obtained))~~ for each residence prior to ~~((installation of))~~ installing any
1587 septic tank, pump tank ~~((t))~~, if needed~~((t))~~, and connecting line to the community on-site
1588 system.

1589 SECTION 105. R&R 3, Part 4, Section 5, as amended, and BOH 13.28.050 are
1590 each hereby amended to read as follows:

1591 **Soil test procedures.**

1592 A. Soil ~~((L))~~ logs. Results of all soil logs shall be submitted as part of the
1593 application for design approval. Soil log excavations shall meet the following
1594 requirements:

1595 1. Allow examination of the soil profile in its original position by excavating
1596 pits of sufficient dimensions, but not less than ~~((two-2))~~ three feet in diameter from top
1597 to bottom of the excavation, to enable observation of soil characteristics by visual and
1598 tactile means. The pits shall be constructed to a depth three feet ~~((3))~~ deeper than the
1599 bottom of the proposed infiltrative surface, but shall be no deeper than the depth of the

1600 water table or restrictive layer. All soil logs dug with a backhoe shall be ramped unless
1601 otherwise waived by the health officer.

1602 2. For single family structures((7)); soil logs shall include four ((4)) or more
1603 test holes located in representative parts of the proposed primary and reserve soil
1604 absorption areas and shall be separated by at least twenty feet ((20')). At least two
1605 ((2)) shall be located in the primary SSAS area and two ((2)) in each area designated
1606 for the reserve SSAS area. One soil log shall be located in the area of the proposed
1607 wastewater tanks. One soil log shall be located in the area of the treatment device, such
1608 as a sand filter or ATU unit, if that device is greater than thirty feet from the wastewater
1609 tanks.

1610 3. Soil log requirements for other than single family residences: For non-single
1611 family development, soil logs shall be made from one ((1)) or more test holes for each
1612 one thousand five hundred ((1,500)) square feet total primary and reserve SSAS areas,
1613 but not less than four ((4)) soil logs shall be provided. At least two ((2)) soil log
1614 excavations shall be in the primary and two ((2)) in each area designated for the reserve
1615 SSAS area.

1616 4. ((Be)) Labeling of soil logs: Soil logs shall be marked with a suitable flag or
1617 label with an indelible identifying number or letter and designer's name. Corresponding
1618 numbers or letters shall appear on the design plan and be accurately located on the
1619 SSAS.

1620 5. Soil log determinations: Allow determination of the soil's texture, structure,
1621 color, bulk density or compaction, water absorption capabilities or permeability, and
1622 elevation of the highest seasonal water table.

1623 6. Use of soil nomenclature: Use the soil names and particle size limits of the
 1624 United States Department of Agriculture Soil Conservation Service classification system.

1625 7. Soil classification: Classify the soil as in Table 13.28-3, Soil Textural
 1626 Classification describing soil type, depth of each type and any evidence of seasonal water
 1627 table. Soil particle size analysis and/or percolation tests may be required by the health
 1628 officer where identification of soil absorption characteristics is in question.

1629 **TABLE 13.28-3**
 1630 **Soil Textural Classification**

Soil Type	Soil Textural Classifications
((1A)) 1	<p>((Very gravelly¹ coarse sands or coarser. All extremely gravelly² soils)) <u>Gravelly and very gravelly¹ coarse sands, all extremely gravelly² soils excluding soil types 5 and 6, all soil types with greater than or equal to 90% rock fragments.</u></p>
((1B)) 2	<p>((Very gravelly medium sand, very gravelly fine sand, very gravelly very fine sand, very gravelly loamy sands)) <u>Coarse sands.</u></p>
((2A))	<p>((Coarse sands (also includes ASTM C-33 sand).))</p>

((2B)) 3	Medium sands, <u>loamy coarse sands, loamy medium sands.</u>
((3)) 4	Fine sands, loamy ((coarse sands, loamy medium sands)) <u>fine sands, sandy loams, loams.</u>
((4)) 5	Very fine sands, loamy fine sands, ((loamy very fine sands, sandy loams, loams)) <u>or silt loams, sandy clay loams, clay loams and silty clay loams with a moderate or strong structure (excluding platy structure).</u>
((5)) 6	((Silt loams that are porous and have well developed structure)) <u>Other silt loams, sandy clay loams, clay loams, silty clay loams.</u>
7 Unsuitable for disposal	((Other silt loams, sandy clay loams, clay loams, silty clay loams, sandy)) <u>Sandy clay, clay, silty clay, and strongly cemented or firm soils, soil with moderate or strong platy structure, any soil with a massive structure, any soil with appreciable amounts of expanding clays.</u>

Table 13.28-3

Explanatory Notes

1. Very Gravelly = >35% and <60% gravel and coarse fragments, by volume.

1634 2. Extremely Gravely = >60% gravel and coarse fragments, by volume.

1635

1636 8. Soil log safety measures: The owner of the property shall be responsible for
1637 constructing and maintaining the soil log excavations in a manner to minimize potential
1638 for physical injury by:

1639 ~~((a))~~ a. Placing excavated soil no closer than ~~((2))~~ two feet from the
1640 excavation;

1641 ~~((b))~~ b. Providing ~~((a ladder,))~~ an earth ramp or steps to a depth of ~~((4))~~ four
1642 feet, for safe egress, then completing the excavation to gain the additional ~~((2-foot))~~ depth
1643 of two feet necessary to observe the ~~((6))~~ six feet of soil face; however, these deepest
1644 ~~((2))~~ two feet are not to be entered ~~((Requirements a, and b of this section are illustrated
1645 by Figure 13.28-1))~~);

1646 ~~((c))~~ c. Providing adequate physical safeguards such as covers, flagging or
1647 fencing over, ~~((and/or))~~ around, or both over and around the excavation's perimeter so as
1648 to prevent injury or damage to the general public or creation of a hazard to ~~((livestock))~~
1649 animals; and

1650 ~~((d))~~ d. Filling the excavation with compacted soil upon completion of the
1651 soil log evaluation.

1652 9. Soil and site evaluation procedures: Use the soil and site evaluation
1653 procedures and terminology in accordance with Chapter 5 of the On-site Wastewater
1654 Treatment Systems Manual, United States Environmental Protection Agency 625/R-
1655 00/008, February 2002 except where modified by, or in conflict with, this title.

1656 B. Percolation ~~((F))~~tests. When percolation tests are conducted, the tests shall be
1657 consistent with the procedure outlined in the Design Manual: On-site Wastewater
1658 Treatment and Disposal Systems, United States Environmental Protection Agency, EPA-
1659 625/1-80-012, October, 1980 ~~((as amended))~~, except where modified by, or in conflict,
1660 with this title. Test holes shall be maintained and protected by the owner so as to prevent
1661 injury or damage to the general public or the creation of a hazard to ~~((livestock))~~ animals
1662 and the owner shall fill the test holes with compacted soil upon completion of evaluation.

1663 C. Particle ~~((S))~~size ~~((A))~~analysis. When particle size analysis tests are
1664 conducted, the procedure used shall be consistent with American Society for Testing
1665 Materials Standard D-442. Samples for testing shall be collected by the OSS designer in
1666 the presence of the health officer or from an identified location, subject to the prior
1667 agreement of the health officer.

1668 SECTION 106. R&R 3, Part 4, Section 6, as amended, and BOH 13.28.060 are
1669 each hereby amended to read as follows:

1670 ~~((Soil conditions))~~ **Minimum soil depth.**

1671 A. All OSS shall have a minimum vertical separation as outlined in Table 13.28-
1672 1 of this code. A minimum of eighteen inches ~~((18"))~~ of original permeable soil is
1673 required above any seasonal high water table or impervious layer of soil on all sites to be
1674 considered for OSS except that less than eighteen inches ~~((18"))~~ but not less than twelve
1675 inches ~~((12"))~~ may be allowed by the health officer provided the lot size is not less than
1676 five ~~((5))~~ acres, and a treatment level A system is used which allows for twelve inches
1677 of vertical separation or two treatment level B systems (without use of disinfection to
1678 meet that standard) are used such as a sandfilter to mound OSS ~~((or equivalent approved~~

1679 ~~treatment and disposal is installed~~)), and the owner files a covenant with the King County
1680 records and elections division agreeing not to subdivide the parcel until public sewer
1681 service is provided.

1682 B. Where marginal soil conditions exist, the health officer may require that
1683 additional investigation be conducted.

1684 C. Where there is evidence or probability of high winter water table or a shallow
1685 restrictive layer, the health officer may require that additional testing or monitoring be
1686 conducted to verify water table levels. The applicant's plan for conducting such testing
1687 shall be specified in a watertable monitoring plan which shall be submitted no later than
1688 ~~((January))~~ December 1, to allow adequate time to monitor and evaluate the seasonal
1689 water table. If not a part of a full site design application submission the plan shall be
1690 accompanied by a fee as specified in the fee ~~((table))~~ schedule. The health officer shall
1691 render a decision on the acceptability of the results of the seasonal high water table
1692 testing or monitoring within ~~((12))~~ twelve months of receiving the application, contingent
1693 upon presence of precipitation conditions typical for the region.

1694 SECTION 107. R&R 3, Part 4, Section 7, as amended, and BOH 13.28.070 are
1695 each hereby amended to read as follows:

1696 **Required absorption area.**

1697 A. Single-family Dwellings. For design purposes one hundred fifty ~~((150))~~ gal-
1698 lons/bedroom/day shall be utilized in determining unit volume with a minimum of three
1699 ~~((3))~~ bedrooms. For each additional bedroom OSS designs must use at least an
1700 additional one hundred twenty ~~((120))~~ gallons/bedroom/day. Loading rates shall be

1701 determined according to soil texture type as outlined in Table 13.28-4. The finest
 1702 textured soil in the selected vertical separation establishes the loading rate.

1703 **Table 13.28-4**

1704 **Maximum Hydraulic Loading Rate**

1705 **For Residential Sewage¹**

Soil Type	Soil Textural Classification Description	Loading Rate gal./sq. ft./day
1A	Very gravelly ² coarse sands or coarser, extremely gravelly ³ soils	1.2 ⁴
1B	Very gravelly medium sands, very gravelly fine sands, very gravelly very fine sands, very gravelly loamy sands	Varies according to soil type of the non-gravel portion ⁵
2A	Coarse sands	1.2
2B	Medium sands	1.0
3	Fine sands, loamy coarse sands, loamy medium sands	0.8

4	Very fine sands, loamy fine sands, loamy very fine sands, sandy loams, loams	0.6 ⁶
5	Silt loams that are porous and have well developed structure	0.45 ^{6,7}

1706

<u>Soil Type</u>	<u>Soil Textural Classification Description</u>	<u>Loading Rate for Residential Effluent Using Gravity or Pressure Distribution (gal./sq.ft./day)⁵</u>
<u>1</u>	<u>Gravelly and very gravelly² coarse sands, all extremely gravelly³ soils excluding Soil types 5 & 6, all soil type with greater than or equal to 90% rock fragments</u>	<u>1.0⁴</u>
<u>2</u>	<u>Coarse sands</u>	<u>1.0</u>
<u>3</u>	<u>Medium sands, loamy coarse sands, loamy medium sands.</u>	<u>0.8</u>
<u>4</u>	<u>Fine sands, loamy fine sands, sandy loams, loams.</u>	<u>0.6⁶</u>
<u>5</u>	<u>Very fine sands, loamy very fine sands; or silt loams, sandy clay loams, clay loams and silty</u>	<u>0.4⁶</u>

	<u>clay loams with a moderate structure or strong structure (excluding a platy structure).</u>	
<u>6</u>	<u>Other silt loams, sandy clay loams, clay loams, silty clay loams.</u>	<u>0.2^{6,7}</u>
<u>7</u>	<u>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.</u>	<u>Not suitable</u>

Table 13.28-4

Explanatory Notes

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 ((+A)) 1 soil, only ((alternative)) systems which meet or exceed ((Treatment Standard 2)) the treatment levels required in Table 13.28-1 may be installed.
5. The loading rate listed for the soil type present in the non((-))gravel 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 ((and)), type 5 or type 6 shall be constructed during dry weather (defined as at least two consecutive weeks without appreciable

1721 rainfall) and dry soil conditions to minimize compaction and smearing during excavation,
1722 as verified at the site.

1723 7. SSAS in soil type ~~((S))~~ 6 must utilize pressure distribution.

1724

1725 B. Buildings ~~((O))~~other than ((S))single-family ((R))residences.

1726 1. Soil dispersal components having daily design flow between one thousand
1727 and three thousand five hundred gallons of sewage per day shall:

1728 a. Be located only on soil types 1 through 5;

1729 b. Be located only on slopes of less than thirty percent, or seventeen degrees;

1730 and

1731 c. Have pressure distribution and timed dosing.

1732 2. Schools with OSS and who use laboratories and shop facilities shall have
1733 plumbing drains for these facilities directed to holding tanks separate from the common
1734 wastewater drains to the OSS.

1735 3. For OSS treating sewage from a nonresidential source, the designer shall
1736 provide the following:

1737 a. Information showing that none of the chemicals or other materials listed in
1738 BOH 13.04.058 will be introduced into the OSS; and

1739 b. A site-specific design providing the treatment level equal to or greater than
1740 the treatment level required of sewage from a residential source.

1741 4. The owner of an OSS for a commercial development not classified as a
1742 community on-site system shall file a covenant ((agreeing that the property will remain
1743 under one (1) ownership for all commercial developments not classified as community

1744 systems)) declaring that the owner is responsible for the operation, monitoring and
 1745 maintenance of the OSS in accordance with this title.

1746 ~~((2.))~~ 5. Required absorption area must be determined by using one of the
 1747 following methods:

1748 a. By using the figures given in Table 13.28-5, or the Onsite Wastewater
 1749 Treatment Systems Manual, EPA/625/R-00/008, as amended, then using the appropriate
 1750 application rate from Table 13.28-4; or

1751 b. By determining average water meter readings for one year from at least
 1752 three ~~((3))~~ similar establishments and adding a minimum safety factor of fifty percent
 1753 ~~((50%))~~. Both operating capacity and surge capacity must be determined.

1754 ~~((3))~~ 6. The minimum SSAS area must be not less than two hundred ~~((200))~~
 1755 square feet.

