

1 **VIRGINIA SOIL AND WATER CONSERVATION BOARD**
2 **Amend Parts I, II, and III of the Virginia Stormwater Management Program Permit**
3 **Regulations**

4 **December 4, 2009 vs.**

5 Part I
6 Definitions, Purpose, and Applicability

7 **4VAC50-60-10. Definitions.**

8 The following words and terms used in this chapter have the following meanings
9 unless the context clearly indicates otherwise.

10 "Act" means the Virginia Stormwater Management Act, Article 1.1 (§ 10.1-603.1 et
11 seq.) of Chapter 6 of Title 10.1 of the Code of Virginia.

12 "Adequate channel" means a ~~channel~~ watercourse or wetland that will convey the
13 designated frequency storm event without ~~overtopping the channel bank or its banks or~~
14 ~~causing erosive damage to the channel bed or banks, or overbank sections of the~~
15 same. A wetland may be considered an adequate channel provided the discharge from
16 the designated frequency storm event does not cause erosion in the wetland.

17 "Administrator" means the Administrator of the United States Environmental
18 Protection Agency or an authorized representative.

19 "Applicable standards and limitations" means all state, interstate, and federal
20 standards and limitations to which a discharge or a related activity is subject under the
21 Clean Water Act (CWA) (33 USC § 1251 et seq.) and the Act, including effluent
22 limitations, water quality standards, standards of performance, toxic effluent standards or
23 prohibitions, best management practices, and standards for sewage sludge use or
24 disposal under §§ 301, 302, 303, 304, 306, 307, 308, 403 and 405 of CWA.

25 "Approval authority" means the Virginia Soil and Water Conservation Board
26 or ~~their~~ its designee.

27 "Approved program" or "approved state" means a state or interstate program that
28 has been approved or authorized by EPA under 40 CFR Part 123 (2000).

29 ~~"Aquatic bench" means a 10- to 15-foot wide bench around the inside perimeter of a~~
30 ~~permanent pool that ranges in depth from zero to 12 inches. Vegetated with emergent~~
31 ~~plants, the bench augments pollutant removal, provides habitats, conceals trash and~~
32 ~~water level fluctuations, and enhances safety.~~

33 ~~"Average land cover condition" means a measure of the average amount of~~
34 ~~impervious surfaces within a watershed, assumed to be 16%. Note that a locality may~~
35 ~~opt to calculate actual watershed-specific values for the average land cover condition~~
36 ~~based upon 4VAC50-60-110.~~

37 "Average monthly discharge limitation" means the highest allowable average of daily
38 discharges over a calendar month, calculated as the sum of all daily discharges
39 measured during a calendar month divided by the number of daily discharges measured
40 during that month.

41 "Average weekly discharge limitation" means the highest allowable average of daily
42 discharges over a calendar week, calculated as the sum of all daily discharges
43 measured during a calendar week divided by the number of daily discharges measured
44 during that week.

45 "Best management practice (~~BMP~~)" or "BMP" means schedules of activities,
46 prohibitions of practices, including both structural and nonstructural practices,
47 maintenance procedures, and other management practices to prevent or reduce the

48 pollution of surface waters and groundwater systems from the impacts of land-disturbing
49 activities.

50 ~~"Bioretention basin" means a water quality BMP engineered to filter the water quality~~
51 ~~volume through an engineered planting bed, consisting of a vegetated surface layer~~
52 ~~(vegetation, mulch, ground cover), planting soil, and sand bed, and into the in-situ~~
53 ~~material.~~

54 ~~"Bioretention filter" means a bioretention basin with the addition of a sand filter~~
55 ~~collector pipe system beneath the planting bed.~~

56 "Board" means the Virginia Soil and Water Conservation Board.

57 "Bypass" means the intentional diversion of waste streams from any portion of a
58 treatment facility.

59 "Channel" means a natural stream or manmade waterway watercourse with defined
60 bed and banks that conducts continuously or periodically flowing water.

61 "Chesapeake Bay watershed" means all land areas draining to the following Virginia
62 river basins: Potomac River Basin, James River Basin, Rappahannock River Basin,
63 Chesapeake Bay and small coastal basins, and York River Basin.

64 "Common plan of development or sale" means a contiguous area where separate
65 and distinct construction activities may be taking place at different times on different
66 schedules.

67 ~~"Constructed wetlands" means areas intentionally designed and created to emulate~~
68 ~~the water quality improvement function of wetlands for the primary purpose of removing~~
69 ~~pollutants from stormwater.~~

70 "Comprehensive stormwater management plan" means a plan, which may be
71 integrated with other land use plans or regulations, that specifies how the water
72 quality and components, quantity components, or both of stormwater are to be managed
73 on the basis of an entire watershed or a portion thereof. The plan may also provide for
74 the remediation of erosion, flooding, and water quality and quantity problems caused by
75 prior development.

76 "Construction activity" means any clearing, grading or excavation associated with
77 large construction activity or associated with small construction activity.

78 "Contiguous zone" means the entire zone established by the United States under
79 Article 24 of the Convention on the Territorial Sea and the Contiguous Zone (37 FR
80 11906 June 15, 1972).

81 "Continuous discharge" means a discharge which occurs without interruption
82 throughout the operating hours of the facility, except for infrequent shutdowns for
83 maintenance, process changes, or other similar activities.

84 "Control measure" means any BMP, stormwater facility, or other method used to
85 minimize the discharge of pollutants to state waters.

86 "Co-operator" means an operator ~~to~~ of a VSMP permit that is only responsible for
87 permit conditions relating to the discharge for which it is the operator.

88 "Clean Water Act" or "CWA" means the federal Clean Water Act (33 USC § 1251 et
89 seq.), formerly referred to as the Federal Water Pollution Control Act or Federal Water
90 Pollution Control Act Amendments of 1972, Public Law 92-500, as amended by Public
91 Law 95-217, Public Law 95-576, Public Law 96-483, and Public Law 97-117, or any
92 subsequent revisions thereto.

93 "CWA and regulations" means the Clean Water Act (CWA) and applicable
94 regulations published in the Code of Federal Regulations promulgated thereunder. For
95 the purposes of this chapter, it includes state program requirements.

96 "Daily discharge" means the discharge of a pollutant measured during a calendar
97 day or any 24-hour period that reasonably represents the calendar day for purposes of
98 sampling. For pollutants with limitations expressed in units of mass, the daily discharge
99 is calculated as the total mass of the pollutant discharged over the day. For pollutants
100 with limitations expressed in other units of measurement, the daily discharge is
101 calculated as the average measurement of the pollutant over the day.

102 "Department" means the Department of Conservation and Recreation.

103 "Development" means ~~a tract of land developed or to be developed as a unit under~~
104 ~~single ownership or unified control which is to be used for any business or industrial~~
105 ~~purpose or is to contain three or more residential dwelling units~~ land disturbance and the
106 resulting landform associated with the construction of residential, commercial, industrial,
107 institutional, recreation, transportation, or utility facilities or structures or the clearing of
108 land for nonagricultural or nonsilvicultural purposes.

109 "Direct discharge" means the discharge of a pollutant.

110 "Director" means the Director of the Department of Conservation and Recreation or
111 his designee.

112 "Discharge," when used without qualification, means the discharge of a pollutant.

113 "Discharge of a pollutant" means:

- 114 1. Any addition of any pollutant or combination of pollutants to state waters from
115 any point source; or
- 116 2. Any addition of any pollutant or combination of pollutants to the waters of the
117 contiguous zone or the ocean from any point source other than a vessel or other
118 floating craft which is being used as a means of transportation.

119 This definition includes additions of pollutants into surface waters from: surface
120 runoff that is collected or channeled by man; discharges through pipes, sewers, or other
121 conveyances owned by a state, municipality, or other person that do not lead to a
122 treatment works; and discharges through pipes, sewers, or other conveyances, leading
123 into privately owned treatment works. This term does not include an addition of
124 pollutants by any indirect discharger.

125 "Discharge Monitoring Report" or "DMR" means the form supplied by the
126 department, or an equivalent form developed by the operator and approved by the
127 board, for the reporting of self-monitoring results by operators.

128 "Draft permit" means a document indicating the board's tentative decision to issue or
129 deny, modify, revoke and reissue, terminate, or reissue a permit. A notice of intent to
130 terminate a permit, and a notice of intent to deny a permit are types of draft permits. A
131 denial of a request for modification, revocation and reissuance, or termination is not a
132 draft permit. A proposed permit is not a draft permit.

133 "Drainage area" means a land and area, water area on a land-disturbing site, or both
134 from which runoff flows to a common outlet point.

135 "Effluent limitation" means any restriction imposed by the board on quantities,
136 discharge rates, and concentrations of pollutants which are discharged from point
137 sources into surface waters, the waters of the contiguous zone, or the ocean.

138 "Effluent limitations guidelines" means a regulation published by the administrator
139 under § 304(b) of the CWA to adopt or revise effluent limitations.

140 "Environmental Protection Agency (~~EPA~~)" or "EPA" means the United States
141 Environmental Protection Agency.

142 "Existing permit" means for the purposes of this chapter a permit issued by the
143 permit-issuing authority and currently held by a permit applicant.

144 "Existing source" means any source that is not a new source or a new discharger.

145 "Facilities or equipment" means buildings, structures, process or production
146 equipment or machinery that form a permanent part of a new source and that will be
147 used in its operation, if these facilities or equipment are of such value as to represent a
148 substantial commitment to construct. It excludes facilities or equipment used in
149 connection with feasibility, engineering, and design studies regarding the new source or
150 water pollution treatment for the new source.

151 "Facility or activity" means any VSMP point source or treatment works treating
152 domestic sewage or any other facility or activity (including land or appurtenances
153 thereto) that is subject to regulation under the VSMP ~~program~~.

154 "~~Flood fringe~~" is the ~~portion of the floodplain outside the floodway, usually associated~~
155 ~~with standing rather than flowing water, which is covered by floodwater during the 100-~~
156 ~~year discharge~~ [which is covered with water from the 100-year storm event].

157 "Flooding" means a volume of water that is too great to be confined within the banks
158 or walls of the stream, water body or conveyance system and that overflows onto
159 adjacent lands, thereby causing or threatening damage.

160 "Floodplain" means any land area adjoining a channel, river, stream, or other water
161 body that is susceptible to being inundated by water. It includes the floodway and flood
162 fringe areas [associated with the 100-year storm event].

163 "Floodway" means the channel of a river or other watercourse and the adjacent land
164 areas, usually associated with flowing water, that must be reserved in order to discharge
165 the [base flood 100-year storm event] without cumulatively increasing the water surface
166 elevation more than one foot or as otherwise designated by the Federal Emergency
167 Management Agency.

168 "General permit" means a VSMP permit authorizing a category of discharges under
169 the CWA and the Act within a geographical area of the Commonwealth of Virginia.

170 "~~Grassed swale~~" means ~~an earthen conveyance system which is broad and shallow~~
171 ~~with erosion resistant grasses and check dams, engineered to remove pollutants from~~
172 ~~stormwater runoff by filtration through grass and infiltration into the soil.~~

173 "Hazardous substance" means any substance designated under the Code of Virginia
174 or 40 CFR Part 116 (2000) pursuant to § 311 of the CWA.

175 "Hydrologic Unit Code" or "HUC" means a watershed unit established in the most
176 recent version of Virginia's 6th Order National Watershed Boundary Dataset.

177 "Illicit discharge" means any discharge to a municipal separate storm sewer that is
178 not composed entirely of stormwater, except discharges pursuant to a VPDES or VSMP
179 permit (other than the VSMP permit for discharges from the municipal separate storm
180 sewer), discharges resulting from fire fighting activities, and discharges identified by and
181 in compliance with 4VAC50-60-1220 C 2.

182 "Impervious cover" means a surface composed of any material that significantly
183 impedes or prevents natural infiltration of water into soil. Impervious surfaces include,
184 but are not limited to, conventional roofs, buildings, streets, parking areas, and
185 any conventional concrete, asphalt, or ~~compacted~~ gravel surface that is or may become
186 compacted.

187 "Incorporated place" means a city, town, township, or village that is incorporated
188 under the Code of Virginia.

189 "Indian country" means (i) all land within the limits of any Indian reservation under
190 the jurisdiction of the United States government, notwithstanding the issuance of any
191 patent, and including rights-of-way running through the reservation; (ii) all dependent
192 Indian communities with the borders of the United States whether within the originally or
193 subsequently acquired territory thereof, and whether within or without the limits of a
194 state; and (iii) all Indian allotments, the Indian titles to which have not been extinguished,
195 including rights-of-way running through the same.

196 "Indirect discharger" means a nondomestic discharger introducing "pollutants" to a
197 "publicly owned treatment works (POTW)."

198 ~~"Infiltration facility" means a stormwater management facility that temporarily
199 impounds runoff and discharges it via infiltration through the surrounding soil. While an
200 infiltration facility may also be equipped with an outlet structure to discharge impounded
201 runoff, such discharge is normally reserved for overflow and other emergency
202 conditions. Since an infiltration facility impounds runoff only temporarily, it is normally dry
203 during nonrainfall periods. Infiltration basin, infiltration trench, infiltration dry well, and
204 porous pavement shall be considered infiltration facilities.~~

205 "Inspection" means an on-site review of the project's compliance with the permit, the
206 local stormwater management program, and any applicable design criteria, or an on-site
207 review to obtain information or conduct surveys or investigations necessary in the
208 enforcement of the Act and this chapter.

209 "Interstate agency" means an agency of two or more states established by or under
210 an agreement or compact approved by Congress, or any other agency of two or more
211 states having substantial powers or duties pertaining to the control of pollution as
212 determined and approved by the administrator under the CWA and regulations.

213 "Karst area" means any land area predominantly underlain at the surface or shallow
214 subsurface by limestone, dolomite, or other soluble bedrock regardless of any obvious
215 surface karst features.

216 "Karst features" means sinkholes, sinking and losing streams, caves, large flow
217 springs, and other such landscape features found in karst areas.

218 "Land disturbance" or "land-disturbing activity" means a manmade change to the
219 land surface that potentially changes its runoff characteristics including any clearing,
220 grading, or excavation associated with a construction activity regulated pursuant to
221 the federal Clean Water Act CWA, the Act, and this chapter.

222 "Large construction activity" means construction activity including clearing, grading
223 and excavation, except operations that result in the disturbance of less than five acres of
224 total land area. Large construction activity also includes the disturbance of less than five
225 acres of total land area that is a part of a larger common plan of development or sale if
226 the larger common plan will ultimately disturb five acres or more.

227 "Large municipal separate storm sewer system" means all municipal separate storm
228 sewers that are either:

229 1. Located in an incorporated place with a population of 250,000 or more as
230 determined by the 1990 decennial census by the Bureau of Census (40 CFR Part
231 122 Appendix F (2000));

232 2. Located in the counties listed in 40 CFR Part 122 Appendix H (2000), except
233 municipal separate storm sewers that are located in the incorporated places,
234 townships or towns within such counties;

235 3. Owned or operated by a municipality other than those described in subdivision
236 1 or 2 of this definition and that are designated by the board as part of the large
237 or medium municipal separate storm sewer system due to the interrelationship
238 between the discharges of the designated storm sewer and the discharges from
239 municipal separate storm sewers described under subdivision 1 or 2 of this
240 definition. In making this determination the board may consider the following
241 factors:

- 242 a. Physical interconnections between the municipal separate storm sewers;
- 243 b. The location of discharges from the designated municipal separate storm
244 sewer relative to discharges from municipal separate storm sewers described
245 in subdivision 1 of this definition;
- 246 c. The quantity and nature of pollutants discharged to surface waters;
- 247 d. The nature of the receiving surface waters; and
- 248 e. Other relevant factors.

249 4. The board may, upon petition, designate as a large municipal separate storm
250 sewer system, municipal separate storm sewers located within the boundaries of
251 a region defined by a stormwater management regional authority based on a
252 jurisdictional, watershed, or other appropriate basis that includes one or more of
253 the systems described in this definition.

254 "Linear development project" means a land-disturbing activity that is linear in nature
255 such as, but not limited to, (i) the construction of electric and telephone utility lines, and
256 natural gas pipelines; (ii) construction of tracks, rights-of-way, bridges, communication
257 facilities and other related structures of a railroad company; (iii) highway construction
258 projects ~~and~~; (iv) construction of stormwater channels and stream restoration activities; ~~;~~
259 and (v) water and sewer lines. Private subdivision roads or streets shall not be
260 considered linear development projects.

261 "Local stormwater management program" or "local program" means ~~a statement of~~
262 the various methods employed by a locality or the department to manage the quality and
263 quantity of runoff resulting from land-disturbing activities and shall include such items as
264 local ordinances, permit requirements, policies and guidelines, technical materials, plan
265 review, inspection, enforcement, and evaluation consistent with the Act and this
266 chapter. ~~The ordinance shall include provisions to require the control of after-~~
267 ~~development stormwater runoff rate of flow, the proper maintenance of stormwater~~
268 ~~management facilities, and minimum administrative procedures.~~

269 "Locality" means a county, city, or town.

270 "Major facility" means any VSMP facility or activity classified as such by the regional
271 administrator in conjunction with the board.

272 "Major modification" means, for the purposes of this chapter, the modification or
273 amendment of an existing permit before its expiration that is not a minor modification as
274 defined in this regulation.