1756 **TABLE 13.28-5**

Type of Establishment ¹	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 ((service)) <u>establishment</u> not included)	20
Food ((Service)) Establishments – with food preparation	50 (gallons per seat)
Taverns - no food preparation (estimate patrons per day	5

and add 15 gallons/employee)	
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
((Drive-in Theaters (per car space)))	((10))
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	50

hookups - with central toilets and showers - per space)	
Recreational Vehicle Parks (with sewer and water hookups - with central toilets and showers - per space)	100
Boarding Houses (<u>per person</u>)	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 ((Design Manual: On-Site wastewater Treatment and Disposal Systems)) <u>Onsite Wastewater Treatment Systems Manual, February 2002, EPA/625/R-00/008, as amended</u> , United States Environmental Protection Agency, ((EPA-625/1-80-012, October, 1980)) 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 ((October 1985)) <u>November 2007</u> , Washington State Department of Ecology (available ((upon written request to the department of ecology)) <u>online</u>).	
--	--

1757 1. For buildings other than single family residences the requirements of 13.28.020B
1758 shall be met.

1759 SECTION 108. R&R 3, Part 5, Section 1 (A) (4), as amended, and BOH
1760 13.32.050 are each hereby amended to read as follows:

1761 **Cleanouts.** Building sewers of four-inch ~~((4"))~~ diameter shall have cleanouts
1762 installed at intervals of not more than fifty feet ~~((50'))~~ and building sewers of six inch
1763 ~~((6"))~~ diameter and larger shall have cleanouts installed at intervals of not more than
1764 one hundred feet ~~((100'))~~. One cleanout shall be placed between the house and the
1765 septic tank with access to grade.

1766 SECTION 109. R&R 3, Part 5, Section 1 (A) (5), as amended, and BOH
1767 13.32.060 are each hereby amended to read as follows:

1768 **Minimum horizontal separation.** Minimum horizontal separations shall be as
1769 indicated in Table 13.28-2 (Horizontal Setbacks).

1770 SECTION 110. R&R 3, Part 5, Section 2 (A), as amended, and BOH 13.36.010
1771 are each hereby amended to read as follows:

1772 **Design standards.**

1773 A. ~~((Before septic tanks, effluent pump tanks, sewage holding tanks, grease traps
1774 or any other sewage tanks may be manufactured, constructed, or sold for installation in~~

1775 King County, plans must be submitted by the applicant to and approved by the health
1776 officer, and further, prior to sale or installation, the tank must be included on the
1777 "approved list as described in 13.08.046. The plan review fee shall be as specified in the
1778 fee schedule payable at the time of the initial plan submission. In addition to the base
1779 fee, a review fee, payable at the time of completion of the plan review, shall be assessed
1780 equal to the actual costs associated with application review of any resubmissions,
1781 corrections or additions required.) No septic tank, effluent pump tank, sewage holding
1782 tank, grease trap or any other sewage tank may be installed in King County unless:

1783 1. The tank is included on the DOH publication, List of Approved On-site
1784 Sewage Tanks;

1785 2. The tank conforms to the DOH publication, Recommended Standards and
1786 Guidance for Performance, Application, Design, Construction, Installation and Testing
1787 On-site Sewage System Tanks, July 1, 2007," as amended; and

1788 3. The health officer has approved plans for the tank installation. Such plans
1789 shall show all dimensions, reinforcing, structural details and other pertinent data as
1790 required by the health officer. ((Approval may not be construed or used in any manner to
1791 imply endorsement of a product by the department.)) Upon approval by the health
1792 officer, the plans will be assigned an official number. ((Plans for built-in-place
1793 wastewater tanks shall be submitted to the health officer for review.))

1794 B. Tanks made of materials other than concrete shall be approved by the
1795 secretary prior to approval by the health officer.

1796 C. No pre-cast wastewater tank ((shall)) may be installed-except those which are
1797 included on the ((approved)) registered list and have been clearly and legibly marked on

1798 the upper surface of the lid showing the number assigned by the health officer, name of
 1799 the manufacturer, tank model number, tank capacity in gallons and date of manufacture.

1800 D. No metal septic tanks shall be installed in areas under the jurisdiction of the
 1801 department.

1802 E. All septic tanks, whether they are installed or used singly, in series or in a
 1803 divided system, must be designed according to waste load and in no case shall have a
 1804 total capacity of less than one thousand ~~((1,000))~~ five hundred gallons, except by
 1805 written permission of the health officer.

1806 **Minimum Capacities for**
 1807 **Single-Family Residence Septic Tanks**

Number of Bedrooms	Minimum Liquid Capacity Below Outlet Invert (Gallons)
4 or less	((1000)) <u>1500</u>
Each additional bedroom, add	250
Garbage grinder installed, add ¹	((750)) <u>250</u>

1808 1. Use of garbage grinders increases settleable and floatable solids accumulations
 1809 in the septic tank, increases wastewater strength and thus increases the potential for
 1810 system failure especially if frequent and regular tank monitoring and maintenance is not
 1811 performed. Therefore, use of garbage grinders is not recommended (see 13.60.005A.3).

1812 _____
 1813 F. No septic tank with a compartment smaller than two hundred fifty gallons
 1814 liquid capacity may be installed.

1815 G. A septic tank designed to service any facility except a single-family residence
1816 or multiple family housing shall have a liquid capacity at least equal to ~~((one and one-half~~
1817 ~~(1 1/2)))-three~~ times the projected ~~((daily sewage volume))~~ design flow, with a minimum
1818 of one thousand ~~((1,000))~~ five hundred gallons. Septic tanks serving multiple family
1819 housing shall have a minimum liquid capacity equal to two ~~((2))~~ times the projected
1820 ~~((daily sewage volume))~~ design flow but not less than one thousand ~~((1,000))~~ five
1821 hundred gallons.

1822 H. ~~((The liquid depth of any tank or compartment thereof shall not be less than~~
1823 ~~forty-eight inches (48"), nor shall a liquid depth greater than seventy-two inches (72") be~~
1824 ~~considered in determining septic tank capacity without written permission of the health~~
1825 ~~officer.~~

1826 I) All septic tanks or combinations of tanks installed shall provide at least two
1827 ~~((2))~~ compartments. No wastewater tanks may be joined below the normal inverts
1828 unless otherwise pre-approved by the health officer.

1829 ~~((J-))~~ I. When multi-compartment tanks or two or more tanks in series are used,
1830 the first compartment or tank shall have a liquid capacity of two-thirds ~~((2/3))~~ to three
1831 quarters ~~((3/4))~~ of total required liquid capacity.

1832 ~~((K))~~ J. The minimum liquid capacity of a tank receiving intermittent use shall be
1833 determined from the maximum expected daily waste load, but shall in no case be less
1834 than one thousand ~~((1,000))~~ five hundred gallons.

1835 K. The plan review fee shall be as specified in the fee schedule, payable at the
1836 time of initial plan submission. In addition to the initial plan review fee, a revision
1837 review fee shall be assessed as specified in the fee schedule, payable at the time of

1838 completion of the plan review, for review of any resubmissions, corrections or additions
1839 required.

1840 SECTION 111. R&R 3, Part 5, section 2 (B), as amended, and BOH 13.36.020
1841 are each hereby amended to read as follows:

1842 **Construction.**

1843 No wastewater tank may be sold for installation, or installed which does not
1844 comply with this title.

1845 A. Wastewater tanks shall be constructed of sound and durable materials not
1846 subject to corrosion or excessive deterioration and shall be watertight, constructed and
1847 installed to prevent the entrance of rainwater, surface drainage or groundwater. Baffles
1848 shall be of rigid material and secured to the compartment wall.

1849 B. Newly installed septic tanks shall be equipped with a removable cartridge-type
1850 outlet baffle filter. An inspection/cleanout access port of sufficient diameter with a
1851 secured lid at or above finished grade shall be provided to allow convenient access for
1852 filter inspection and cleaning.

1853 C. Septic tanks must be provided with a ((manhole)) maintenance access port or
1854 removable cover for each compartment (minimum dimension eighteen inches (((18")))
1855 for septic tank inspection and sludge removal. All baffles shall have removable covers or
1856 properly placed ((manholes)) maintenance access ports with a minimum diameter of six
1857 inches (((6"))) , and the ((manhole)) maintenance access cover or inlet and outlet covers
1858 shall have adequate permanent handles. If effluent filters are used, access to the filter at
1859 finished grade is required.

1860 D. In each septic tank the inlet baffle or submerged pipe shall extend
1861 approximately six inches (~~((6"))~~) below the liquid surface and above the liquid surface at
1862 least to the crown of the inlet sewer.

1863 E. In each septic tank the outlet baffle or submerged pipe shall extend below the
1864 liquid level a distance approximately equal to twenty-eight percent (~~((28%))~~) to forty
1865 percent (~~((40%))~~) of the liquid depth, and these baffles or pipes shall extend at least six
1866 inches (~~((6"))~~) above the liquid level to provide for scum storage.

1867 F. Septic tanks shall have at least one inch between the under side of the top of
1868 the tank and top of inlet and outlet pipes or baffles to allow the required ventilation of the
1869 tank and disposal field through the main building vent stacks.

1870 G. The invert of the inlet pipe in each septic tank must be at least three inches
1871 (~~((3"))~~) above the outlet invert.

1872 H. Each compartment dividing wall shall have a minimum four inches (~~((4"))~~)
1873 diameter opening, the invert of which is a minimum of one inch (~~((1"))~~) and a maximum
1874 of three inches (~~((3"))~~) below the outlet invert. A baffle shall be located on the inlet side
1875 of the wall and shall extend a minimum of eighteen inches (~~((18"))~~) below the outlet and
1876 shall extend a minimum of six inches (~~((6"))~~) above the liquid level.

1877 SECTION 112. R&R 3, Part 5, Section 2 (C), as amended, and BOH 13.36.030
1878 are each hereby amended to read as follows:

1879 **Location (~~(and Installation))~~, installation and maintenance.**

1880 A. Minimum separation distances shall be as indicated in Table 13.28-2.

1881 B. No septic tank or dosing tank shall be located under paving unless the
1882 (~~(manhole))~~ maintenance access and inspection (~~(holes))~~ ports are extended up through

1883 the paving and the ((manhole)) maintenance access port is equipped with a locking-type
1884 cover and is approved as a traffic-bearing tank.

1885 C. Each septic tank compartment shall be equipped with locking type
1886 ((manholes)) maintenance access ports extending to finished grade to provide access for
1887 preventive maintenance inspections or sludge removal. Maximum riser height shall not
1888 exceed three feet.

1889 D. ((No)) It is unlawful to construct, maintain, own or operate any septic tank or
1890 other receptacle for human excrement ((shall be constructed, maintained, or used which))
1891 that directly or indirectly discharges sewage upon the surface of the ground, or into any
1892 waters of the state.

1893 E. Sewage tanks shall be located in an area(((s))) or areas accessible for periodic
1894 inspection and sludge removal.

1895 F. Sewage tanks shall be located, installed and maintained to preclude surface
1896 and ground water from entering the tank. Sewage tanks shall be installed so that the
1897 outlet invert is higher than the maximum seasonal water table.

1898 G. Unless otherwise provided by the health officer in writing, all sewage tanks
1899 shall be tested and demonstrated to be watertight in accordance with the method
1900 prescribed ASTM ((C1227-97)) C127-07a Section 9.1.1- Vacuum Testing or 9.1.2-
1901 "Hydrostatic Testing" following installation and prior to being put into service by the
1902 project design engineer, designer or installer. Results of this test shall be available for
1903 review by the health officer at the time of final inspection. The designer shall submit
1904 verification of this testing with the record drawing documents.

1905 H. Sewage tanks shall be installed and bedded according to the manufacturer's
1906 directions and upon a level, stable base that will not settle. Instructions for installation
1907 shall be supplied by the manufacturer to the OSS designer or installer of record at the
1908 time of installation.

1909 SECTION 113. R&R 99-01, Section 2 (part), and BOH 13.40.001 are each
1910 hereby amended to read as follows:

1911 **Specifications - general.**

1912 A. No pump chamber shall be manufactured for use in King County,
1913 constructed(~~(,)~~) or installed unless it is included on the (~~(approved)~~) registered list.

1914 B. Pumps, fittings and controls shall be provided and installed in accordance with
1915 the (~~("Guidelines for the use of pressure distribution systems,")~~) Recommended
1916 Standards and Guidance for Pressure Distribution Systems, Washington State Department
1917 of Health as amended and Figure 13.40-1 of this title.

1918 C. Pumps and electrical wiring shall conform to all applicable state and local
1919 electrical codes and the permanent wiring shall be installed prior to notification of the
1920 health officer for (~~(as-built)~~) final inspection.

1921 D. Except by written permission of the health officer, pump tanks shall be at least
1922 one thousand (~~((1,000))~~) five hundred gallons liquid capacity.

1923 SECTION 114. R&R 99-01, Section 2 (part), and BOH 13.40.005 are each
1924 hereby amended to read as follows:

1925 **Location.**

1926 A. Minimum separation distances shall be as indicated in Table 13.28-2.

1927 B. Pump tanks shall be located in an area~~((s))~~ or areas accessible for periodic
1928 inspection, maintenance and sludge removal.

1929 C. For systems using pumps, clearly accessible controls and warning devices are
1930 required including:

1931 1. Process controls such as float and pressure activated pump on/off switches,
1932 pump-run timers and process flow controls;

1933 2. Diagnostic tools including dose cycle counters and hour meters on the sewage
1934 stream, or flow meters on either the water supply or sewage stream: and

1935 3. Audible and visual alarms designed to alert a resident of a malfunction. The
1936 alarm is to be placed on a circuit independent of the pump circuit.

1937 D. Pump tanks shall be located, installed and maintained to preclude surface and
1938 ground water from entering the tank and shall be tested and demonstrated to be watertight
1939 in accordance with the methods prescribed in BOH ((C))chapter 13.36 of this title
1940 following installation and prior to being put into service.

1941 SECTION 115. R&R 3, Part 5, Section 3 (A), as amended, and BOH 13.40.010
1942 are each hereby amended to read as follows:

1943 **Siphon or pump requirements.** ~~((Where required, d))~~Dosing systems shall be
1944 equipped with an automatic siphon or pump or duplicate alternating siphons or pumps.

1945 SECTION 116. R&R 3, Part 5, Section 3 (C), as amended, and BOH 13.40.030
1946 are each hereby amended to read as follows:

1947 **Size requirement.** The dosing tank shall be of sufficient size so as to provide the
1948 required one day's total dosing gallonage ~~((see Section 13.48.050))~~ plus one ~~((1))~~ day's

1949 estimated waste volume but shall not be less than one thousand ~~((1,000))~~ five hundred
1950 gallons.

1951 SECTION 117. R&R 3, Part 5, Section 3 (D), as amended, and BOH 13.40.040
1952 are each hereby amended to read as follows:

1953 ~~((High water alarm))~~ **Pump switch location.** ~~((Where pumping is required a
1954 visible or audible high water level alarm shall be provided on an electrical circuit separate
1955 from that of the pump.))~~ Effluent pump switching mechanisms shall not be located
1956 within the effluent tank, except for sealed floats.

1957 SECTION 118. R&R 3, Part 5, Section 3 (E), as amended, and BOH 13.40.050
1958 are each hereby amended to read as follows:

1959 **Sewage effluent pump specifications.** Designs utilizing sewage effluent pumps
1960 shall specify:

1961 A. A minimum three-inch ~~((3"))~~ separation between the bottom of the pump
1962 tank and the pump intake opening; however, a pump shroud may be used in place of the
1963 three inch block to preclude solids from entering the pump;

1964 B. A disconnect union or an appropriate disconnect device;

1965 C. A check valve on the outlet side of a union;

1966 D. Filtering for pumps, if provided, must meet the following minimum criteria:

1967 1. One-eighth inch ~~((1/8"))~~ mesh size;

1968 2. Non~~((-))~~corrosive material;

1969 3. Cannot interfere with switches or floats; and

1970 4. Easily removable for cleaning.

1971 E. Pumps or dosing devices shall be specified by the manufacturer as suitable for

1972 the intended purpose.

1973 SECTION 119. R&R 3, Part 5, Section 4, as amended, and BOH 13.44.010 are
1974 each hereby amended to read as follows:

1975 **Specifications—~~((G))~~general.**

1976 A. No inspection box or distribution box shall be manufactured, sold or installed
1977 which is not constructed of durable, watertight materials and which is not equipped with
1978 an adequate removable cover.

1979 B. The inspection box or distribution box shall be set on a concrete pad or
1980 tamped crushed rock to prevent misalignment.

1981 C. The inspection box or distribution box shall be constructed and installed so the
1982 inlet invert is not less than four inches (~~((4"))~~) above the level of the outlet invert(~~((s))~~) or
1983 inverts, and the outlet inverts shall be not less than two inches (~~((2"))~~) above the floor of
1984 the box.

1985 D. The inspection box or distribution box shall be installed with at least thirty-six
1986 inches (~~((36"))~~) of four-inch (~~((4"))~~) tightline extending from each outlet. There shall be
1987 no (~~(filter material)~~) drainrock within thirty-six inches (~~((36"))~~) of the inspection box.

1988 E. There shall be no driving, parking, paving, or construction over the
1989 distribution or inspection box.

1990 F. The distribution or inspection box shall have an inspection access with a
1991 secured lid at finished grade (~~((or be installed within twelve (12) inches of grade with a~~
1992 ~~permanent visible marker at the finished grade))~~).

1993 SECTION 120. R&R 3, Part 5, Section 6, as amended, and BOH 13.48.010 are
1994 each hereby amended to read as follows:

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Specifications.

A. No OSS ~~((shall))~~ may be constructed unless there has first been a soil evaluation for the site completed in the manner described in ~~((Section))~~ BOH 13.28.050 to determine type, size and location of the OSS. SSAS design and construction shall be in accordance with the following:

1. Maximum bottom width of trenches shall be twenty four inches ~~((24"))~~ except a maximum width of up to thirty six ~~((inch (36") trench width))~~ inches may be allowed provided that:

~~((a))~~ a. For soil types ~~((1A-3))~~ 1 through 4 the SSAS is at least pressure distribution in accordance with BOH 13.48.060 ~~((of this title))~~ (pressure distribution systems); and

~~((b))~~ b. For soil types ~~((4 and))~~ 5 and 6 the effluent shall meet ~~((treatment standard 2))~~ the next higher treatment level as indicated in table 13.28-1 unless treatment level B is already required prior to discharge to the SSAS; and

~~((e))~~ c. The slope does not exceed thirty percent ~~((30%))~~.
~~Trench width in excess of thirty-six inches (36") may not be used for computation of absorption area.)~~

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

3. ~~((Maximum))~~ The maximum depth of soil cover over the top of SSAS ~~((filter material))~~ drainrock shall not exceed twenty-four inches ~~((24"))~~ except by written

2017 permission of the health officer. The infiltrative surface or bottom of the drainfield shall
2018 not be deeper than thirty-six inches (~~((36"))~~) below the finished grade.

2019 ~~((3))~~ 4. ~~((Minimum))~~ The minimum depth of soil cover over ~~((filter material))~~
2020 drainrock shall not be less than twelve inches (~~((12"))~~) unless otherwise authorized by the
2021 health officer.

2022 ~~((4))~~ 5. Minimum depth of ~~((filter material))~~ drainrock under drainfield lines
2023 shall not be less than six inches (~~((6"))~~).

2024 ~~((5))~~ 6. The amount of ~~((filter material))~~ drainrock over drainfield lines shall not
2025 be less than two inches (~~((2"))~~).

2026 ~~((6))~~ 7. ~~((Filter material))~~ Drainrock shall be clean, washed, uniformly graded,
2027 non~~((-))~~deteriorating gravel, size three eighths inches (~~((3/8"))~~) to seven eighths inches
2028 (~~((7/8"))~~) or three quarters inches (~~((3/4"))~~) to one and one half inches (~~((1 1/2"))~~), with
2029 no visible fine particles adhering to gravel surfaces and with the percent by weight
2030 passing the U.S. No. 200 sieve not greater than 0.5 percent.

2031 ~~((7))~~ 8. Minimum separation between drainfield trench side walls shall not be
2032 less than four feet (~~((4'))~~) of undisturbed soil for soil texture types 1, 2, and 3 and shall
2033 not be less than six feet (~~((6'))~~) for soil texture ~~((type 4 and 5))~~ types 4, 5 and 6.

2034 9. Individual laterals greater than one hundred feet in length must use pressure
2035 distribution.

2036 ~~((8))~~ 10. ~~((When gravelless trench systems are used they must be included on~~
2037 ~~the "approved list", be installed in accordance with the manufacturer's installation~~
2038 ~~instructions and be in accordance with))~~ No gravelless drainfield system may be installed
2039 unless it satisfies the requirements of BOH 13.52.054.

2040 ((9:)) 11. ((Imported cover material must be stockpiled on site prior to the
2041 designer's preinstallation inspection unless otherwise waived in writing by the health
2042 officer)) The designer shall specify, in the OSS design, the SSAS cover material to be
2043 used and shall verify, in the record drawing, that the cover material used conforms with
2044 the design specifications.

2045 B. Horizontal separations shall be maintained in accordance with ((Section
2046 13.28.030(T))) BOH 13.28.030W and Table 13.28-2.

2047 C. No drainfield pipes shall be installed unless all fittings are rigidly joined
2048 together in accordance with the pipe manufacturer's directions.

2049 D. Approved rigid drainfield pipe ((f)), such as PVC((f)), shall be used((;
2050 provided further, that)), but only if stakes are placed in the trench center at not more than
2051 five ((5))-foot intervals to maintain grade and a transit level, laser((;)) or equally
2052 accurate instrument shall be used to assure that proper grade is maintained.

2053 E. No drainfield shall be installed ((which)) that requires a change in grade and
2054 earth cover unless terracing is accomplished by the use of a suitable plastic or concrete
2055 drop box or by use of rigid plastic pipe with glued joints (overflow stepdown). Such
2056 installation shall have an earth dam twenty-four inches ((24")) thick preceding
2057 terracing. Earth dams shall consist of original undisturbed soil. ((If overflow stepdowns
2058 are used they shall be in accordance with Figure 13.48-1 A and B.))

2059 F. Not less than one ((1)) drainfield trench monitoring port of at least four
2060 inches ((4")) in diameter, which is anchored, with ((a)) an easily removable cover
2061 ((which)) that extends to finished grade, shall be installed down to the infiltrative surface
2062 in each drainfield lateral.

2063 G. No OSS shall be installed unless the pipe lines between the building and the
2064 septic tank, the septic tank and the distribution box, under paved areas, and within ten
2065 feet ~~((10'))~~ of any buildings, shall be constructed of plastic, or cast-iron pipe laid with
2066 watertight joints. The pipe materials shall conform to material specifications of the
2067 Uniform Plumbing Code.

2068 H. No drainfield shall be installed ~~((which))~~ that, after installation of the gravel
2069 over the pipe, is not then covered with a geotextile barrier material ~~((which))~~ that meets
2070 the specifications of Section 5, Design Standards for Large On-site Sewage Systems,
2071 December 1993, amended July 1994, Washington State Department of Health, as
2072 amended.

2073 I. No drainfield shall be installed under driveways, roadways, parking areas,
2074 paved areas or under areas subject to compaction by vehicular traffic. A permanent
2075 vehicle barrier may be required for a driveway or parking area adjacent to an OSS or
2076 reserve drainfield area to prevent damage.

2077 J. Pipe used for construction of gravity drainfield lines shall be a minimum of
2078 four inches ~~((4'))~~ inside diameter and constructed of rigid materials conforming with
2079 ~~((the Design Manual: On-site Wastewater Treatment and Disposal Systems, United
2080 States Environmental Protection Agency, EPA-625/1-80-012, October, 1980))~~ ASTM
2081 F481-02, as amended.

2082 K. Pipe used for construction of tightline must comply with the current Uniform
2083 Plumbing Code.

2084 L. SSAS shall be installed in undisturbed native soil. Trees or tree stumps
2085 greater than eighteen inches ~~((18'))~~ in diameter, when measured two feet ~~((2'))~~ above

2086 grade, shall be left standing, cut at ground level, burned in place, or managed by other
2087 methods acceptable to the health officer (~~(which)~~) that will avoid disturbing the soil.

2088 SECTION 121. R&R 3, Part 5, Section 6, as amended, and BOH 13.48.020 are
2089 each hereby amended to read as follows:

2090 **Interconnected loop drainfields.**

2091 A. The slope of ground surface within the drainfield area may not exceed 0.5
2092 percent in any direction.

2093 B. The bottom of the trenches and the drain lines must be level to a tolerance of
2094 plus or minus one inch (~~((1"))~~) in one hundred feet (~~((100'))~~).

2095 C. The invert of the drainfield line must be at least six inches (~~((6"))~~) lower than
2096 the outlet invert of the septic tank.

2097 D. The drainfield lines must be continuous and interconnected with at least two
2098 (~~((2))~~) connections to the inspection box. Cross-gridding of drainfield lines is not
2099 allowed in computation of total square footage of the drainfield area. For the purpose of
2100 this section, cross-gridding refers to the placement of multiple connection points between
2101 parallel drainfield lines to increase square footage as calculated by the total trench bottom
2102 area, which is length times width, of all drainfield lines.

2103 SECTION 122. R&R 3, Part 5, Section 7, as amended, and BOH 13.48.030 are
2104 each hereby amended to read as follows:

2105 **Serial distribution drainfields.**

2106 A. The slope of ground surface in the drainfield area must equal or exceed 0.5
2107 percent in any direction.

2108 B. The bottom of the trenches and the drain lines shall be level to a tolerance of
2109 plus or minus one inch ~~((1"))~~ in one hundred feet ~~((100'))~~.

2110 C. The trenches shall follow the ground surface contours.

2111 D. Adjacent trenches shall be connected with an overflow stepdown tightline in
2112 such a manner that each trench is filled with effluent to the depth of the gravel at the top
2113 of the drainline before flowing to succeeding trenches. The drop box method of
2114 distribution, as described in the United States Environmental Protection Agency Design
2115 Manual, is an alternative to the overflow stepdown method of distribution.

2116 E. The invert of the overflow line from the first trench must be at least four
2117 inches ~~((4"))~~ lower than the outlet invert of the septic tank.

2118 F. ~~((If more than three hundred feet (300') of drainfield is specified, the design))~~
2119 All serial distribution systems shall divide the system into halves. The inverts of the
2120 outlets of the distribution box must be at least one inch ~~((1"))~~ higher than the invert of
2121 any overflow pipe in the drainfield.

2122 G. The drainfield shall be provided with an inspection or distribution box at the
2123 head of the system.

2124 SECTION 123. R&R 99-01, Section 2 (part), and BOH 13.48.060 are each
2125 hereby amended to read as follows:

2126 ~~((Conventional))~~ **Pressure distribution systems.**

2127 A. Pressure distribution systems shall be designed in accordance with the
2128 specifications contained in the current edition of ~~((Guidelines for the Use of Pressure
2129 Distribution Systems))~~ Recommended Standards and Guidance for Pressure Distribution
2130 Systems, July 1, 2007, published by the Washington State Department of Health, as

2131 amended, except where modified by or in conflict with this title.

2132 B. Monitoring and maintenance shall be in accordance with BOH 13.60.010.

2133 SECTION 124. R&R 3, Part 6, Section 1, as amended, and BOH 13.52.010 are

2134 each hereby amended to read as follows:

2135 **Holding tanks.**

2136 A. Sewage holding tanks may be permitted only for controlled, nonresidential
2137 usage or as an interim method to handle emergency situations or to correct existing
2138 problem systems; provided, that an on-site system management program satisfactory to
2139 the health officer has been established to assure on-going operation and maintenance.

2140 B. In addition, the applicant must provide ~~((the following information:~~

2141 ~~1. Amount of time that will elapse before sewers will be available to the~~
2142 ~~property.~~

2143 ~~2. A) a no-protest agreement with the sewerage authority or a signed petition~~
2144 ~~supporting formation of a ULID if the property is within a sewer service area.~~

2145 C. Design plans shall be submitted to the health officer for review. The design
2146 and operation shall be in accordance with this title and with Guidelines for Holding Tank
2147 Sewage Systems, ~~((, December 1991))~~ July 2007, Washington State Department of
2148 Health, as amended. The application shall include specifications for the anticipated daily
2149 sewage load, the tank capacity, the alarm device, the overflow elevation, the location of
2150 the tank, and any other information pertinent to the installation.

2151 D. A minimum bond of ~~((four))~~ five thousand dollars ~~(((\$4,000.00))~~) must be
2152 filed with the health officer or management authority to guarantee cleanup in case of
2153 accidental spill and/or repair of the system.

2154 E. A copy of a pumping contract with a certified OSS pumper must be filed with
2155 the department.

2156 F. An OSS installation permit must be obtained prior to installation of the tank.

2157 G. Monitoring and maintenance shall be in accordance with BOH 13.60.010.

2158 SECTION 125. R&R 3, Part 6, Section 2, as amended, and BOH 13.52.020 are
2159 each hereby amended to read as follows:

2160 **Composting and incineration toilets.**

2161 A. There shall be an adequate system as defined by the health officer for
2162 treatment and disposal of gray water. Anticipated water use shall be specified.