275 "Major municipal separate storm sewer outfall ~~(or major outfall)~~" or "major outfall"
276 means a municipal separate storm sewer outfall that discharges from a single pipe with
277 an inside diameter of 36 inches or more or its equivalent (discharge from a single
278 conveyance other than circular pipe which is associated with a drainage area of more
279 than 50 acres); or for municipal separate storm sewers that receive stormwater from
280 lands zoned for industrial activity (based on comprehensive zoning plans or the
281 equivalent), with an outfall that discharges from a single pipe with an inside diameter of

282 12 inches or more or from its equivalent (discharge from other than a circular pipe
283 associated with a drainage area of two acres or more).

284 "Manmade" means constructed by man.

285 "Manmade stormwater conveyance system" means a pipe, ditch, vegetated swale, or
286 other conveyance constructed by man.

287 "Maximum daily discharge limitation" means the highest allowable daily discharge.

288 "Maximum extent practicable" or "MEP" means the technology-based discharge
289 standard for municipal separate storm sewer systems established by CWA § 402(p).
290 MEP is achieved, in part, by selecting and implementing effective structural and
291 nonstructural best management practices (BMPs) and rejecting ineffective BMPs and
292 replacing them with effective best management practices (BMPs). MEP is an iterative
293 standard, which evolves over time as urban runoff management knowledge increases.
294 As such, the operator's MS4 program must continually be assessed and modified to
295 incorporate improved programs, control measures, BMPs, etc., to attain compliance with
296 water quality standards.

297 "Medium municipal separate storm sewer system" means all municipal separate
298 storm sewers that are either:

299 1. Located in an incorporated place with a population of 100,000 or more but less
300 than 250,000 as determined by the 1990 decennial census by the Bureau of
301 Census (40 CFR Part 122 Appendix G (2000));

302 2. Located in the counties listed in 40 CFR Part 122 Appendix I (2000), except
303 municipal separate storm sewers that are located in the incorporated places,
304 townships or towns within such counties;

305 3. Owned or operated by a municipality other than those described in subdivision
306 1 or 2 of this definition and that are designated by the board as part of the large
307 or medium municipal separate storm sewer system due to the interrelationship
308 between the discharges of the designated storm sewer and the discharges from
309 municipal separate storm sewers described under subdivision 1 or 2 of this
310 definition. In making this determination the board may consider the following
311 factors:

312 a. Physical interconnections between the municipal separate storm sewers;

313 b. The location of discharges from the designated municipal separate storm
314 sewer relative to discharges from municipal separate storm sewers described
315 in subdivision 1 of this definition;

316 c. The quantity and nature of pollutants discharged to surface waters;

317 d. The nature of the receiving surface waters; or

318 e. Other relevant factors.

319 4. The board may, upon petition, designate as a medium municipal separate
320 storm sewer system, municipal separate storm sewers located within the
321 boundaries of a region defined by a stormwater management regional authority
322 based on a jurisdictional, watershed, or other appropriate basis that includes one
323 or more of the systems described in subdivisions 1, 2 and 3 of this definition.

324 "Minor modification" means, for the purposes of this chapter, minor modification or
325 amendment of an existing permit before its expiration for the reasons listed at 40 CFR
326 122.63 and as specified in 4VAC50-60-640. Minor modification for the purposes of this
327 chapter also means other modifications and amendments not requiring extensive review
328 and evaluation including, but not limited to, changes in EPA promulgated test protocols,

329 increasing monitoring frequency requirements, changes in sampling locations, and
330 changes to compliance dates within the overall compliance schedules. A minor permit
331 modification or amendment does not substantially alter permit conditions, substantially
332 increase or decrease the amount of surface water impacts, increase the size of the
333 operation, or reduce the capacity of the facility to protect human health or the
334 environment.

335 "Municipal separate storm sewer" means a conveyance or system of conveyances
336 otherwise known as a municipal separate storm sewer system, including roads with
337 drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade
338 channels, or storm drains:

- 339 1. Owned or operated by a federal, state, city, town, county, district, association,
340 or other public body, created by or pursuant to state law, having jurisdiction or
341 delegated authority for erosion and sediment control and stormwater
342 management, or a designated and approved management agency under § 208
343 of the CWA that discharges to surface waters;
- 344 2. Designed or used for collecting or conveying stormwater;
- 345 3. That is not a combined sewer; and
- 346 4. That is not part of a publicly owned treatment works.

347 "Municipal separate storm sewer system" or "MS4" means all separate storm sewers
348 that are defined as "large" or "medium" or "small" municipal separate storm sewer
349 systems or designated under 4VAC50-60-380 A 1.

350 "Municipal Separate Storm Sewer System Management Program" or "MS4 Program"
351 means a management program covering the duration of a permit for a municipal
352 separate storm sewer system that includes a comprehensive planning process that
353 involves public participation and intergovernmental coordination, to reduce the discharge
354 of pollutants to the maximum extent practicable, to protect water quality, and to satisfy
355 the appropriate water quality requirements of the CWA and regulations and the Virginia
356 Stormwater Management Act and attendant regulations, using management practices,
357 control techniques, and system, design and engineering methods, and such other
358 provisions that are appropriate.

359 "Municipality" means a city, town, county, district, association, or other public body
360 created by or under state law and having jurisdiction over disposal of sewage, industrial
361 wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or
362 a designated and approved management agency under § 208 of the CWA.

363 "National Pollutant Discharge Elimination System (~~NPDES~~)" or "NPDES" means the
364 national program for issuing, modifying, revoking and reissuing, terminating, monitoring
365 and enforcing permits, and imposing and enforcing pretreatment requirements under §§
366 307, 402, 318, and 405 of the CWA. The term includes an approved program.

367 "Natural channel design concepts" means the utilization of engineering analysis and
368 fluvial geomorphic processes to create, rehabilitate, restore, or stabilize an open
369 conveyance system for the purpose of creating or recreating a stream that conveys its
370 bankfull storm event within its banks and allows larger flows to access its floodplain.

371 "Natural stormwater conveyance system" means the main channel of a natural
372 stream, in combination with the floodway and flood fringe, which compose the floodplain.

373 "Natural stream" means a tidal or nontidal watercourse that is part of the natural
374 topography. It usually maintains a continuous or seasonal flow during the year and is
375 characterized as being irregular in cross-section with a meandering course. Constructed
376 channels such as drainage ditches or swales shall not be considered natural streams ;

377 however, channels designed utilizing natural channel design concepts may be
378 considered natural streams.

379 "New discharger" means any building, structure, facility, or installation:

- 380 1. From which there is or may be a discharge of pollutants;
- 381 2. That did not commence the discharge of pollutants at a particular site prior to
382 August 13, 1979;
- 383 3. Which is not a new source; and
- 384 4. Which has never received a finally effective VPDES or VSMP permit for
385 discharges at that site.

386 This definition includes an indirect discharger that commences discharging into
387 surface waters after August 13, 1979. It also includes any existing mobile point source
388 (other than an offshore or coastal oil and gas exploratory drilling rig or a coastal oil and
389 gas developmental drilling rig) such as a seafood processing rig, seafood processing
390 vessel, or aggregate plant, that begins discharging at a site for which it does not have a
391 permit; and any offshore or coastal mobile oil and gas exploratory drilling rig or coastal
392 mobile oil and gas developmental drilling rig that commences the discharge of pollutants
393 after August 13, 1979.

394 "New permit" means, for the purposes of this chapter, a permit issued by the permit-
395 issuing authority to a permit applicant that does not currently hold and has never held a
396 permit of that type, for that activity, at that location.

397 "New source," means any building, structure, facility, or installation from which there
398 is or may be a discharge of pollutants, the construction of which commenced:

- 399 1. After promulgation of standards of performance under § 306 of the CWA that
400 are applicable to such source; or
- 401 2. After proposal of standards of performance in accordance with § 306 of the
402 CWA that are applicable to such source, but only if the standards are
403 promulgated in accordance with § 306 of the CWA within 120 days of their
404 proposal.

405 "Nonpoint source pollution" means pollution such as sediment, nitrogen and
406 phosphorous, hydrocarbons, heavy metals, and toxics whose sources cannot be
407 pinpointed but rather are washed from the land surface in a diffuse manner by
408 stormwater runoff.

409 ~~"Nonpoint source pollutant runoff load" or "pollutant discharge" means the average~~
410 ~~amount of a particular pollutant measured in pounds per year, delivered in a diffuse~~
411 ~~manner by stormwater runoff.~~

412 "Operator" means the owner or operator of any facility or activity subject to the
413 VSMP permit regulation. In the context of stormwater associated with a large or small
414 construction activity, operator means any person associated with a construction project
415 that meets either of the following two criteria: (i) the person has direct operational control
416 over construction plans and specifications, including the ability to make modifications to
417 those plans and specifications or (ii) the person has day-to-day operational control of
418 those activities at a project that are necessary to ensure compliance with a stormwater
419 pollution prevention plan for the site or other permit conditions (i.e., they are authorized
420 to direct workers at a site to carry out activities required by the stormwater pollution
421 prevention plan or comply with other permit conditions). In the context of stormwater
422 discharges from Municipal Separate Storm Sewer Systems (MS4s), operator means the
423 operator of the regulated MS4 system.

424 "Outfall" means, when used in reference to municipal separate storm sewers, a point
425 source at the point where a municipal separate storm sewer discharges to surface
426 waters and does not include open conveyances connecting two municipal separate
427 storm sewers, or pipes, tunnels or other conveyances which connect segments of the
428 same stream or other surface waters and are used to convey surface waters.

429 "Overburden" means any material of any nature, consolidated or unconsolidated,
430 that overlies a mineral deposit, excluding topsoil or similar naturally occurring surface
431 materials that are not disturbed by mining operations.

432 "Owner" means the Commonwealth or any of its political subdivisions including, but
433 not limited to, sanitation district commissions and authorities, and any public or private
434 institution, corporation, association, firm or company organized or existing under the
435 laws of this or any other state or country, or any officer or agency of the United States, or
436 any person or group of persons acting individually or as a group that owns, operates,
437 charters, rents, or otherwise exercises control over or is responsible for any actual or
438 potential discharge of sewage, industrial wastes, or other wastes or pollutants to state
439 waters, or any facility or operation that has the capability to alter the physical, chemical,
440 or biological properties of state waters in contravention of § 62.1-44.5 of the Code of
441 Virginia, the Act and this chapter.

442 "Peak flow rate" means the maximum instantaneous flow from a prescribed design
443 storm at a particular location.

444 "Percent impervious" means the impervious area within the site divided by the area
445 of the site multiplied by 100.

446 "Permit" means an approval issued by the permit-issuing authority for the initiation of
447 a land-disturbing activity or for stormwater discharges from an MS4. Permit does not
448 include any permit that has not yet been the subject of final permit-issuing authority
449 action, such as a draft permit or a proposed permit.

450 "Permit-issuing authority" means the board, the department, or a locality ~~that is~~
451 ~~delegated authority by the board to issue, deny, revoke, terminate, or amend stormwater~~
452 ~~permits under the provisions of the Act and this chapter~~ with a qualifying local program.

453 "Permittee" means the person or locality to which the permit is issued, including any
454 owner or operator whose construction site is covered under a construction general
455 permit.

456 "Person" means any individual, corporation, partnership, association, state,
457 municipality, commission, or political subdivision of a state, governmental body
458 (including but not limited to a federal, state, or local entity), any interstate body or any
459 other legal entity.

460 "Planning area" means a designated portion of the parcel on which the land
461 development project is located. Planning areas shall be established by delineation on a
462 master plan. Once established, planning areas shall be applied consistently for all future
463 projects.

464 "Point of discharge" means a location at which concentrated stormwater runoff is
465 released.

466 "Point source" means any discernible, confined, and discrete conveyance including,
467 but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure,
468 container, rolling stock, concentrated animal feeding operation, landfill leachate
469 collection system, vessel, or other floating craft from which pollutants are or may be
470 discharged. This term does not include return flows from irrigated agriculture or
471 agricultural stormwater runoff.

472 "Pollutant" means dredged spoil, solid waste, incinerator residue, filter backwash,
473 sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials,
474 radioactive materials (except those regulated under the Atomic Energy Act of 1954, as
475 amended (42 USC § 2011 et seq.)), heat, wrecked or discarded equipment, rock, sand,
476 cellar dirt and industrial, municipal, and agricultural waste discharged into water. It does
477 not mean:

- 478 1. Sewage from vessels; or
479 2. Water, gas, or other material that is injected into a well to facilitate production
480 of oil or gas, or water derived in association with oil and gas production and
481 disposed of in a well if the well used either to facilitate production or for disposal
482 purposes is approved by the board and if the board determines that the injection
483 or disposal will not result in the degradation of ground or surface water
484 resources.

485 "Pollutant discharge" means the average amount of a particular pollutant measured
486 in pounds per year or other standard reportable unit as appropriate, delivered in a diffuse
487 manner by stormwater runoff.

488 "Pollution" means such alteration of the physical, chemical or biological properties of
489 any state waters as will or is likely to create a nuisance or render such waters (a)
490 harmful or detrimental or injurious to the public health, safety or welfare, or to the health
491 of animals, fish or aquatic life; (b) unsuitable with reasonable treatment for use as
492 present or possible future sources of public water supply; or (c) unsuitable for
493 recreational, commercial, industrial, agricultural, or other reasonable uses, provided that
494 (i) an alteration of the physical, chemical, or biological property of state waters, or a
495 discharge or deposit of sewage, industrial wastes or other wastes to state waters by any
496 owner which by itself is not sufficient to cause pollution, but which, in combination with
497 such alteration of or discharge or deposit to state waters by other owners, is sufficient to
498 cause pollution; (ii) the discharge of untreated sewage by any owner into state waters;
499 and (iii) contributing to the contravention of standards of water quality duly established
500 by the State Water Control Board, are "pollution" for the terms and purposes of this
501 chapter.

502 ~~"Post-development"~~ "Postdevelopment" refers to conditions that reasonably may be
503 expected or anticipated to exist after completion of the land development activity on a
504 specific site or tract of land.

505 ~~"Pre-development"~~ "Predevelopment" refers to the conditions that exist at the time
506 that plans for the land development of a tract of land are ~~approved by~~ submitted to the
507 plan approval authority. Where phased development or plan approval occurs
508 (preliminary grading, demolition of existing structures, roads and utilities, etc.), the
509 existing conditions at the time prior to the first item being ~~approved or~~
510 ~~permitted~~ submitted shall establish ~~pre-development~~ predevelopment conditions.

511 "Prior developed lands" means land that has been previously utilized for residential,
512 commercial, industrial, institutional, recreation, transportation or utility facilities or
513 structures, and that will have the impervious areas associated with those uses altered
514 during a land-disturbing activity.

515 "Privately owned treatment works (~~PVOTW~~)" or "PVOTW" means any device or
516 system that is (i) used to treat wastes from any facility whose operator is not the operator
517 of the treatment works and (ii) not a POTW.

518 "Proposed permit" means a VSMP permit prepared after the close of the public
519 comment period (and, when applicable, any public hearing and administrative appeals)

520 that is sent to EPA for review before final issuance. A proposed permit is not a draft
521 permit.

522 "Publicly owned treatment works (~~POTW~~) or "POTW" means a treatment works as
523 defined by § 212 of the CWA that is owned by a state or municipality (as defined by §
524 502(4) of the CWA). This definition includes any devices and systems used in the
525 storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes
526 of a liquid nature. It also includes sewers, pipes, and other conveyances only if they
527 convey wastewater to a POTW treatment plant. The term also means the municipality as
528 defined in § 502(4) of the CWA, that has jurisdiction over the indirect discharges to and
529 the discharges from such a treatment works.

530 "Qualified personnel" means a licensed professional engineer, responsible land
531 disturber, or other person who holds a certificate of competency from the board in the
532 area of project inspection or combined administrator.

533 "Qualifying local stormwater management program" or "qualifying local program"
534 means a local program that is administered by a locality that has been authorized by the
535 board to issue coverage under the VSMP General Permit for Discharges of Stormwater
536 from Construction Activities (4VAC50-60-1170).

537 "Recommencing discharger" means a source that recommences discharge after
538 terminating operations.

539 "Regional administrator" means the Regional Administrator of Region III of the
540 Environmental Protection Agency or the authorized representative of the regional
541 administrator.

542 ~~"Regional (watershed-wide) stormwater management facility" or "regional facility"~~
543 ~~means a facility or series of facilities designed to control stormwater runoff from a~~
544 ~~specific watershed, although only portions of the watershed may experience land~~
545 ~~development.~~

546 ~~"Regional (watershed-wide) stormwater management plan" or "regional plan" means~~
547 ~~a document containing material describing how runoff from open space, existing~~
548 ~~development and future planned development areas within a watershed will be~~
549 ~~controlled by coordinated design and implementation of regional stormwater~~
550 ~~management facilities.~~

551 "Restored stormwater conveyance system" means a stormwater conveyance system
552 that has been designed and constructed using natural channel design concepts,
553 including the main channel, floodway, and flood fringe.

554 "Revoked permit" means, for the purposes of this chapter, an existing permit that is
555 terminated by the board before its expiration.

556 "Runoff coefficient" means the fraction of total rainfall that will appear at a
557 conveyance as runoff.

558 "Runoff" or "stormwater runoff" means that portion of precipitation that is discharged
559 across the land surface or through conveyances to one or more waterways.