2163 B. ~~((The composting toilet must))~~ Composting toilets and incineration toilets
2164 shall be designed, installed, operated and maintained in accordance with the ~~((Guidelines~~
2165 ~~for the Use of Composting Toilets, dated July 1984))~~ Recommended Standards and
2166 Guidance for Performance, Application, Design, and Operation & Maintenance, Water
2167 Conserving On-site Wastewater Treatment Systems, July 2007, Washington State
2168 Department of Health, or as amended and with the ("approved list") registered list.
2169 ~~((The incineration toilet must be designed, installed, operated and maintained in~~
2170 ~~accordance with Interim Guidelines for Incineration Toilets, July 1984, Washington State~~
2171 ~~Department of Health, as amended and with the "approved list."))~~

2172 C. Removal and disposal of composted materials shall be done in a manner
2173 which complies with ~~((Guidelines for Sludge Disposal, Washington State Department of~~
2174 ~~Health, 1954 as amended, and Sludge Management Guidelines, Washington State~~
2175 ~~Department of Ecology))~~ Recommended Standards and Guidance for Performance,
2176 Application, Design, and Operation & Maintenance, Water Conserving On-site

2177 Wastewater Treatment Systems, July 2007, Washington State Department of Health. The
2178 method for disposal shall be specified for each installation.

2179 D. Sufficient area shall be available for a one hundred percent primary and
2180 reserve area. The department ((shall)) may grant a reduction of up to fifty percent
2181 ((50%)) in septic tank size, and up to forty percent ((40%)) in installed drainfield size
2182 if the compost or incineration system is consistent with this title. In no case, however,
2183 shall the tank size be less than seven hundred fifty ((750)) gallons. Further, there shall
2184 be recorded and filed a restrictive covenant running forever with the land, on the title of
2185 the affected property, and binding upon and benefiting all parties having any right,
2186 interest, or title in the property or any part thereof, and their heirs, successors and assigns.
2187 The covenant shall include the following:

2188 1. A description of the waterless toilet installed and the alteration that would be
2189 necessary to convert to a water carried toilet system.

2190 2. A covenant of agreement to maintain such system in proper working order.

2191 3. A covenant of agreement that any alteration, change or modification to the
2192 OSS will not be undertaken without a new site application and approval by the health
2193 officer.

2194 E. Monitoring and maintenance shall be performed in accordance with
2195 ((Section)) BOH 13.60.010.

2196 SECTION 126. R&R 3, Part 6, Section 3, as amended, and BOH 13.52.030 are
2197 each hereby amended to read as follows:

2198 **Mound systems.**

2199 A. Mound systems shall be designed in accordance with this title and the
2200 specifications contained in ~~((Guidelines for Mound Systems, September 1993,))~~
2201 Recommended Standards and Guidance for Mound Systems, Washington State
2202 Department of Health as amended. However, in no case shall a mound system be
2203 installed in areas with less than eighteen inches (18") of original permeable soil except as
2204 provided in ~~((Section 13.28.030(S,))~~ BOH 13.28.030S and Table 13.28-1.

2205 1. Soil depth shall be demonstrated by at least one soil log hole in the bed area
2206 and, if on a slope greater than five percent, one soil log in the thirty-foot downslope
2207 setback area.

2208 2. All mound footprints, primary and reserve are to be staked in the field and
2209 cleared of vegetation sufficient to determine the contours for proper orientation and
2210 alignment.

2211 3. Mound beds shall have at least one inspection port at each end of the bed to
2212 the sand and gravel interface.

2213 B. The owner shall provide a recorded covenant agreeing to operate, maintain
2214 and report the performance of the system in accordance with the Recommended
2215 Standards and Guidance for Mound Systems, Washington State Department of Health as
2216 amended, and this title. The owner shall maintain in effect at all times a maintenance
2217 contract with a service provider who is approved by the health officer.

2218 C. Monitoring and maintenance of any mound system shall be performed in
2219 accordance with ~~((Section))~~ BOH 13.60.010.

2220 SECTION 127. R&R 99-01, Section 2 (part), and BOH 13.52.040 are each
2221 hereby amended to read as follows:

2222 **Aerobic treatment units (ATU).**

2223 A. ~~((ATUs shall be))~~ No ATU may be installed unless it is included on the
2224 ~~("approved list"))~~ registered list. ~~((and))~~ ATUs shall be designed, installed, operated and
2225 maintained in accordance with this title, with the specifications contained in ~~((Guidelines~~
2226 ~~for Aerobic Treatment Systems, 1990,))~~ Recommended Standards and Guidance for On-
2227 site Wastewater Treatment Systems Proprietary Treatment Products, July 1, 2007,
2228 Washington State Department of Health as amended, and with the manufacturer's
2229 instructions.

2230 B. For uses requiring treatment ~~((standard 1 or 2))~~ level A or B, those ATUs
2231 needing disinfection to meet the appropriate required treatment ~~((standard))~~ level shall
2232 have been tested and approved as meeting that treatment ~~((standard))~~ level by the
2233 National Sanitation Foundation and DOH with a disinfection unit as specified by the
2234 manufacturer ~~((chlorination not allowed except for marine shoreline failure repairs))~~
2235 installed as a component of the tested and approved unit. Disinfection by chlorination
2236 may be used only on property adjacent to a marine shoreline.

2237 C. Unless waived by the health officer, soil absorption area shall be computed in
2238 accordance with ~~((Section))~~ BOH 13.28.070.

2239 D. Monitoring and maintenance of ATUs shall be performed in accordance with
2240 ~~((Section))~~ BOH 13.60.010.

2241 E. The owner shall provide a recorded covenant agreeing to operate, maintain
2242 and report the performance of the system in accordance with the manufacturer's
2243 recommendations and this title and to also maintain in effect at all times a maintenance
2244 contract with a service provider ~~((who is approved by the manufacturer and the health~~

2245 officer)) to provide performance monitoring and maintenance services in accordance with
2246 BOH chapter 13.60.

2247 SECTION 128. R&R 3, Part 6, Section 5, as amended, and BOH 13.52.050 are
2248 each hereby amended to read as follows:

2249 **Sand filters.**

2250 A. Sand filters shall be designed in accordance with this title and the
2251 specifications contained in ~~((Guidelines for Sandfilters, June 1996,))~~ Recirculating
2252 Gravel filter Systems, July 1, 2007, and Stratified Sand Filter Treatment Systems, July 1,
2253 2007, Washington State Department of Health as amended.

2254 B. Monitoring and maintenance shall be performed in accordance with
2255 ~~((Section))~~ BOH 13.60.010.

2256 C. ~~((Proprietary sandfilters shall be on the))~~ No sand filter may be installed
2257 unless it is included on the ("approved list") registered list and designed for uses
2258 requiring treatment ((Standard 1 or 2 any)) level A or B. Any proprietary sandfilters
2259 needing disinfection to meet the appropriate required treatment ((standard)) level shall
2260 have been tested and approved as meeting that treatment ((standard)) level by the
2261 National Sanitation Foundation and DOH with a disinfection unit ~~(((chlorination not~~
2262 allowed except for marine shoreline failure repairs))), as specified by the manufacturer,
2263 installed as a component of the tested and approved filter unit. Disinfection by
2264 chlorination may be used only on property adjacent to a marine shoreline.

2265 D. The owner shall provide a recorded covenant agreeing to operate, maintain
2266 and report the performance of the system in accordance with the manufacturer's
2267 recommendations and this title and to also maintain in effect at all times a maintenance

2268 contract with a service provider who is approved by the manufacturer and the health
2269 officer.

2270 SECTION 129. R&R 99-01, Section 2 (part), and BOH 13.52.054 are each
2271 hereby amended to read as follows:

2272 **Gravelless (~~Drainfield Systems~~) drainfield systems.**

2273 A. (~~Gravelless systems shall be included on the "approved list" and~~) No
2274 gravelless drainfield system may be installed unless it is included on the approved list.

2275 All gravelless drainfield systems shall be designed, installed and maintained in
2276 accordance with this title, with the (~~approved~~) registered list, with the specifications
2277 contained in (~~Guideline for Gravelless Drainfield Systems, May 1995~~) Recommended
2278 Standards and Guidance for Gravelless Distribution Technologies (or Products), July 1,
2279 2007, Washington State Department of Health, as amended, and with the manufacturer's
2280 directions.

2281 B. Unless waived by the health officer, soil absorption area shall be computed in
2282 accordance with (~~Section~~) BOH 13.28.070.

2283 C. Monitoring and maintenance shall be performed in accordance with BOH
2284 13.60.010.

2285 NEW SECTION. SECTION 130. There is hereby added a new section to BOH
2286 chapter 13.52 to read as follows:

2287 **Proprietary packed bed filter systems.**

2288 A. No proprietary packed bed filter system may be installed unless it is included
2289 on the registered list. Proprietary packed bed filter systems shall be designed, installed
2290 and maintained in accordance with this title, with the registered list, and the

2291 specifications contained in Recommended Standards and Guidance for On-site
2292 Wastewater Treatment Systems Proprietary Treatment Products, July 1, 2007,
2293 Washington State Department of Health, as amended, and with the manufacturer's
2294 directions. For uses requiring treatment level A or B, those proprietary packed bed filter
2295 systems needing disinfection to meet the appropriate required treatment level must have
2296 been tested and approved as meeting that treatment level by the NSF and DOH with a
2297 disinfection unit as specified by the manufacturer and installed as a component of the
2298 tested and approved unit. Disinfection by chlorination may be used only on property
2299 adjacent to a marine shoreline.

2300 B. Unless waived by the health officer, the soil absorption area for proprietary
2301 packed bed filter systems shall be computed in accordance with BOH.28.070.

2302 C. Monitoring and maintenance of proprietary packed bed filter systems shall be
2303 performed in accordance with BOH.60.010.

2304 D. The owner shall provide a recorded covenant agreeing to operate, maintain
2305 and report the performance of the system in accordance with the manufacturer's
2306 recommendations, as applicable, and this title and to also maintain in effect at all times a
2307 maintenance contract with a service provider to provide performance monitoring and
2308 maintenance services in accordance with the requirements of BOH chapter 13.60.

2309 NEW SECTION. SECTION 131. There is hereby added a new section to BOH
2310 chapter 13.52 to read as follows:

2311 **Upflow media filter systems.**

2312 A. No upflow media filter system may be installed unless it is included on the
2313 registered list. All upflow media filter systems shall be designed, installed and

2314 maintained in accordance with this title, with the registered list, and the specifications
2315 contained in Recommended Standards and Guidance for On-site Wastewater Treatment
2316 Systems Proprietary Treatment Products, July 1, 2007, Washington State Department of
2317 Health, as amended, and with the manufacturer's directions.

2318 1. Soil depth shall be demonstrated by at least one soil log hole in the basin area
2319 and, if on a slope greater than five percent, one soil log hole in the thirty feet downslope
2320 setback area as measured from the edge of the absorption area.

2321 2. All upflow sand filter footprints, primary areas, and reserve areas shall be
2322 staked in the field and cleared of vegetation sufficient to determine the contours for
2323 proper orientation and alignment.

2324 B. Unless waived by the health officer, soil absorption area shall be computed in
2325 accordance with BOH 13.28.070.

2326 C. Monitoring and maintenance of upflow media filter systems shall be
2327 performed in accordance with BOH 13.60.010.

2328 D. The owner shall provide a recorded covenant agreeing to operate, maintain
2329 and report the performance of the system in accordance with the manufacturer's
2330 recommendations and this title and to also maintain in effect at all times a maintenance
2331 contract with a service provider to provide performance monitoring and maintenance
2332 services in accordance with BOH chapter 13.60.

2333 NEW SECTION. SECTION 132. There is hereby added a new section to BOH
2334 chapter 13.52 to read as follows:

2335 **Subsurface drip systems (SDS).** A. No subsurface drip system shall be installed
2336 unless it is included on the registered list. All subsurface drip systems shall be designed,

2337 installed and maintained in accordance with this title, with the registered list, and the
2338 specifications contained in Recommended Standards and Guidance for Subsurface Drip
2339 Systems, July 1, 2007, Washington State Department of Health, as amended, and with the
2340 manufacturer's directions.

2341 B. Any subsurface drip system shall be used with the addition of a treatment level
2342 B system.

2343 C. Timed dosing is required.

2344 D. The dripline must be installed a minimum of six inches into original,
2345 undisturbed soil.

2346 E. Two-foot spacing between driplines is the minimum allowed, unless otherwise
2347 waived by the health officer.

2348 F. A subsurface drip system may be used wherever this title requires pressure
2349 distribution.

2350 G. Soil dispersal components having daily design flows greater than one
2351 thousand gallons of sewage per day may:

2352 1. Be located only in soil types 1 through 5; and

2353 2. Be located only on slopes of less than thirty percent, or seventeen degrees.

2354 NEW SECTION. SECTION 133. There is hereby added a new section to BOH
2355 chapter 13.52 to read as follows:

2356 **State-approved new on-site sewage system technologies.** No on-site sewage
2357 system technology submitted to the health officer for design approval after the effective
2358 date of this title will be approved for installation or installed unless it is included on the
2359 registered list and has standards for its use detailed in either WAC 246-271A-0100 or in

2360 recommended standards and guidance documents issued by the Washington ((S))state
2361 Department of Health, or is subject to a valid product development permit issued by the
2362 health officer. The health officer is authorized to adopt rules, policies or procedures not
2363 inconsistent with the provisions of this title to restrict or limit the use of new on-site
2364 sewage system technologies or to approve, deny or limit the use of new on-site sewage
2365 system technologies for new construction or repairs.

2366 SECTION 134. R&R 3, Part 6, Section 6, as amended, and BOH 13.52.060 are
2367 each hereby amended to read as follows:

2368 ~~((Experimental systems))~~ **Product development permits.**

2369 A. ~~((Experimental systems may be installed only when in compliance with the
2370 provisions of WAC 246-272-05001))~~ No person may install and test or use any
2371 proprietary OSS technology not currently approved or listed by the Washington state
2372 Department of Health without first obtaining from the health officer a valid annual
2373 product development permit in accordance with WAC 246-272A-0170.

2374 B. All costs for performance and data monitoring and reporting to the health
2375 officer shall be the responsibility of the owner. The health officer may charge for such
2376 additional costs involved in monitoring and reporting on each ~~((experimental system))~~
2377 proprietary component or sequence installed as is necessary to recover reasonable
2378 expenses.

2379 SECTION 135. R&R 3, Part 7, Section 1, as amended, and BOH 13.56.010 are
2380 each hereby amended to read as follows:

2381 **General installation requirements.**

2382 A. All OSS shall be constructed and installed in a manner that will accommodate

2383 all sewage from the buildings and premises to be served, and in accordance with this title.
2384 Except as provided in BOH 13.20.035 and 13.20.040, only an installer holding a valid,
2385 current installer's certificate of competency may install, modify or repair an OSS.