560 ~~"Sand filter" means a contained bed of sand that acts to filter the first flush of runoff.~~
561 ~~The runoff is then collected beneath the sand bed and conveyed to an adequate~~
562 ~~discharge point or infiltrated into the in-situ soils.~~

563 "Runoff characteristics" include , but are not limited to, velocity, peak flow rate,
564 volume, time of concentration, and flow duration, and their influence on channel
565 morphology including sinuosity, channel cross-sectional area, and channel slope.

566 "Runoff volume" means the volume of water that runs off the site of a land-disturbing
567 activity from a prescribed design storm.

568 "Schedule of compliance" means a schedule of remedial measures included in a
569 permit, including an enforceable sequence of interim requirements (for example, actions,
570 operations, or milestone events) leading to compliance with the Act, the CWA and
571 regulations.

572 "Secretary" means the Secretary of the Army, acting through the Chief of Engineers.

573 "Severe property damage" means substantial physical damage to property, damage
574 to the treatment facilities that causes them to become inoperable, or substantial and
575 permanent loss of natural resources that can reasonably be expected to occur in the
576 absence of a bypass. Severe property damage does not mean economic loss caused by
577 delays in production.

578 ~~"Shallow marsh" means a zone within a stormwater extended detention basin that~~
579 ~~exists from the surface of the normal pool to a depth of six to 18 inches, and has a large~~
580 ~~surface area and, therefore, requires a reliable source of baseflow, groundwater supply,~~
581 ~~or a sizeable drainage area, to maintain the desired water surface elevations to support~~
582 ~~emergent vegetation.~~

583 "Significant materials" means, but is not limited to: raw materials; fuels; materials
584 such as solvents, detergents, and plastic pellets; finished materials such as metallic
585 products; raw materials used in food processing or production; hazardous substances
586 designated under § 101(14) of CERCLA (42 USC § 9601(14)); any chemical the facility
587 is required to report pursuant to § 313 of Title III of SARA (42 USC § 11023); fertilizers;
588 pesticides; and waste products such as ashes, slag and sludge that have the potential to
589 be released with stormwater discharges.

590 "Single jurisdiction" means, for the purposes of this chapter, a single county or city.
591 The term county includes incorporated towns which are part of the county.

592 "Site" means the land or water area where any facility or activity is physically located
593 or conducted, a parcel of land being developed, or a designated ~~planning~~ area of a
594 parcel in which the land development project is located. Areas channelward of mean low
595 water in tidal Virginia shall not be considered part of a site.

596 "Site hydrology" means the movement of water on, across, through and off the site
597 as determined by parameters including, but not limited to, soil types, soil permeability,
598 vegetative cover, seasonal water tables, slopes, land cover, and impervious cover.

599 "Small construction activity" means:

600 1. Construction activities including clearing, grading, and excavating that results
601 in land disturbance of equal to or greater than one acre, or equal to or greater
602 than 2,500 square feet in all areas of the jurisdictions designated as subject to
603 the Chesapeake Bay Preservation Area Designation and Management
604 Regulations adopted pursuant to the Chesapeake Bay Preservation Act, and less
605 than five acres. Small construction activity also includes the disturbance of less
606 than one acre of total land area that is part of a larger common plan of
607 development or sale if the larger common plan will ultimately disturb equal to or
608 greater than one and less than five acres. Small construction activity does not
609 include routine maintenance that is performed to maintain the original line and
610 grade, hydraulic capacity, or original purpose of the facility. The board may waive
611 the otherwise applicable requirements in a general permit for a stormwater
612 discharge from construction activities that disturb less than five acres where
613 stormwater controls are not needed based on a "total maximum daily load"

614 (TMDL) approved or established by EPA that addresses the pollutant(s) of
615 concern or, for nonimpaired waters that do not require TMDLs, an equivalent
616 analysis that determines allocations for small construction sites for the
617 pollutant(s) of concern or that determines that such allocations are not needed to
618 protect water quality based on consideration of existing in-stream concentrations,
619 expected growth in pollutant contributions from all sources, and a margin of
620 safety. For the purpose of this subdivision, the pollutant(s) of concern include
621 sediment or a parameter that addresses sediment (such as total suspended
622 solids, turbidity or siltation) and any other pollutant that has been identified as a
623 cause of impairment of any water body that will receive a discharge from the
624 construction activity. The operator must certify to the board that the construction
625 activity will take place, and stormwater discharges will occur, within the drainage
626 area addressed by the TMDL or equivalent analysis.

627 2. Any other construction activity designated by the either the board or the EPA
628 regional administrator, based on the potential for contribution to a violation of a
629 water quality standard or for significant contribution of pollutants to surface
630 waters.

631 "Small municipal separate storm sewer system" or "small MS4" means all separate
632 storm sewers that are (i) owned or operated by the United States, a state, city, town,
633 borough, county, parish, district, association, or other public body (created by or
634 pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes,
635 stormwater, or other wastes, including special districts under state law such as a sewer
636 district, flood control district or drainage district, or similar entity, or an Indian tribe or an
637 authorized Indian tribal organization, or a designated and approved management
638 agency under § 208 of the CWA that discharges to surface waters and (ii) not defined as
639 "large" or "medium" municipal separate storm sewer systems or designated under
640 4VAC50-60-380 A 1. This term includes systems similar to separate storm sewer
641 systems in municipalities, such as systems at military bases, large hospital or prison
642 complexes, and highway and other thoroughfares. The term does not include separate
643 storm sewers in very discrete areas, such as individual buildings.

644 "Source" means any building, structure, facility, or installation from which there is or
645 may be a discharge of pollutants.

646 "Stable" means, in the context of channels, a channel that has developed an
647 established dimension, pattern, and profile such that over time, these features are
648 maintained.

649 "State" means the Commonwealth of Virginia.

650 "State/EPA agreement" means an agreement between the regional administrator
651 and the state that coordinates EPA and state activities, responsibilities and programs
652 including those under the CWA and the Act.

653 "State project" means any land development project that is undertaken by any state
654 agency, board, commission, authority or any branch of state government, including
655 state-supported institutions of higher learning.

656 "State Water Control Law" means Chapter 3.1 (§ 62.1-44.2 et seq.) of Title 62.1 of
657 the Code of Virginia.

658 "State waters" means all water, on the surface and under the ground, wholly or
659 partially within or bordering the Commonwealth or within its jurisdiction, including
660 wetlands.

661 "Stormwater" means precipitation that is discharged across the land surface or
662 through conveyances to one or more waterways and that may include stormwater runoff,
663 snow melt runoff, and surface runoff and drainage.

664 "Stormwater conveyance system" means any of the following, either within or
665 downstream of the land-disturbing activity: (i) a manmade stormwater conveyance
666 system, (ii) a natural stormwater conveyance system, or (iii) a restored stormwater
667 conveyance system.

668 ~~"Stormwater detention basin" or "detention basin" means a stormwater management~~
669 ~~facility that temporarily impounds runoff and discharges it through a hydraulic outlet~~
670 ~~structure to a downstream conveyance system. While a certain amount of outflow may~~
671 ~~also occur via infiltration through the surrounding soil, such amounts are negligible when~~
672 ~~compared to the outlet structure discharge rates and are, therefore, not considered in~~
673 ~~the facility's design. Since a detention facility impounds runoff only temporarily, it is~~
674 ~~normally dry during nonrainfall periods.~~

675 "Stormwater discharge associated with construction activity" means a discharge of
676 pollutants in stormwater runoff from areas where land-disturbing activities (e.g., clearing,
677 grading, or excavation); construction materials or equipment storage or maintenance
678 (e.g., fill piles, borrow area, concrete truck washout, fueling); or other industrial
679 stormwater directly related to the construction process (e.g., concrete or asphalt batch
680 plants) are located.

681 "Stormwater discharge associated with large construction activity" means the
682 discharge of stormwater from large construction activities.

683 "Stormwater discharge associated with small construction activity" means the
684 discharge of stormwater from small construction activities.

685 ~~"Stormwater extended detention basin" or "extended detention basin" means a~~
686 ~~stormwater management facility that temporarily impounds runoff and discharges it~~
687 ~~through a hydraulic outlet structure over a specified period of time to a downstream~~
688 ~~conveyance system for the purpose of water quality enhancement or stream channel~~
689 ~~erosion control. While a certain amount of outflow may also occur via infiltration through~~
690 ~~the surrounding soil, such amounts are negligible when compared to the outlet structure~~
691 ~~discharge rates and, therefore, are not considered in the facility's design. Since an~~
692 ~~extended detention basin impounds runoff only temporarily, it is normally dry during~~
693 ~~nonrainfall periods.~~

694 ~~"Stormwater extended detention basin-enhanced" or "extended detention basin-~~
695 ~~enhanced" means an extended detention basin modified to increase pollutant removal~~
696 ~~by providing a shallow marsh in the lower stage of the basin.~~

697 "Stormwater management facility" means a device that controls stormwater runoff
698 and changes the characteristics of that runoff including, but not limited to, the quantity
699 and quality, the period of release or the velocity of flow.

700 "Stormwater management plan" means a document(s) containing material for
701 describing how existing runoff characteristics will be maintained by a land-disturbing
702 activity and methods for complying with the requirements of the local program or this
703 chapter.

704 "Stormwater Management Program" means a program established by a locality that
705 is consistent with the requirements of the ~~Virginia Stormwater Management Act~~, this
706 chapter and associated guidance documents.

707 "Stormwater management standards" means the minimum criteria for stormwater
708 management programs and land-disturbing activities as set out in Part II (4VAC50-60-40
709 et seq.) of this chapter.

710 "Stormwater Pollution Prevention Plan" or "SWPPP" means a document that is
711 prepared in accordance with good engineering practices and that identifies potential
712 sources of pollutants that may reasonably be expected to affect the quality of stormwater
713 discharges from the construction site or its associated land-disturbing activities. In
714 addition the document shall identify and require the implementation of control measures,
715 and shall include, but not be limited to the inclusion of, or the incorporation by reference
716 of, an erosion and sediment control plan, a post-construction stormwater management
717 plan, a spill prevention control and countermeasure (SPCC) plan, and other practices
718 that will be used to minimize pollutants in stormwater discharges from land-disturbing
719 activities in compliance with the terms and conditions of this chapter. All plans
720 incorporated by reference into the SWPPP shall be enforceable under the permit issued
721 or general permit coverage authorized.

722 ~~"Stormwater retention basin" or "retention basin" means a stormwater management~~
723 ~~facility that includes a permanent impoundment, or normal pool of water, for the purpose~~
724 ~~of enhancing water quality and, therefore, is normally wet, even during nonrainfall~~
725 ~~periods. Storm runoff inflows may be temporarily stored above this permanent~~
726 ~~impoundment for the purpose of reducing flooding, or stream channel erosion.~~

727 ~~"Stormwater retention basin I" or "retention basin I" means a retention basin with the~~
728 ~~volume of the permanent pool equal to three times the water quality volume.~~

729 ~~"Stormwater retention basin II" or "retention basin II" means a retention basin with~~
730 ~~the volume of the permanent pool equal to four times the water quality volume.~~

731 ~~"Stormwater retention basin III" or "retention basin III" means a retention basin with~~
732 ~~the volume of the permanent pool equal to four times the water quality volume with the~~
733 ~~addition of an aquatic bench.~~

734 "Subdivision" means the same as defined in § 15.2-2201 of the Code of Virginia.

735 "Surface waters" means:

736 1. All waters that are currently used, were used in the past, or may be
737 susceptible to use in interstate or foreign commerce, including all waters that are
738 subject to the ebb and flow of the tide;

739 2. All interstate waters, including interstate wetlands;

740 3. All other waters such as intrastate lakes, rivers, streams (including intermittent
741 streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows,
742 playa lakes, or natural ponds the use, degradation, or destruction of which would
743 affect or could affect interstate or foreign commerce including any such waters:

744 a. That are or could be used by interstate or foreign travelers for recreational
745 or other purposes;

746 b. From which fish or shellfish are or could be taken and sold in interstate or
747 foreign commerce; or

748 c. That are used or could be used for industrial purposes by industries in
749 interstate commerce.

750 4. All impoundments of waters otherwise defined as surface waters under this
751 definition;

752 5. Tributaries of waters identified in subdivisions 1 through 4 of this definition;

753 6. The territorial sea; and

754 7. Wetlands adjacent to waters (other than waters that are themselves wetlands)
755 identified in subdivisions 1 through 6 of this definition.

756 Waste treatment systems, including treatment ponds or lagoons designed to meet
757 the requirements of the CWA and the law, are not surface waters. Surface waters do not
758 include prior converted cropland. Notwithstanding the determination of an area's status
759 as prior converted cropland by any other agency, for the purposes of the Clean Water
760 Act, the final authority regarding the Clean Water Act jurisdiction remains with the EPA.

761 "Total dissolved solids" means the total dissolved (filterable) solids as determined by
762 use of the method specified in 40 CFR Part 136 (2000).

763 "Total maximum daily load" or "TMDL" means the sum of the individual wasteload
764 allocations for point sources, load allocations (LAs) for nonpoint sources, natural
765 background loading and a margin of safety. TMDLs can be expressed in terms of either
766 mass per time, toxicity, or other appropriate measure. The TMDL process provides for
767 point versus nonpoint source trade-offs.

768 "Toxic pollutant" means any pollutant listed as toxic under § 307(a)(1) of the CWA or,
769 in the case of sludge use or disposal practices, any pollutant identified in regulations
770 implementing § 405(d) of the CWA.

771 "Unstable" means, in the context of channels, a channel that is not stable.

772 "Upset" means an exceptional incident in which there is unintentional and temporary
773 noncompliance with technology based permit effluent limitations because of factors
774 beyond the reasonable control of the operator. An upset does not include
775 noncompliance to the extent caused by operational error, improperly designed treatment
776 facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or
777 improper operation.

778 "Urban development area" or "UDA" means, as defined by § 15.2-2223.1 of the
779 Code of Virginia, an area designated by a locality that is appropriate for higher density
780 development due to proximity to transportation facilities, the availability of a public or
781 community water and sewer system, or proximity to a city, town, or other developed
782 area.

783 "Variance" means any mechanism or provision under § 301 or § 316 of the CWA or
784 under 40 CFR Part 125 (2000), or in the applicable federal effluent limitations guidelines
785 that allows modification to or waiver of the generally applicable effluent limitation
786 requirements or time deadlines of the CWA. This includes provisions that allow the
787 establishment of alternative limitations based on fundamentally different factors or on §
788 301(c), § 301(g), § 301(h), § 301(i), or § 316(a) of the CWA.

789 ~~"Vegetated filter strip" means a densely vegetated section of land engineered to~~
790 ~~accept runoff as overland sheet flow from upstream development. It shall adopt any~~
791 ~~natural vegetated form, from grassy meadow to small forest. The vegetative cover~~
792 ~~facilitates pollutant removal through filtration, sediment deposition, infiltration and~~
793 ~~absorption, and is dedicated for that purpose.~~

794 "Virginia Pollutant Discharge Elimination System (VPDES) permit" or "VPDES
795 permit" means a document issued by the State Water Control Board pursuant to the
796 State Water Control Law authorizing, under prescribed conditions, the potential or actual
797 discharge of pollutants from a point source to surface waters and the use or disposal of
798 sewage sludge.

799 "Virginia Stormwater Management Act" means Article 1.1 (§ 10.1-603.1 et seq.) of
800 Chapter 6 of Title 10.1 of the Code of Virginia.

801 "Virginia Stormwater BMP Clearinghouse website" means a website that contains
802 detailed design standards and specifications for control measures that may be used in
803 Virginia to comply with the requirements of the Virginia Stormwater Management Act
804 and associated regulations and that is jointly created by the department and the Virginia
805 Water Resources Research Center subject to advice to the director from a permanent
806 stakeholder advisory committee.

807 "Virginia Stormwater Management Handbook" means a collection of pertinent
808 information that provides general guidance for compliance with the Act and associated
809 regulations and is developed by the department with advice from a stakeholder advisory
810 committee.

811 "Virginia Stormwater Management Program (~~VSMP~~)" or "VSMP" means the Virginia
812 program for issuing, modifying, revoking and reissuing, terminating, monitoring and
813 enforcing permits, and imposing and enforcing requirements pursuant to the ~~federal~~
814 ~~Clean Water Act CWA~~, the ~~Virginia Stormwater Management Act~~, this chapter, and
815 associated guidance documents.

816 "Virginia Stormwater Management Program (~~VSMP~~) permit" or "VSMP permit"
817 means a document issued by the permit-issuing authority pursuant to the Virginia
818 Stormwater Management Act and this chapter authorizing, under prescribed conditions,
819 the potential or actual discharge of pollutants from a point source to surface waters.
820 Under the approved state program, a VSMP permit is equivalent to a NPDES permit.

821 "VSMP application" or "application" means the standard form or forms, including any
822 additions, revisions or modifications to the forms, approved by the administrator and the
823 board for applying for a VSMP permit.

824 "Wasteload allocation" or "wasteload" or "WLA" means the portion of a receiving
825 surface water's loading or assimilative capacity allocated to one of its existing or future
826 point sources of pollution. WLAs are a type of water quality-based effluent limitation.