2386 B. If requested by the health officer, a master installer shall provide written
2387 certification that either the master installer or a certified associate installer was physically
2388 present during the entire installation or repair of any OSS installed or repaired under a
2389 permit issued to the master installer. In addition the installer shall:

2390 1. Perform the installation or repair in accordance with the approved design;

2391 2. Have the approved design in his or her possession during all phases of the
2392 installation or repair;

2393 3. Maintain the permit at the site during all phases of the installation or repair;

2394 4. Make no changes to the approved design without the prior authorization of
2395 the designer and the health officer;

2396 5. Install only septic tanks, pump chambers, and holding tanks approved by
2397 DOH and the department;

2398 6. Install the OSS to be watertight, except for the soil dispersal component;

2399 7. Back fill with twelve to twenty-four inches of approved cover material and
2400 grade the site to prevent surface water from accumulating over any component of the
2401 OSS.

2402 SECTION 136. R&R 3, Part 7, Section 2, as amended, and BOH 13.56.020 are
2403 each hereby amended to read as follows:

2404 **Pre((-)installation inspection.** Once the building foundation has been
2405 constructed and the plumbing stub-out is installed, and before the installation of the OSS,

2406 the designer shall be physically present to inspect the site and plumbing stubout pipe and
2407 determine compatibility with the original design and applicable regulations including:
2408 satisfactory water quality and quantity if using an individual private water source,
2409 building footprint, surface and subsurface drainage/seasonal watertable conditions that
2410 may affect wastewater tank locations and on-site stormwater collection and infiltration
2411 systems. The designer must notify the department of ~~((his/her))~~ the designer's decision in
2412 regards to the pre((-))installation inspection within five ~~((5))~~ working days after the
2413 designer is requested to do the pre((-))installation inspection by the owner, the installer,
2414 or the health officer. The department may issue an installation permit only after the
2415 designer has notified the department in writing that the site is acceptable and meets the
2416 criteria of the original design and applicable regulations. If the OSS must be installed
2417 before construction of the building, the health officer may waive the plumbing stub-out
2418 portion of the pre((-))installation inspection requirement.

2419 SECTION 137. R&R 3, Part 7, Section 3, as amended, and BOH 13.56.030 are
2420 each hereby amended to read as follows:

2421 **On-site system inspection.**

2422 A. The health officer may inspect, at any reasonable time, the proposed location
2423 of any OSS, the work done, or the material used in an OSS. If the health officer finds
2424 that the work done, or material used, is not in accordance with this title the health officer
2425 shall revoke the installation permit if the specified changes are not made within a
2426 reasonable time, and it shall be unlawful to use the OSS.

2427 B. Newly Installed On-site Sewage System.

2428 1. Once a new OSS has been installed, but before it is covered, the installer shall
2429 notify the designer and owner that the system is ready for inspection. The designer shall
2430 then inspect the work within five ~~((5))~~ working days. If the designer finds that the work
2431 is complete and in accordance with the approved design, the system performance
2432 specifications and this title, the installation permit shall be signed by the designer and
2433 then written notification shall be given to the health officer within one ~~((1))~~ working
2434 day and the owner and installer instructed to leave the system open and uncovered for
2435 three ~~((3))~~ working days after notification, so that the health officer may inspect it.

2436 2. Should the designer disapprove the system, notification shall immediately be
2437 given to the health officer in writing. The designer shall also specify in writing to the
2438 owner and installer and health officer the changes to be made. Once the installer has
2439 corrected the system as specified by the designer, the designer shall be notified that the
2440 system is ready for inspection. The designer shall then inspect the system. If the
2441 designer finds that corrections have been made and that the system is in accordance with
2442 this title, the designer shall notify the department. Instructions shall be given to the
2443 owner and installer to leave the system open and uncovered for three ~~((3))~~ working days
2444 so that the health officer may inspect it.

2445 3. The designer shall inspect the installation within five ~~((5))~~ working days
2446 after the backfilling operation has been completed.

2447 4. If the work is in accordance with this title the designer shall submit to the
2448 department certification of system completion within thirty ~~((30))~~ days of being notified
2449 by the installer. This certification shall include a detailed ~~(("as-built"))~~ record drawing of
2450 the system, pursuant to ~~((Section))~~ BOH 13.56.050.

2451 C. An OSS designed or installed by other than certified designers and installers
2452 ((shall)) may not be covered until the health officer has given written approval to cover.

2453 SECTION 138. R&R 3, Part 7, Section 4, as amended, and BOH 13.56.040 are
2454 each hereby amended to read as follows:

2455 **Installation and backfilling.** Backfilling operations ((shall)) may be done only
2456 by a certified master or associate installer ((or by a person under the direct eyesight
2457 supervision of the master installer)) under the OSS installation permit. Care must be
2458 taken to avoid any damage to the system. Unless otherwise authorized by the health
2459 officer, the OSS shall be backfilled within thirty (((30))) days after health officer and
2460 designer approval of the installation. The backfill material should be mounded above
2461 natural grade to allow for settling and to channel runoff away from the system. The
2462 installer shall notify the designer within one (((1))) working day of completion of
2463 backfill.

2464 SECTION 139. R&R 3, Part 7, Section 5, as amended, and BOH 13.56.050 are
2465 each hereby amended to read as follows:

2466 ((As-built record)) **Record drawing.**

2467 A. Whenever a designer approves an installation, a completely scaled and
2468 dimensioned ((as-built plan)) record drawing and certification of the approved OSS shall
2469 be prepared in ((quadruplicate)) triplicate by the designer of the system on forms
2470 provided by the health officer. These forms shall then be signed by the designer and
2471 within thirty (((30))) days of notifying the health officer of system completion all ((four
2472 (4))) three complete copies shall be ((forwarded with one (1) copy of the OSS installation
2473 permit to the health officer)) submitted.

2474 Where an installation, alteration or repair is undertaken without a design prepared
2475 by a designer, the installer or OSM performing the installation, alteration or repair shall
2476 provide a reconciled record drawing to the health officer and the OSS owner at the time
2477 of final inspection.

2478 B. The following details are required for all record drawings:

2479 1. An accurate plot plan, with measurements and directions accurate to within
2480 one-half of one foot, showing ((location)) the locations of the essential components of the
2481 OSS including:

2482 a. All sewage tanks, tank pump out lids, tank inspection access ports and depth
2483 of tank burial.

2484 b. All plumbing stub outlets.

2485 c. Building sewer line between building and septic tank.

2486 d. Effluent transport line between septic tank and distribution box or inspection
2487 box.

2488 e. The ends, and all changes in direction, of installed and found buried pipes
2489 and electrical cables that are part of the OSS.

2490 f. The distribution/inspection box.

2491 ~~((f.))~~ g. All soil absorption system laterals and permanent visible marker
2492 locations. The length and width of each individual drainfield lateral shall be shown to
2493 scale and the total number of lineal feet and square footage of laterals specified on the
2494 drawing. A dimensioned reserve soil absorption system area shall be included.

2495 ~~((g.))~~ h. The location of any unusual construction features such as step downs
2496 ~~((f.))~~, in the drainfield laterals ~~((g.))~~, must be clearly indicated.

2497 ~~((h.))~~ i. Distance between any drainfield laterals and the edges of any fill soils,
2498 cuts, banks, terraces, foundations, property lines, lakes, streams, wells or other water
2499 sources, water lines, driveways and impermeable surfaces.

2500 ~~((i.))~~ j. The location and detail of soil absorption system inspection ports.

2501 ~~((j.))~~ k. Location and depth of permeable cover added after installation.

2502 ~~((k.))~~ l. If a pump system, the pump size, manufacturer, model, pump cycle
2503 duration, dose in gallons/cycle and pump timer settings.

2504 ~~((l.))~~ m. Location, size, shape, and placement of all buildings on the building
2505 site showing their relation to the OSS and to any easements, underground oil storage
2506 tanks, utility lines~~((;))~~ and property lines.

2507 ~~((m.))~~ n. Location, direction of flow, and discharge point of all ground and/or
2508 surface water interceptor drains and on-site stormwater infiltration systems.

2509 ~~((n.))~~ o. Orientation of drawing with north direction by arrow.

2510 ~~((o.))~~ p. Location of private water supply (well, spring, etc.).

2511 ~~((p.))~~ q. Location of design control point.

2512 2. Clearly Indicated Scale using the appropriate scaled increments shown on a
2513 typical engineering scale. Recommended scale of one inch (1") equals twenty feet (20').
2514 Scales utilizing ratios smaller than one inch (1") equals thirty feet (30') are not
2515 acceptable.

2516 3. One copy of an OSS owner's operating, maintenance and technical
2517 specifications manual which includes:

2518 ((A-)) a. System performance specifications, including initial settings of
2519 electrical or mechanical devices needed to operate the system as intended by the designer
2520 and installer;

2521 ((B-)) b. System operating instructions, including, for proprietary products,
2522 manufacturer's standard product literature;

2523 ((C-)) c. System preventive maintenance instructions and service schedule;

2524 ((D-)) d. Make, model and/or performance specifications of all system
2525 components; and

2526 ((E-)) e. Check list and schedule for routine monitoring inspections, effluent
2527 sampling and reports.

2528 f. Record that materials and equipment meet the specifications contained in the
2529 design.

2530 4. Copy of recorded "notice on title" required by ((Section)) BOH 13.56.054,
2531 and an operation and maintenance services agreement, as applicable.

2532 5. Copy of OSS installation permit.

2533 6. Documentation describing the waste strength range within which the OSS is
2534 designed to operate.

2535 SECTION 140. R&R 99-01, Section 2 (part), as amended, and BOH 13.56.054
2536 are each hereby amended to read as follows:

2537 **Notice on title.**

2538 A. New systems. The owner shall record a notice on title with the King County
2539 records and election division. This notice shall include all of the owner's responsibilities
2540 described in ((Section)) BOH 13.60.005 ((of this title)) and Table 13.60-1.

2541 B. Existing ((S))systems.

2542 1. Prior to sale or transfer of property ownership, if the building is served by an
2543 OSS and the notice on title required by this section has not been recorded, then the owner
2544 shall record the notice as set forth in ((Section)) BOH 13.56.054.A. At the time of sale
2545 the seller shall obtain the buyer's signature acknowledging receipt of a copy of this
2546 recorded notice.

2547 2. At the time of sale or transfer of property ownership, the buyer or transferee
2548 of a property served by an OSS shall forward to the health officer a fee as set forth in the
2549 fee schedule and submit a signed copy of the notice on title as set forth in Section
2550 13.56.054.A.

2551 3. At the time a building is remodeled or expanded, if it is not connected to
2552 public sewer and the notice on title required by this section has not been recorded, then
2553 the owner shall record the notice as set forth in ((section)) BOH 13.56.054((A)).A.

2554 SECTION 141. R&R 3, Part 7, Section 6, as amended, and BOH 13.56.060 are
2555 each hereby amended to read as follows:

2556 **Approval.**

2557 A. Within ten ((10)) working days after receipt of certification by a designer
2558 that an OSS as installed is in accordance with this title, the health officer shall approve or
2559 disapprove thereof. It shall be unlawful to use a newly installed OSS prior to its approval
2560 by the health officer.

2561 B. If the health officer disapproves such work or system, notification in writing
2562 shall be provided to the owner, designer and installer within ten ((10)) working days
2563 stating the reasons for such disapproval and stating the right to appeal.

2564 ~~((C. Six (6) months following installation of a new OSS or concurrent with~~
2565 ~~permitting a repair or modification to an existing OSS, the health officer shall send a~~
2566 ~~notice together with a copy of the "as-built" drawing to the owner or occupant of the~~
2567 ~~premises reminding of the requirement to implement regular and routine maintenance of~~
2568 ~~the system.~~

2569 ~~Educational materials regarding use and maintenance of on-site systems for long~~
2570 ~~term or permanent serviceability will accompany the notice.))~~

2571 SECTION 142. R&R 99-01, Section 2 (part), and BOH 13.60.005 are each
2572 hereby amended to read as follows:

2573 **Operation and maintenance.**

2574 A. The OSS owner is responsible for the continuous proper operation and
2575 maintenance of the OSS, and shall:

2576 1. Determine the level of solids and scum in the septic tank at least once every
2577 three ~~((3))~~ years for residential systems with no garbage grinder and once every year if
2578 a garbage grinder is installed and, unless otherwise provided in writing by the health
2579 officer, once every year for commercial systems.

2580 2. Employ an approved pumper to remove the septage from the tank when the
2581 level of solids and scum indicates that removal is necessary.

2582 3. Cause preventive maintenance/system performance monitoring inspections to
2583 be conducted and any indicated service to be performed by an approved person at a
2584 minimum frequency in accordance with Table 13.60-1 unless otherwise established by
2585 the health officer ~~((or the sewage review committee)).~~

2586 4. Secure and renew contracts, as needed, to fulfill the OSS operation and
2587 maintenance requirements of Table 13.60-1.

2588 ((4)) 5. Operate and maintain all OSS in accordance with this title, with
2589 pertinent alternative system guidelines issued by the DOH and with the approved OSS
2590 owner's operating and maintenance instruction manual.

2591 ((5)) 6. Protect the OSS area including the reserve area from:

2592 a. Cover by structures or impervious material;

2593 b. Surface drainage;

2594 c. Soil compaction, for example, by vehicular traffic or livestock; and

2595 d. Damage by soil removal and grade alteration.

2596 ((6)) 7. Maintain the flow of sewage to the OSS at or below the approved
2597 ~~((design both in quantity and waste strength))~~ operating capacity and sewage quality
2598 standards for residential strength waste water.

2599 ((7)) 8. Direct drains, such as footing or roof drains away from the area where
2600 the OSS is located.

2601 9. At time of property transfer, provide the buyer with maintenance records, if
2602 available, in addition to the completed seller disclosure statement in accordance with
2603 chapter 64.06 RCW for residential real property transfers.

2604 B. The owner shall not allow:

2605 1. Use or introduction of strong bases, strong acids or organic solvents into an
2606 OSS for the purpose of system cleaning;

2607 2. Use of a sewage system additive unless it is specifically approved by the
2608 DOH; or

2609 3. Use of an OSS to dispose of waste components atypical of residential
2610 wastewater, for example, but not limited to, petroleum products, paints, solvents, or
2611 pesticides.

2612 SECTION 143. R&R 3, Part 8, Section 1, as amended, and BOH 13.60.010 are
2613 each hereby amended to read as follows:

2614 **Monitoring of ((conventional, alternative)) residential, community on-site or**
2615 **commercial systems.**

2616 A. The owner shall cause monitoring of the performance of any OSS at a
2617 frequency and by a qualified person as specified in Table 13.60-1. ((The health officer
2618 shall periodically provide notification to the OSS owner regarding proper use and
2619 maintenance of the OSS)).

2620 B. For all system types, service access and monitoring ports to finished grade are
2621 required for all system components. Specific component requirement include the
2622 following:

2623 1. Septic tanks shall have service access maintenance ports and monitoring ports
2624 for the inlet and outlet. If effluent filters are used, access to the filter at finished grade is
2625 required;

2626 2. Surge, flow equalization or other sewage tanks shall be accessible for
2627 monitoring and maintenance;

2628 3. All pretreatment units shall have service access maintenance ports and
2629 monitoring ports;

2630 4. Pump chambers, tanks and vaults shall have service access maintenance
2631 ports;

Inspection Interval	Conventional Gravity System	Pressure Distribution System	Mound system or sandfilter system or sandfilter-to mound system	Aerobic Treatment Unit (ATU) System	Non Discharging ☉Toilets	Commercial & Food Service Establishments
		Subsurface Drip Systems				
45 days ↑ following approval/occupancy	n/a	n/a	n/a	OSM or system designer	n/a	n/a
Every 3 months	n/a	n/a	n/a	OSM ²	n/a	n/a
First 6 ↑ months following approval/occupancy	SO, designer or OSM	OSM or ☉ system designer	OSM or → system designer	n/a	SO	OSM or → system designer
Annually	SO ↓ or OSM	☉ OSM SDS every 6 months	→ OSM	→ OSM	SO →	OSM →
Every 3 years	SO, pumper or OSM ²	((OSM-☉)) n/a	n/a	n/a	n/a	n/a
SO=	On-site system owner					
OSM=	Certified on-site system maintainer (see 13.20.035))					

2652

Table 13.60-1					
Minimum Frequency of Preventive Maintenance/Performance Monitoring					
	<u>Gravity System</u> ⁴	<u>Public Domain Technology</u> ²	<u>Proprietary Technology</u> ^{3,5}	<u>Commercial and Food Establishment</u>	<u>Non-Discharging Toilets</u> ⁶

<u>Initial¹</u> <u>Inspection</u>	<u>6 months</u>	<u>6 months</u>	<u>45 days</u>	<u>45 days</u>	<u>N/A</u>
<u>Regular</u> <u>Inspection</u> <u>frequency</u>	<u>Every 3</u> <u>years</u>	<u>Annually</u>	<u>Every 6</u> <u>months</u>	<u>Annually or 6</u> <u>months</u> <u>Depending on</u> <u>Technology</u> <u>used</u>	<u>Annually</u>
<u>Who May</u> <u>Perform</u> <u>the</u> <u>Inspection</u>	<u>Owner or</u> <u>Licensed</u> <u>Maintainer</u> <u>or</u> <u>Licensed</u> <u>OSS</u> <u>Pumper</u>	<u>Licensed</u> <u>Maintainer</u>	<u>Licensed</u> <u>Maintainer</u>	<u>Licensed</u> <u>Maintainer</u>	<u>Owner</u>

Table 13.60-1

Explanatory Notes

1. ((The system components and conditions which must be inspected shall be specified in the approved OSS owner's operation and maintenance instruction manual))

The initial inspection is to be performed at the time interval indicated following occupancy.

2. ((An initial system performance inspection to insure that the system has been properly designed and installed, is adjusted properly, is being operated correctly and is

2661 ~~performing as expected~~) Public domain technology includes such systems as: mounds,
2662 intermittent sand filters and pressure distribution.

2663 3. ~~((A complete OSS performance monitoring evaluation is to be conducted and a~~
2664 ~~system performance monitoring report, on forms provided by the health officer, is to be~~
2665 ~~submitted by the person performing the maintenance inspection to the OSS owner at the~~
2666 ~~time of inspection and to the health officer within 30 days of the inspection)) Proprietary
2667 Technology includes such systems as: ATUs, Glendon up-flow filters, Advantex pack
2668 bed filters and subsurface drip.~~

2669 4. At least an annual septic tank maintenance check is required if the structure
2670 served is equipped with a garbage grinder waste disposal unit. If a screened outlet baffle
2671 is present an annual check is recommended. Pumpers shall report each pumping event to
2672 the health officer in accordance with BOH ((C))chapter 13.68.

2673 5. ~~((A quarterly maintenance and monitoring inspection of the ATU is required))~~
2674 Table 13.60-1 specifies the minimum required monitoring frequency. A more stringent
2675 monitoring frequency shall be used if recommended by the manufacturer.

2676 6. This monitoring is in addition to that required for the OSS receiving the
2677 building's non((-))toilet liquid waste.

2678 _____
2679 ((B)) G. The person conducting the maintenance and performance monitoring
2680 inspection shall submit a system operation and maintenance/performance monitoring
2681 report, on forms provided by the health officer, to the owner at the time of the inspection
2682 and to the health officer accompanied by a filing fee as specified in the fee schedule
2683 within thirty ~~((30))~~ days of the inspection.

2684 ((C)) H. The fee for each OSS monitoring/performance inspection ((conducted))
2685 required by the health officer shall be in accordance with the fee schedule.

2686 ((D)) I. Preventive maintenance and monitoring of the OSS performance and
2687 quality of effluent shall be required for any commercial development using OSS.

2688 1. The minimum frequency and the type of inspection required shall be in
2689 accordance with Table 13.60-1 unless otherwise established by the health officer.

2690 2. At least an annual inspection of OSS serving food ((service)) establishments
2691 shall be conducted.

2692 ((E)) J. For properties where required monitoring and/or preventive maintenance
2693 inspections are at least thirty ((30)) days overdue the health officer may notify the
2694 owner that the OSS is not in compliance with these rules. The health officer may, in
2695 addition to provisions of BOH ((C))chapter 1.08, cause a notice of non((-))compliance to
2696 be recorded with the real property records for the subject lot.

2697 SECTION 144. R&R 3, Part 8, Section 2, as amended, and BOH 13.60.020 are
2698 each hereby amended to read as follows:

2699 **Community and large on-site system management.**

2700 A. Maintenance and management of community systems and large on-site
2701 sewage systems shall only be provided by a public agency as defined in RCW 39.34.020
2702 acting as the management authority. ((The management system shall comply with the
2703 Guidelines for the Formation and Operation of On-Site Waste Management Systems,
2704 dated November 1976, as published by the Washington State department of Health until
2705 other rules are adopted by the health officer consistent with these guidelines at which
2706 time those rules shall govern.))

2707 B. The proposed waste management system agreements shall be submitted to the
2708 health officer for review and be accompanied by a fee as specified in the fee schedule.

2709 C. The application shall be accompanied by an opinion letter from an attorney
2710 licensed to practice law in the state of Washington representing that the management
2711 agreement complies with all applicable laws and regulations, and is a valid and binding
2712 obligation of all parties thereto. The opinion letter shall be in such form as the health
2713 officer may require.

2714 D. The management authority shall prepare a homeowner's manual which
2715 describes the responsibilities and duties of the homeowner along with precautionary
2716 information as may be necessary to preclude inadvertent abuse to the sewage system. A
2717 copy of such manual shall be provided to each homeowner by the management authority
2718 at the time of purchase or transfer of the property.

2719 NEW SECTION. SECTION 145. There is hereby added a new section to BOH
2720 chapter 13.60 to read as follows:

2721 **Operation and maintenance at time of sale.**

2722 A. The seller of any single family or multiple family residential property served
2723 by an OSS shall, prior to transfer of title to the property, have a monitoring and
2724 performance inspection performed by a licensed OSM. The licensed OSM shall file with
2725 the department an on-site system report and applicable fee in accordance with the fee
2726 schedule.

2727 1. If no record drawing is on file with the department, the OSM shall prepare a
2728 record drawing and include it with the O&M report submitted to the department.

2729 2. If a record drawing is on file with the department but does not accurately
2730 depict the OSS, the OSM shall prepare a reconciled record drawing and include it with
2731 the O&M report submitted to the department.

2732 3. A monitoring and performance inspection is not required if such an
2733 inspection was performed within the previous 6 months.

2734 4. At the time of property transfer, the owner shall provide, to the buyer,
2735 maintenance records, if available, in addition to the completed seller disclosure statement
2736 in accordance with chapter 64.06 RCW for residential real property transfers.

2737 SECTION 146. R&R 3, Part 9, Section 1, as amended, and BOH 13.64.010 are
2738 each hereby amended to read as follows:

2739 **Repairs of failing OSS.**

2740 A. This title shall be applied to the maximum extent permitted by the site for any
2741 repair necessitated by the failure of an existing OSS. The health officer may waive
2742 compliance with these requirements if a conforming repair is not feasible and if in the
2743 health officer's judgment the repaired system will not have an adverse effect on public
2744 health, but the repaired system shall not discharge onto the surface of the ground, into
2745 surface waters, or otherwise fail.

2746 B. The health officer may require a site design in accordance with BOH chapter
2747 13.28 for the repair or replacement of a failing soil absorption component and if deemed
2748 necessary for a limited repair. Prior to designing the repair system, the designer shall
2749 consider the contributing factors of the failure to enable the repair to address identified
2750 causes of the failure, and shall include this information in any design or repair proposal to
2751 the Department.

2752 ((B)) C. It is unlawful to repair an OSS without an OSS ((limited)) repair permit
 2753 or limited repair permit.

2754 **Table 13.64-1**
 2755 **Minimum Treatment ((Standard)) Level Required for Repair or Replacement of**
 2756 **Soil Absorption Components on Sites not Meeting Vertical and/or Horizontal**
 2757 **Separation Requirements of this Title**

2758

((Vertical Separation in Feet	Horizontal Separation in Feet to Surface Water				
	<25 ²	25 < 50 ²	>50 < 75 ²	>75 - 100 ²	>100
<1	Treatment Standard 1	Treatment Standard 1	Treatment Standard 1	Treatment Standard 1	Treatment Standard 2
1 - 2	Treatment Standard 1	Treatment Standard 1	Treatment Standard 1	Treatment Standard 2	Pressure Distributio n
>2 - 3	Treatment Standard 1	Treatment Standard 2 ³⁻⁷	Treatment Standard 2 ³	Pressure Distribution	
>3	Treatment Standard 2 ³	Treatment Standard 2 ³	Pressure Distribution ³	Pressure Distribution)	

2759

<u>Vertical</u>	<u>Horizontal Separation¹</u>			
	<u>< 25 feet^{2,3}</u>	<u>25 < 50 feet^{2,3}</u>	<u>50 < 100 feet^{2,3}</u>	<u>> 100 feet</u>

<u>Separation</u> <u>(in inches)</u>	<u>Soil Type</u>			<u>Soil Type</u>			<u>Soil Type</u>			<u>Soil Type</u>		
	<u>1</u>	<u>2</u>	<u>3-6</u>	<u>1</u>	<u>2</u>	<u>3-6</u>	<u>1</u>	<u>2</u>	<u>3-6</u>	<u>1</u>	<u>2</u>	<u>3-6</u>
<u>< 12</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>B</u>	<u>B</u>	<u>B</u>	<u>B</u>
<u>> 12 < 18</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>B</u>	<u>B</u>	<u>A</u>	<u>B</u>	<u>B</u>	<u>Conforming</u> <u>Systems</u>		
<u>> 18 < 24</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>B</u>	<u>B</u>	<u>A</u>	<u>B</u>	<u>C</u>			
<u>> 24 < 36</u>	<u>A</u>	<u>B</u>	<u>B</u>	<u>B</u>	<u>C</u>	<u>C</u>	<u>B</u>	<u>C</u>	<u>C</u>			
<u>> 36</u>	<u>A</u>	<u>B</u>	<u>B</u>	<u>B</u>	<u>C</u>	<u>C</u>	<u>B</u>	<u>C</u>	<u>E</u>			

Table 13.64-1

Explanatory Notes

((The treatment standard required¹ for repair or replacement of soil absorption components of an existing failed OSS when conforming vertical separation and conforming horizontal separation to surface water and/or to individual private wells⁶ is not possible shall be in accordance with Table 13.64-1^{4,5}.)

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

1. The Treatment ((Standards)) Levels refer to effluent quality achieved before discharge to unsaturated subsurface soil.

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

2775 3. When adjacent to fresh surface water bodies the next higher Treatment
2776 ((Standard)) Level shall be provided unless Treatment ((Standard-1)) Level A is already
2777 provided.

2778 ~~((4. The owner receiving a Table 13.64-1 repair permit where treatment standard 1
2779 or 2 is required shall:~~

2780 ~~(a) Immediately report any OSS failure to the health officer;~~

2781 ~~(b) Continuously operate, maintain and monitor the OSS performance in
2782 accordance with the Interim Guidelines for the Application of Treatment Standards 1 and
2783 2 Using alternative On-Site Sewage Treatment/Disposal Systems, Washington State
2784 Department of Health, August 4, 1992, as amended; and~~

2785 ~~(c) Report the results of "(b)" to the health officer quarterly when treatment
2786 standard 1 is required as annually when treatment standard 2 is required.~~

2787 5. The owner receiving a permit shall file a "notice on title" in accordance with
2788 Section 13.56.054 and the notice shall include:

2789 ~~(a) A notarized agreement to comply with the conditions of foot note (4) above;
2790 and~~

2791 ~~(b) A disclosure that a nonconforming OSS has been installed to correct a
2792 failure because a conforming OSS is not feasible due to site and soil limitations and that
2793 due to the OSS nonconformity the system is not authorized to support new building
2794 construction or expansions or major alterations of the existing structure.~~

2795 ~~6. The health officer may authorize in writing a reduction of horizontal separation
2796 to an individual private drilled well to not less than 75 feet provided that the well is
2797 located upon the parcel and serves the building which is connected to the OSS and a~~

2798 ~~higher treatment standard than otherwise would be required is provided unless treatment~~
2799 ~~standard 1 is already provided. Drinking water quality shall be monitored for coliform~~
2800 ~~and nitrate and reported to the health officer at least annually.~~

2801 ~~7. Mound systems are not permitted as a method to satisfy treatment standard 2.))~~

2802 _____
2803 D. The treatment level required for repair or replacement of soil absorption
2804 components of an existing failed OSS when conforming vertical separation and
2805 conforming horizontal separation to surface water and/or to individual private wells is not
2806 possible shall be in accordance with Table 13.64-1.

2807 E. Alterations or repairs to an OSS shall be documented in a repair record
2808 drawing submitted to the health officer for final approval at time of final inspection,
2809 unless a full design application was submitted for the repair.

2810 F. The owner receiving a Table 13.64-1 repair permit where treatment Level A or
2811 B is required shall:

2812 1. Immediately report any OSS failure to the health officer;
2813 2. Continuously operate, maintain and monitor the OSS performance in
2814 accordance with the appropriate recommended standards and guidance for the technology
2815 in use; and

2816 3. Report the results of the OSS maintenance and monitoring to the health
2817 officer quarterly when Treatment Level A is required and annually when Treatment
2818 Level B is required.