827 "Water quality standards" or "WQS" means provisions of state or federal law that
828 consist of a designated use or uses for the waters of the Commonwealth and water
829 quality criteria for such waters based on such uses. Water quality standards are to
830 protect the public health or welfare, enhance the quality of water, and serve the
831 purposes of the State Water Control Law (§ 62.1-44.2 et seq. of the Code of Virginia),
832 the ~~Virginia Stormwater Management Act~~ (§ 10.1-603.1 et seq. of the Code of Virginia),
833 and the ~~federal Clean Water Act CWA~~ (33 USC § 1251 et seq.).

834 ~~"Water quality volume" means the volume equal to the first 1/2 inch of runoff~~
835 ~~multiplied by the impervious surface of the land development project.~~

836 "Watershed" means a defined land area drained by a river or stream, karst system,
837 or system of connecting rivers or streams such that all surface water within the area
838 flows through a single outlet. In karst areas, the karst feature to which the water drains
839 may be considered the single outlet for the watershed.

840 "Wetlands" means those areas that are inundated or saturated by surface or
841 groundwater at a frequency and duration sufficient to support, and that under normal
842 circumstances do support, a prevalence of vegetation typically adapted for life in
843 saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and
844 similar areas.

845 "Whole effluent toxicity" means the aggregate toxic effect of an effluent measured
846 directly by a toxicity test.

847 **4VAC50-60-20. Purposes.**

848 The purposes of this chapter are to provide a framework for the administration,
849 implementation and enforcement of the Virginia Stormwater Management Act (Act) and
850 to delineate the procedures and requirements to be followed in connection with VSMP
851 permits issued by the board or its designee pursuant to the Clean Water Act (CWA) and
852 the Virginia Stormwater Management Act, while at the same time providing flexibility for
853 innovative solutions to stormwater management issues. The chapter also establishes the
854 board's procedures for the authorization of a qualifying local program, board and
855 department oversight authorities for an authorized qualifying local program, the board's
856 procedures for utilization by the department in administering a local program in localities
857 where no qualifying local program is authorized, and the components of a stormwater
858 management program including but not limited to stormwater management standards.

859 **4VAC50-60-30. Applicability.**

860 This chapter is applicable to:

- 861 1. Every private, local, state, or federal entity that establishes a stormwater
862 management program or a MS4 program;
- 863 2. The department in its oversight of locally administered programs or in its
864 administration of a local program;
- 865 ~~2.~~ 3. Every state agency project regulated under the Act and this chapter; and
- 866 ~~3.~~ 4. Every land-disturbing activity regulated under § 10.1-603.8 of the Code of
867 Virginia unless otherwise exempted in § 10.1-603.8 B.

868 Part II A
869 Stormwater Management Program Technical Criteria

870 **4VAC50-60-40. ~~Applicability~~ Authority and applicability.**

871 This part specifies technical criteria for every stormwater management program and
872 land-disturbing activity.

873 Pursuant to the Virginia Stormwater Management Act (§ 10.1-603.2 et seq. of the
874 Code of Virginia), the board is required to take actions ensuring the general health,
875 safety, and welfare of the citizens of the Commonwealth as well as protecting the quality
876 and quantity of state waters from the potential harm of unmanaged stormwater. In
877 addition to other authority granted to the board under the Stormwater Management Act,
878 the board is authorized pursuant to §§ 10.1-603.2:1 and 10.1-603.4 to adopt regulations
879 that specify minimum technical criteria for stormwater management programs in Virginia,
880 to establish statewide standards for stormwater management from land-disturbing
881 activities, and to protect properties, the quality and quantity of state waters, the physical
882 integrity of stream channels, and other natural resources.

883 ~~In accordance with the board's authority, this part establishes the minimum technical~~
884 ~~criteria and stormwater management standards that shall be employed by a state~~
885 ~~agency in accordance with an implementation schedule set by the board, or by a~~
886 ~~qualifying local program or department-administered local stormwater management~~
887 ~~program that has been approved by the board, to protect the quality and quantity of state~~
888 ~~waters from the potential harm of unmanaged stormwater runoff resulting from land-~~
889 ~~disturbing activities.~~

890 ~~For those localities required to adopt a local stormwater management program~~
891 ~~pursuant to § 10.1-603.3 of the Code of Virginia, until a local program is approved by the~~
892 ~~board, the technical criteria required shall be that found at 4VAC50-60-1180 through~~
893 ~~4VAC50-60-1190.~~

894 **4VAC50-60-45. Applicability.**

895 In accordance with the board's authority, this part establishes the minimum technical
896 criteria and stormwater management standards that shall be employed by a state
897 agency in accordance with an implementation schedule set by the board, or by a
898 qualifying local program or department-administered local stormwater management
899 program that has been approved by the board, to protect the quality and quantity of state
900 waters from the potential harm of unmanaged stormwater runoff resulting from land-
901 disturbing activities, except as provided in 4VAC50-60-48.

902 **4VAC50-60-48. Grandfathering.**

903 A. Land-disturbing activities that receive coverage under the VSMP General Permit
904 for Discharges of Stormwater from Construction Activities prior to the adoption of a local
905 stormwater management program within their jurisdiction shall not be subject to the
906 technical criteria of Part II A, but shall be subject to the technical criteria of Part II B, until
907 the expiration of that permit on June 30, 2014.

908 B. If the operator of a project, as of July 1, 2010, (i) obtained or is the beneficiary of a
909 significant affirmative governmental act that remains in effect allowing development of a
910 specific project, (ii) relied in good faith on the significant affirmative governmental act, (iii)
911 incurred extensive obligations or substantial expenses in diligent pursuit of the specific
912 project in reliance on the significant affirmative governmental act, and (iv) obtained
913 VSMP general permit coverage prior to July 1, 2010, then the land-disturbing activity
914 associated with the project is grandfathered and shall remain subject to the Part II B
915 Technical Criteria until June 30, 2014. If permit coverage continuously remains in effect
916 for the land-disturbing activity within the entire project area, then the project shall remain
917 subject to the Part II B Technical Criteria until June 30, 2019. Should permit coverage
918 not be maintained or if the land-disturbing activity continues beyond June 30, 2019,
919 portions of the project not completed shall be subject to the Part II A Technical
920 Criteria. In the event that the qualifying significant affirmative governmental act or the
921 VSMP permit is subsequently modified or amended in a manner such that there is no
922 increase in the amount of phosphorus leaving the site through stormwater runoff, and
923 such that there is no increase in the volume or rate of runoff, the grandfathering shall
924 continue as before.

925 For purposes of this subsection and without limitation, the following are deemed to
926 be significant affirmative governmental acts allowing development of a specific project:
927 (i) the governing body has accepted proffers or proffered conditions that specify use
928 related to a zoning amendment; (ii) the governing body has approved an application for
929 a rezoning for a specific use or density; (iii) the governing body or board of zoning
930 appeals has granted a special exception or use permit with conditions; (iv) the board of
931 zoning appeals has approved a variance; (v) the governing body or its designated agent
932 has approved a preliminary subdivision plat, site plan, or plan of development for the
933 landowner's property and the applicant diligently pursues approval of the final plat or
934 plan within a reasonable period of time under the circumstances; or (vi) the governing
935 body or its designated agent has approved a final subdivision plat, site plan or plan of
936 development for the landowner's property. [For the purposes of this subsection and
937 without limitation, for state and federal projects, the approval of state or federal funding
938 for a project or the approval of a stormwater management plan are deemed to be
939 significant affirmative governmental acts.]

940 C. Where a land-disturbing activity is part of a common plan of development or sale
941 that has obtained VSMP general permit coverage from the department prior to July 1,
942 2010, the land-disturbing activity will be subject to the technical criteria of Part II B. The

943 registration statement shall include the permit coverage number for the common plan of
944 development or sale for which association is being claimed.

945 [D. In cases where governmental bonding or public financing has been issued for a
946 project prior to July 1, 2010, such project shall be subject to the technical criteria of Part
947 II.B.]