2819 G. The owner receiving a permit shall file a "notice on title" in accordance with
2820 13.56.054 and the notice shall include:

2821 1. A notarized agreement to comply with the conditions of BOH 13.64.010F

2822 above; and

2823 2. A disclosure that a nonconforming OSS has been installed to correct a failure

2824 because a conforming OSS is not feasible due to site and soil limitations and that due to

2825 the OSS nonconformity the system is not authorized to support new building construction

2826 or expansions or major alterations of the existing structure.

2827 H. The health officer may authorize in writing a horizontal separation of not less

2828 than seventy-five feet between an OSS dispersal component and an individual private

2829 drilled well, but only if:

2830 1. the well is located on the same parcel as the property served by the OSS;

2831 2. the OSS is designed and operated to provide treatment level A or treatment

2832 performance beyond that accomplished by meeting the vertical separation and effluent

2833 distribution requirements described in Table 13.64-1; and

2834 3. the owner monitors drinking water quality for coliform and nitrate and

2835 periodically submits drinking water quality reports to the health officer at least annually.

2836 I. For any designed repair, the designer shall include, on the record drawing

2837 document, the operating capacity of the repaired OSS and provide a copy of the record

2838 drawing document to the owner.

2839 J. For any repair required to be performed in accordance with Table 13.64-1 of

2840 this title, disinfection may not be used to achieve the fecal coliform requirements to meet:

2841 1. Treatment levels A or B where there is less than eighteen inches of vertical

2842 separation:

2843 2. Treatment levels A or B in type 1 soils; or

2844 3. Treatment level C.

2845 ((C)) K. Except as provided in Section 13.20.040 of this title, OSS repairs shall
2846 be supervised by an OSS master installer certified pursuant to Sections 13.20.020 and
2847 13.20.030.

2848 ((D)) L. When the work of repairing an existing OSS has been completed, but
2849 before it is closed and covered, the person who designed the repair and owner shall be
2850 notified. The person who designed the repair shall then proceed as described in Section
2851 13.56.030, B and C. The person designing the repair shall then call for the health officer
2852 to inspect the system. For a limited repair the installer shall submit a limited repair report
2853 to the health officer within five (5) working days.

2854 ((E)) M. Unless otherwise directed by the health officer, OSS repairs shall not be
2855 covered until the health officer has given approval.

2856 SECTION 147. R&R 3, Part 9, Section 2, as amended, and BOH 13.64.020 are
2857 each hereby amended to read as follows:

2858 **Remodeling—((A))approval required.**

2859 A. Existing buildings or structures to which additions, alterations, or
2860 improvements which would impact the operation of the OSS are made after the effective
2861 date of this title shall be served by an OSS complying with this title; provided, however,
2862 the health officer may waive compliance with these requirements for existing buildings or
2863 structures when the addition, alterations, repairs, or improvements to the building or
2864 structure are compatible with and do not adversely impact the OSS including the
2865 potential reserve area, do not affect the adequacy of the system to treat the sewage over
2866 the remaining useful life of the building or structure, and do not adversely affect the

2867 ability of the continued operation of the system to protect public health, surface water
2868 quality, or groundwater quality.

2869 B. Applications for approval by the health officer of existing OSS serving
2870 existing buildings undergoing addition, alteration, repair, or improvement shall be made
2871 as provided in this section. The application shall be made on forms furnished by the
2872 health officer.

2873 C. The health officer will review all applications to determine the compatibility
2874 of the proposed addition, alteration, repair, or improvement with the existing OSS.

2875 1. Factors that the health officer may consider include, but are not limited to, the
2876 following:

- 2877 a. Location of SSAS in relation to foundation and existing improvements;
- 2878 b. Size of SSAS in relation to proposed use;
- 2879 c. Condition of the existing OSS;
- 2880 d. Useful anticipated life of the existing on-site sewage disposal system;
- 2881 e. Potential for reconstruction and repair of the existing on-site sewage
2882 disposal system;
- 2883 f. Ultimate purpose of the remodeling; and
- 2884 g. Approved source of water.

2885 2. The health officer may require the applicant to furnish such exhibits and
2886 information as may be deemed relevant and necessary to the application.

2887 ~~D. ((Within ten (10) working days of receipt of the application and all required~~
2888 ~~information the health officer will notify the applicant of one of the following:~~

2889 ~~1. Approval of the application (and so notify the building official).~~

2890 ~~2. Corrections needed to be made to accommodate the application's approval.~~

2891 ~~3. Disapproval of the application (and notify in writing the building official and~~
2892 ~~the applicant of the action taken and the reasons therefore))~~ Any applicant for a permit
2893 for a change of use in a commercial structure served by an OSS shall obtain the health
2894 officer's review and approval of the OSS before the OSS may be utilized to serve the new
2895 use in the structure. Any such applicant for a change in use approval for the continued
2896 use of the OSS shall submit a written application for approval by the health officer. The
2897 application shall include information detailing any processes or uses which may impact
2898 the wastewater characteristics and flows of the existing OSS.

2899 E. The non((-))refundable fee for such a review shall be as specified in the fee
2900 schedule, payable to the department. No charge shall be made for applications for
2901 projects that are determined to be categorically exempt by the health officer.

2902 SECTION 148. R&R 3, Part 11, Section 1, as amended, and BOH 13.68.010 are
2903 each hereby amended to read as follows:

2904 **Pumper certification requirements.**

2905 A. It is unlawful for any person to carry on or engage in the business of pumping
2906 out the contents of septic tanks, cesspools, grease traps, seepage pits, vault privies,
2907 portable toilets and other receptacles of human sewage or to transport over the highways
2908 or to dispose of the contents therefrom in King County unless the pumper business
2909 operator and in addition, each employee of the OSS pumper who engages in OSS
2910 pumping activities, holds a valid certificate of competency and each vehicle has an
2911 annual inspection tab issued by the health officer in accordance with this title for

2912 conducting such business. The following liquid waste pumper's certificate of
2913 competency classifications are established:

- 2914 1. OSS pumper
- 2915 2. Grease trap/interceptor pumper
- 2916 3. Vessel sewage holding tank pumper
- 2917 4. Portable toilet pumper

2918 B. All persons holding a valid ~~((sludgehauler))~~ pumper registration on the
2919 effective date of these regulations will be classified by the health officer in accordance
2920 with ~~((paragraph A. (1 through 4)))~~ subsections A1 through A4 of this section.

2921 C. ~~((Not later than six (6) months after the effective date of these regulations each
2922 person who was employed by an OSS pumper on the effective date of these regulations
2923 and who engages in OSS pumping activities shall obtain a pumper certificate of
2924 competency in accordance with this title.~~

2925 D)) An applicant may be issued a certificate under such terms, conditions orders
2926 and direction as the health officer may deem necessary for the protection of public health.
2927 The health officer may waive any specific condition required by this chapter for
2928 certification when, in the opinion of the health officer, the condition duplicates a
2929 requirement of another regulatory agency and which the applicant has fulfilled.

2930 SECTION 149. R&R 3, Part 11, Section 3, as amended, and BOH 13.68.030 are
2931 each hereby amended to read as follows:

2932 **Examination and inspection.**

2933 A. Except as described in ((13.68.010(B))) BOH 13.68.010.B, a pumper's
2934 certificate of competency and/or vehicle inspection tab shall be issued to the applicant
2935 only after:

2936 1. Completion of a course of instruction given by a qualified person(s)
2937 acceptable to the health officer and which covers, as applicable to the certificate of
2938 competency classification, basic sanitation principles affecting public health, on-site
2939 sewage concepts, details of proper servicing of sewage tanks or other receptacles of
2940 human sewage and the transporting and disposing of sewage, septage, sludge, or fats, oils
2941 and grease;

2942 2. Satisfactory completion of an examination relevant to the pumper certificate
2943 of competency classification, which may include but not necessarily be limited to the
2944 applicant's knowledge of sanitation principles affecting public health, knowledge of
2945 principles of on-site sewage system operations, knowledge of sewage tank and/or
2946 portable toilet servicing procedures, knowledge of regulations governing disposal of
2947 septage, sewage and/or fats, oils and grease, and the reliability of the applicant in
2948 observing sanitation laws, regulations and directions, plus other pertinent information as
2949 deemed necessary by the health officer except that the grease trap/interceptor pumpers,
2950 vessel sewage holding tank pumpers and portable toilet pumpers may be exempted from
2951 such examination upon satisfactory completion of an industry certification/training
2952 program acceptable to the health officer. The fee for such examination or evaluation of
2953 training documentation shall be as specified in the fee schedule, payable in advance and
2954 nonrefundable;

2955 3. Annual inspection and approval of the applicant's equipment to be used in the
2956 performance of the business;

2957 4. The business operator provides the health officer with evidence of
2958 compliance with ~~((S))~~state of Washington minimum bonding requirements as stated in
2959 ~~((RCW-C))~~chapter 18.27 RCW and contractor's liability insurance for at least fifty
2960 thousand dollars ~~(((\$50,000)))~~; and

2961 5. Business operators, other than OSS pumpers, sign and provide to the health
2962 officer a statement certifying that all employees working in contact with equipment
2963 potentially contaminated by sewage have successfully completed a course of instruction
2964 given by a qualified person~~((s))~~ or persons acceptable to the health officer which covers
2965 basic sanitation principles affecting public health.

2966 B. Certificate of competency and vehicle inspection fees shall be as specified in
2967 the fee schedule. ~~((Said fees are to be paid to the department to be used to defray
2968 expenses in issuing registration certificates, conducting inspections and otherwise
2969 administering this title.))~~

2970 C. ~~((The health officer shall act upon each new and renewal application within
2971 thirty (30) days of receipt of a complete application and documentation that all
2972 requirements of this title have been met.~~

2973 D.)) After certification has been approved by the health officer, the applicant will
2974 be issued a certification of competency registration number. The business owner shall
2975 permanently affix said number preceded by the letters "KC No." on each of the
2976 applicant's collection vehicles. Said numbers must be in a contrasting color to that of the
2977 vehicle and in letters at least three inches high and placed along with the annual

2978 wastewater vehicle tab in a conspicuous place designated by the health officer. In
2979 addition, the name of the operating firm shall be conspicuously displayed on both sides of
2980 the truck.

2981 ~~((E))~~ D. Certificates shall expire December 31st of each year.

2982 1. The health officer may renew certificates of competency provided that the
2983 applicant submits not later than December 31st a complete renewal application
2984 accompanied by: a fee as set forth in the fee ~~((table))~~ schedule, ~~((evidence of at least one~~
2985 ~~(1) CEU for each pumper,))~~ authorization for continued use of all disposal sites, a
2986 completed annual vehicle inspection report and proof of minimum bonding and insurance
2987 requirements; and

2988 2. Complete applications for renewal submitted after January 15^(th)
2989 shall be subject to a late fee in the amount of one-half ~~((1/2))~~ the renewal fee, after
2990 January 31^(st) double the renewal fee and after February 10^(th) a renewal shall not be
2991 granted without passing a competency examination.

2992 SECTION 150. R&R 99-01, Section 2 (part), and BOH 13.68.036 are each
2993 hereby amended to read as follows:

2994 **Pumping procedures.** The pumper shall:

2995 A. Pump out the full contents and all compartments of the sewage tank.

2996 B. Leave the premises serviced in a clean and sanitary condition.

2997 C. Dispose of septage and sewage only at approved disposal sites.

2998 D. Possess at all times during pumping and transporting, complete records of the
2999 origin of the septage and sewage.

3000 E. Measure and record the depth of sludge and scum layers in septic tanks.

3001 F. Observe and record the physical condition of the sewage tank pumped
3002 including signs of tank exfiltration or infiltration and condition of baffles in septic tanks.

3003 SECTION 151. R&R 99-01, Section 2 (part), as amended, and BOH 2.18.020 are
3004 each hereby amended to read as follows:

3005 Fee schedule.

3006 ~~((PART 1 — FEES PERTAINING TO TITLE 13~~

3007 ~~EFFECTIVE JANUARY 1, 2006, THROUGH DECEMBER 31, 2006~~

3008 ~~Persons shall pay permit fees, application review fees, reinspection fees,~~
3009 ~~monitoring report filing fees, variance request fees, special service fees and~~
3010 ~~miscellaneous fees under Title 13 of this code as set forth in the fee schedule below:~~

3011 ~~1. OSS construction permit fee~~

- 3012 a. ~~single family, new pressurized\$472.00~~
- 3013 b. ~~single family, new gravity 350.00~~
- 3014 c. ~~single family, repair or modification 290.00~~
- 3015 d. ~~single family, limited repair 76.00~~
- 3016 e. ~~non single family 625.00~~

3017 ~~2. On-site system maintainer certificate of competency fee~~

- 3018 a. ~~Issued July 1st or before\$240.00~~
- 3019 b. ~~Issued after July 1st120.00~~
- 3020 c. ~~Maintainer competency examination 240.00~~

3021 ~~3. Master installer certificate of competency fee~~

- 3022 a. ~~Issued July 1st or before\$240.00~~

3023 b. Issued after July 1st..... 120.00

3024 c. Master installer competency examination 240.00

3025 **4. Associate installer certificate of competency fee**

3026 a. Initial and renewal certificate.....\$ 90.00

3027 b. Associate installer competency examination 150.00

3028 **5. Pumper certificate of competency fee**

3029 a. Business owner\$100.00

3030 b. OSS pumper employee 50.00

3031 c. Vehicle inspection tab.....\$25.00/vehicle

3032 d. Pumper competency examination.....\$ 25.00

3033 **6. Site design application review fee**

3034 a. Conventional gravity system, new\$350.00

3035 b. Pressurized system, new 520.00

3036 c. Revision review\$149.78 base fee

3037 plus \$149.78/hour

3038 after one hour

3039 **7. Community and large on-site systems review fees**

3040 a. Preliminary engineering report,

3041 new and replacement.....\$300.00

3042 b. Plans and specifications, new 500.00

3043 c. Plans and specifications,

3044 repaired and replacement..... 250.00

3045 d.— Management agreement review 100.00

3046 **8. Subdivision review fees**

3047 a.— Pre-application review\$375.00 + \$115.00/lot

3048 b.— Final application review.....\$375.00 + \$175.00/lot

3049 **9. Sewage review committee fees**

3050 a.— Appeal review\$1,105.00

3051 b.— Refunds, non refundable amount 75.00

3052 **10. Miscellaneous fees**

3053 a.— Building remodel review.....\$285.00

3054 b.— Wastewater tank manufacturers

3055 standards review.....\$149.78 base fee

3056 plus \$149.78/hour

3057 after one hour

3058 e.— OSS maintainer's report

3059 filing (database management).....\$10.00

3060 d.— Alternative, community, commercial

3061 system monitoring by the health officer 75.00

3062 e.— Experimental system reviewactual cost

3063 f.— Disciplinary/performance review

3064 conference for certificate of

3065 competency holder\$150.00

3066	g.— Reinstatement of certificate	
3067	after suspension.....	applicable certificate fee
3068	h.— Reinspection fee.....	actual cost/\$50.00 minimum
3069	i.— Change of designer of record.....	\$ 35.00
3070	j.— Replacement private well/spring	
3071	location review.....	195.00
3072	k.— Watertable monitoring plan review	634.00
3073	l.— OSS operation and maintenance	
3074	program fee due from buyer or	
3075	transferee of a property served by	
3076	OSS at time of sale or transfer	
3077	of property ownership.....	40.00
3078	m.— Report on the condition of an individual	
3079	private, non-public well.....	316.00
3080	n.— Report on the condition of an OSS	316.00
3081	o.— Report on the condition of an OSS and	
3082	an individual private, non-public well	
3083	on the same premises.....	451.00

PART 2 — FEES PERTAINING TO TITLE 13

EFFECTIVE JANUARY 1, 2006, THROUGH DECEMBER 31, 2006

Persons shall pay permit fees, application review fees, reinspection fees, monitoring report filing fees, variance request fees, special service fees and miscellaneous fees under Title 13 of this code as set forth in the fee schedule below:

3089	1. OSS construction permit fee	
3090	a. single family, new pressurized	\$496.00
3091	b. single family, new gravity	368.00
3092	c. single family, repair or modification	305.00
3093	d. single family, limited repair	80.00
3094	e. non single family	656.00
3095	2. On-site system maintainer certificate of competency fee	
3096	a. Issued July 1st or before	\$252.00
3097	b. Issued after July 1st	126.00
3098	c. Maintainer competency examination	252.00
3099	3. Master installer certificate of competency fee	
3100	a. Issued July 1st or before	\$252.00
3101	b. Issued after July 1st	126.00
3102	c. Master installer competency examination	252.00
3103	4. Associate installer certificate of competency fee	
3104	a. Initial and renewal certificate	\$ 94.00
3105	b. Associate installer competency examination	157.00
3106	5. Pumper certificate of competency fee	
3107	a. Business owner	\$100.00
3108	b. OSS pumper employee	50.00
3109	c. Vehicle inspection tab	\$25.00/vehicle
3110	d. Pumper competency examination	\$ 25.00

3111	6. Site design application review fee	
3112	a. Conventional gravity system, new	\$377.00
3113	b. Pressurized system, new	546.00
3114	c. Revision review	\$157.27 base fee
3115	..... plus \$157.27/hour	
3116	..... after one hour	
3117	7. Community and large on-site systems review fees	
3118	a. Preliminary engineering report,	
3119	new and replacement.....	\$315.00
3120	b. Plans and specifications, new	525.00
3121	c. Plans and specifications,	
3122	repaired and replacement	263.00
3123	d. Management agreement review	105.00
3124	8. Subdivision review fees	
3125	a. Pre-application review	\$393.00 + \$115.00/lot
3126	b. Final application review	\$393.00 + \$175.00/lot
3127	9. Sewage review committee fees	
3128	a. Appeal review	\$1,160.00
3129	b. Refunds, non refundable amount	75.00
3130	10. Miscellaneous fees	
3131	a. Building remodel review.....	\$299.00

3132	b.—Wastewater tank manufacturers	
3133	standards review.....	\$157.27 base fee
3134	.....	plus \$157.27/hour
3135	.....	after one hour
3136	e.—OSS maintainer's report	
3137	filing (database management).....	\$10.00
3138	d.—Alternative, community, commercial	
3139	system monitoring by the health officer.....	75.00
3140	e.—Experimental system review.....	actual cost
3141	f.—Disciplinary/performance review	
3142	conference for certificate of	
3143	competency holder.....	\$150.00
3144	g.—Reinstatement of certificate	
3145	after suspension.....	applicable certificate fee
3146	h.—Reinspection fee.....	actual cost/\$50.00 minimum
3147	i.—Change of designer of record.....	\$ 35.00
3148	j.—Replacement private well/spring	
3149	location review.....	204.00
3150	k.—Watertable monitoring plan review.....	666.00
3151	l.—OSS operation and maintenance	
3152	program fee due from buyer or	
3153	transferee of a property served by	

3154	OSS at time of sale or transfer	
3155	of property ownership	40.00
3156	m. Report on the condition of an individual	
3157	private, non-public well	332.00
3158	n. Report on the condition of an OSS	332.00
3159	e. Report on the condition of an OSS and	
3160	an individual private, non-public well	
3161	on the same premises	473.00

PART 3—FEES PERTAINING TO TITLE 13

EFFECTIVE JANUARY 1, 2007, THROUGH DECEMBER 31, 2007

Persons shall pay permit fees, application review fees, reinspection fees, monitoring report filing fees, variance request fees, special service fees and miscellaneous fees under Title 13 of this code as set forth in the fee schedule below:

1. OSS construction permit fee

3168	a. single family, new pressurized	\$520.00
3169	b. single family, new gravity	386.00
3170	e. single family, repair or modification	320.00
3171	d. single family, limited repair	84.00
3172	e. non single family	689.00

2. On-site system maintainer certificate of competency fee

3174	a. Issued July 1st or before	\$264.00
3175	b. Issued after July 1st	132.00

3176 e. ~~Maintainer competency examination.....~~ 264.00

3177 **3. ~~Master installer certificate of competency fee~~**

3178 a. ~~Issued July 1st or before~~ \$264.00

3179 b. ~~Issued after July 1st.....~~ 132.00

3180 e. ~~Master installer competency examination~~ 264.00

3181 **4. ~~Associate installer certificate of competency fee~~**

3182 a. ~~Initial and renewal certificate.....~~ \$ 99.00

3183 b. ~~Associate installer competency examination~~ 165.00

3184 **5. ~~Pumper certificate of competency fee~~**

3185 a. ~~Business owner~~ \$100.00

3186 b. ~~OSS pumper employee~~ 50.00

3187 c. ~~Vehicle inspection tab.....~~ \$25.00/vehicle

3188 d. ~~Pumper competency examination~~ \$ 25.00

3189 **6. ~~Site design application review fee~~**

3190 a. ~~Conventional gravity system, new~~ \$396.00

3191 b. ~~Pressurized system, new~~ 573.00

3192 e. ~~Revision review~~ \$165.13 base fee

3193 plus \$165.13/hour

3194 after one hour

3195	7. Community and large on-site systems review fees	
3196	a.— Preliminary engineering report,	
3197	new and replacement.....	\$330.00
3198	b.— Plans and specifications, new	552.00
3199	e.— Plans and specifications,	
3200	repaired and replacement.....	276.00
3201	d.— Management agreement review.....	111.00
3202	8. Subdivision review fees	
3203	a.— Pre-application review	\$412.00 + \$115.00/lot
3204	b.— Final application review.....	\$412.00 + \$175.00/lot
3205	9. Sewage review committee fees	
3206	a.— Appeal review	\$1,218.00
3207	b.— Refunds, non refundable amount.....	75.00
3208	10. Miscellaneous fees	
3209	a.— Building remodel review.....	\$314.00
3210	b.— Wastewater tank manufacturers	
3211	standards review.....	\$165.13 base fee
3212	.....	plus \$165.13/hour
3213	.....	after one hour
3214	e.— OSS maintainer's report	
3215	filing (database management).....	\$10.00

3216	d.— Alternative, community, commercial	
3217	system monitoring by the health officer	75.00
3218	e.— Experimental system review	actual cost
3219	f.— Disciplinary/performance review	
3220	conference for certificate of	
3221	competency holder	\$150.00
3222	g.— Reinstatement of certificate	
3223	after suspension	applicable certificate fee
3224	h.— Reinspection fee	actual cost/\$50.00 minimum
3225	i.— Change of designer of record	\$ 35.00
3226	j.— Replacement private well/spring	
3227	location review	215.00
3228	k.— Watertable monitoring plan review	699.00
3229	l.— OSS operation and maintenance	
3230	program fee due from buyer or	
3231	transferee of a property served by	
3232	OSS at time of sale or transfer	
3233	of property ownership	40.00
3234	m.— Report on the condition of an individual	
3235	private, non-public well	348.00
3236	n.— Report on the condition of an OSS	348.00

3237 e. ~~Report on the condition of an OSS and~~
 3238 ~~an individual private, non-public well~~
 3239 ~~on the same premises~~497.00

~~PART 4—FEES PERTAINING TO TITLE 13~~

~~EFFECTIVE JANUARY 1, 2008, AND THEREAFTER))~~

3242 Persons shall pay permit fees, application review fees, reinspection fees,
 3243 monitoring report filing fees, variance request fees, special service fees and
 3244 miscellaneous fees under Title 13 of this code as set forth in the fee schedule below:

1. OSS construction permit fee

3246 a. single-family, new pressurized..... \$((546.00)) 772.00
 3247 b. single-family, new gravity ((405.00)) 665.00
 3248 c. single-family, repair or modification ((336.00)) 596.00
 3249 d. single-family, limited repair..... ((88.00)) 212.00
 3250 e. non-single-family ((723.00)) 1,035.00
 3251 f. delinquent submittal of record drawing..... 347.00

2. On-site system maintainer certificate of competency fee

3253 a. Issued July 1st or before.....\$277.00
 3254 b. Issued after July 1st.....139.00
 3255 c. Maintainer competency examination 277.00

3. Master installer certificate of competency fee

3257 a. Issued July 1st or before.....\$277.00

3258	b. Issued after July 1st.....	139.00
3259	c. Master installer competency examination.....	277.00
3260	4. Associate installer certificate of competency fee	
3261	a. Initial and renewal certificate.....	\$104.00
3262	b. Associate installer competency examination.....	173.00
3263	5. Pumper certificate of competency fee	
3264	a. Business owner.....	\$(100.00) <u>208.00</u>
3265	b. OSS pumper employee	((50.00)) <u>104.00</u>
3266	c. Vehicle inspection tab	\$(25.00/vehicle) <u>87.00/vehicle</u>
3267	d. Pumper competency examination.....	\$(25.00) <u>173.00</u>
3268	6. Site design application review fee	
3269	a. ((Conventional-g)) Gravity system, new	\$(416.00) <u>442.00</u>
3270	b. Pressurized system, new	((602.00)) <u>749.00</u>
3271	c. Revision review.....	\$173.39 base fee
3272	.....	plus \$173.39/hour
3273	.....	after one hour
3274	7. Community and large on-site systems review fees	
3275	a. Preliminary engineering report,	
3276	new and replacement.....	\$(347.00) <u>659.00</u>
3277	b. Plans and specifications, new	((579.00)) <u>763.00</u>
3278	c. Plans and specifications,	
3279	repaired and replacement	((290.00)) <u>520.00</u>

3280	d. Management agreement review	((116.00)) <u>243.00</u>
3281	8. Subdivision review fees	
3282	a. Pre-application review	\$((433.00)) <u>696.00</u> + \$115.00/lot
3283	b. Final application review.....	\$((433.00)) <u>1,214.00</u> + \$175.00/lot
3284	9. Sewage review committee fees	
3285	a. Appeal review	\$1,279.00
3286	b. Refunds, non refundable amount	75.00
3287	10. Miscellaneous fees	
3288	a. Building remodel review.....	\$((329.00)) <u>451.00</u>
3289	b. Wastewater tank manufacturers	
3290	standards review.....	\$173.39 base fee
3291	.....	plus \$173.39/hour
3292	.....	after one hour
3293	c. OSS maintainer's <u>maintenance and performance monitoring</u>	
3294	<u>inspection</u> report filing (((database management))):	
3295	(1) <u>Periodic maintenance and performance monitoring</u>	\$((10.00)) <u>25.00</u>
3296	(2) <u>Monitoring and performance inspection prior to</u>	
3297	<u>transfer of title to property</u>	<u>\$95.00</u>
3298	d. Alternative, community, commercial	
3299	system monitoring by the health officer	((75.00)) <u>173.00</u>
3300	e. (((Experimental system review))) <u>Review of new proprietary</u>	
3301	<u>device, method or product</u>	actual cost

3302	f. Disciplinary/performance review	
3303	conference for certificate of	
3304	competency holder.....	\$(150.00) <u>173.00</u>
3305	g. Reinstatement of certificate	
3306	after suspension.....	applicable certificate fee
3307	h. Reinspection fee.....	actual cost/ \$(50.00) <u>173.00</u> minimum
3308	i. Change of designer of record.....	\$(35.00) <u>173.00</u>
3309	j. Replacement private well/spring	
3310	location review.....	225.00
3311	k. Watertable monitoring plan review	734.00
3312	l. OSS operation and maintenance	
3313	program fee due from buyer or	
3314	transferee of a property served by	
3315	OSS at time of sale or transfer	
3316	of property ownership.....	40.00
3317	m. Report on the condition of an individual	
3318	private, non((-))public well.....	366.00
3319	n. Report on the condition of an OSS	366.00
3320	o. Report on the condition of an OSS and	
3321	an individual private, non-public well	
3322	on the same premises	522.00
3323	p. <u>Annual product development permit</u>	<u>actual cost of review of</u>
3324		<u>permit application, permit issuance, and</u>

3325 monitoring of product performance data

3326 SECTION 152. Severability. If any provision of this rule or its application to
3327 any person or circumstance is held invalid, the remainder of the rule or the application of
3328 the provision to other persons or circumstances is not affected.

3329 SECTION 153. Effective date. This rule takes effect upon approval of the
3330 Washington state Department of Health or thirty days after its adoption, whichever
3331 occurs later.

3332

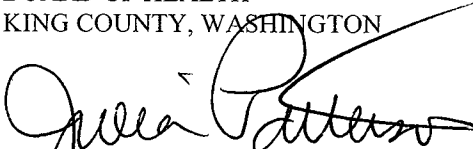
R&R was introduced on and passed by the Board of Health on 6/19/2008, by the following vote:

Yes: 9 - Ms. Lambert, Ms. Patterson, Mr. von Reichbauer, Mr. Dunn, Ms. Clark, Mr. Rasmussen, Dr. Nicola, Ms. Manning and Dr. Counts

No: 0

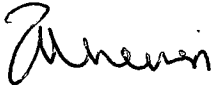
Excused: 6 - Mr. Ferguson, Mr. Sherman, Mr. Hutchinson, Ms. Frisinger, Mr. Gossett and Mr. Licata

BOARD OF HEALTH
KING COUNTY, WASHINGTON



Julia Patterson, Chair

ATTEST:



Anne Noris, Clerk of the Board

Attachments None