948 **4VAC50-60-50. General. (Repealed.)**

949 ~~A. Determination of flooding and channel erosion impacts to receiving streams due to~~
950 ~~land-disturbing activities shall be measured at each point of discharge from the land~~
951 ~~disturbance and such determination shall include any runoff from the balance of the~~
952 ~~watershed which also contributes to that point of discharge.~~

953 ~~B. The specified design storms shall be defined as either a 24-hour storm using the~~
954 ~~rainfall distribution recommended by the U.S. Department of Agriculture's Natural~~
955 ~~Resources Conservation Service (NRCS) when using NRCS methods or as the storm of~~
956 ~~critical duration that produces the greatest required storage volume at the site when~~
957 ~~using a design method such as the Modified Rational Method.~~

958 ~~C. For purposes of computing runoff, all pervious lands in the site shall be assumed~~
959 ~~prior to development to be in good condition (if the lands are pastures, lawns, or parks),~~
960 ~~with good cover (if the lands are woods), or with conservation treatment (if the lands are~~
961 ~~cultivated); regardless of conditions existing at the time of computation.~~

962 ~~D. Construction of stormwater management facilities or modifications to channels~~
963 ~~shall comply with all applicable laws and regulations. Evidence of approval of all~~
964 ~~necessary permits shall be presented.~~

965 ~~E. Impounding structures that are not covered by the Impounding Structure~~
966 ~~Regulations (4VAC50-20) shall be engineered for structural integrity during the 100-year~~
967 ~~storm event.~~

968 ~~F. Pre-development and post-development runoff rates shall be verified by~~
969 ~~calculations that are consistent with good engineering practices.~~

970 ~~G. Outflows from a stormwater management facility or stormwater conveyance~~
971 ~~system, shall be discharged to an adequate channel.~~

972 ~~H. Proposed residential, commercial, or industrial subdivisions shall apply these~~
973 ~~stormwater management criteria to the land disturbance as a whole. Individual lots in~~
974 ~~new subdivisions shall not be considered separate land-disturbing activities, but rather~~
975 ~~the entire subdivision shall be considered a single land development project. Hydrologic~~
976 ~~parameters shall reflect the ultimate land disturbance and shall be used in all~~
977 ~~engineering calculations.~~

978 ~~I. All stormwater management facilities shall have an inspection and maintenance~~
979 ~~plan that identifies the owner and the responsible party for carrying out the inspection~~
980 ~~and maintenance plan.~~

981 ~~J. Construction of stormwater management impoundment structures within a Federal~~
982 ~~Emergency Management Agency (FEMA) designated 100-year floodplain shall be~~
983 ~~avoided to the extent possible. When this is unavoidable, all stormwater management~~
984 ~~facility construction shall be in compliance with all applicable regulations under the~~
985 ~~National Flood Insurance Program, 44 CFR Part 59.~~

986 ~~K. Natural channel characteristics shall be preserved to the maximum extent~~
987 ~~practicable.~~

988 ~~L. Land-disturbing activities shall comply with the Virginia Erosion and Sediment~~
989 ~~Control Law (§ 10.1-560 et seq. of the Code of Virginia) and attendant regulations.~~

990 M. Flood control and stormwater management facilities that drain or treat water from
991 multiple development projects or from a significant portion of a watershed may be
992 allowed in Resource Protection Areas defined in the Chesapeake Bay Preservation Act,
993 provided that (i) the local government has conclusively established that the location of
994 the facility within the Resource Protection Area is the optimum location; (ii) the size of
995 the facility is the minimum necessary to provide necessary flood control, stormwater
996 treatment, or both; and, (iii) the facility must be consistent with a stormwater
997 management program that has been approved by the board.

998 **4VAC50-60-53. General requirements.**

999 The physical, chemical, biological, and hydrologic characteristics and the water
1000 quality and quantity of the receiving state waters shall be maintained, protected, or
1001 improved in accordance with the requirements of this part. Objectives include, but are
1002 not limited to, supporting state designated uses and water quality standards. All control
1003 measures used shall be employed in a manner that minimizes impacts on receiving state
1004 waters.

1005 **4VAC50-60-56. Applicability of other laws and regulations.**

1006 Nothing in this chapter shall be construed as limiting the applicability of other laws
1007 and regulations, including, but not limited to, the CWA, Virginia Stormwater Management
1008 Act, Virginia Erosion and Sediment Control Law, and the Chesapeake Bay Preservation
1009 Act, except as provided in § 10.1-603.3 I of the Code of Virginia and all applicable
1010 regulations adopted in accordance with those laws, or the rights of other federal
1011 agencies, state agencies, or local governments to impose more stringent technical
1012 criteria or other requirements as allowed by law.

1013 **4VAC50-60-60. Water quality. (Repealed.)**

1014 A. ~~Compliance with the water quality criteria may be achieved by applying the~~
1015 ~~performance-based criteria or the technology-based criteria to either the site or a~~
1016 ~~planning area.~~

1017 B. ~~Performance-based criteria. For land-disturbing activities, the calculated post-~~
1018 ~~development nonpoint source pollutant runoff load shall be compared to the calculated~~
1019 ~~pre-development load based upon the average land cover condition or the existing site~~
1020 ~~condition. A BMP shall be located, designed, and maintained to achieve the target~~
1021 ~~pollutant removal efficiencies specified in Table 1 to effectively reduce the pollutant load~~
1022 ~~to the required level based upon the following four applicable land development~~
1023 ~~situations for which the performance criteria apply:~~

1024 1. ~~Situation 1 consists of land-disturbing activities where the existing percent~~
1025 ~~impervious cover is less than or equal to the average land cover condition and~~
1026 ~~the proposed improvements will create a total percent impervious cover which is~~
1027 ~~less than the average land cover condition.~~

1028 ~~Requirement: No reduction in the after disturbance pollutant discharge is~~
1029 ~~required.~~

1030 2. ~~Situation 2 consists of land-disturbing activities where the existing percent~~
1031 ~~impervious cover is less than or equal to the average land cover condition and~~
1032 ~~the proposed improvements will create a total percent impervious cover which is~~
1033 ~~greater than the average land cover condition.~~

1034 ~~Requirement: The pollutant discharge after disturbance shall not exceed the~~
1035 ~~existing pollutant discharge based on the average land cover condition.~~

1036 3. ~~Situation 3 consists of land-disturbing activities where the existing percent~~
1037 ~~impervious cover is greater than the average land cover condition.~~

1038 Requirement: ~~The pollutant discharge after disturbance shall not exceed (i) the~~
 1039 ~~pollutant discharge based on existing conditions less 10% or (ii) the pollutant~~
 1040 ~~discharge based on the average land cover condition, whichever is greater.~~

1041 4. ~~Situation 4 consists of land disturbing activities where the existing percent~~
 1042 ~~impervious cover is served by an existing stormwater management BMP that~~
 1043 ~~addresses water quality.~~

1044 Requirement: ~~The pollutant discharge after disturbance shall not exceed the existing~~
 1045 ~~pollutant discharge based on the existing percent impervious cover while served by the~~
 1046 ~~existing BMP. The existing BMP shall be shown to have been designed and constructed~~
 1047 ~~in accordance with proper design standards and specifications, and to be in proper~~
 1048 ~~functioning condition.~~

1049 C. ~~Technology-based criteria. For land-disturbing activities, the post-developed~~
 1050 ~~stormwater runoff from the impervious cover shall be treated by an appropriate BMP as~~
 1051 ~~required by the post-developed condition percent impervious cover as specified in Table~~
 1052 ~~1. The selected BMP shall be located, designed, and maintained to perform at the target~~
 1053 ~~pollutant removal efficiency specified in Table 1. Design standards and specifications for~~
 1054 ~~the BMPs in Table 1 that meet the required target pollutant removal efficiency will be~~
 1055 ~~available at the department.~~

Table 1*

Water Quality BMP*	Target Phosphorus Removal Efficiency	Percent Impervious Cover
Vegetated filter strip	10%	16-21%
Grassed Swale	15%	
Constructed wetlands	20%	22-37%
Extended detention (2 x WQ Vol)	35%	
Retention basin I (3 x WQ Vol)	40%	
Bioretention basin	50%	38-66%
Bioretention filter	50%	
Extended detention-enhanced	50%	
Retention basin II (4 x WQ Vol)	50%	
Infiltration (1 x WQ Vol)	50%	
Sand filter	65%	67-100%
Infiltration (2 x WQ Vol)	65%	
Retention basin III (4 x WQ Vol with aquatic bench)	65%	

1057 *Innovative or alternate BMPs not included in this table may be allowed at the discretion
 1058 of the local program administrator or the department. Innovative or alternate BMPs not
 1059 included in this table which target appropriate nonpoint source pollution other than
 1060 phosphorous may be allowed at the discretion of the local program administrator or the
 1061 department.

1062 **4VAC50-60-63. Water quality design criteria requirements.**

1063 In order to protect the quality of state waters and to control nonpoint source pollution
 1064 stormwater pollutants, the following minimum technical criteria and statewide standards
 1065 for stormwater management shall be applied to the site of a land-disturbing activity. The

1066 ~~local program shall have discretion to allow for application of the criteria to each~~
1067 ~~drainage area of the site. However, where a site drains to more than one HUC, the~~
1068 ~~pollutant load reduction requirements shall be applied independently within each HUC~~
1069 ~~unless reductions are achieved in accordance with a comprehensive watershed~~
1070 ~~stormwater management plan in accordance with 4VAC50-60-96.~~

1071 1. New development. The total phosphorus load of new development projects
1072 shall not exceed 0.28 0.45 pounds per acre per year, as calculated pursuant to
1073 4VAC50-60-65 , except:

1074 a. [The total phosphorus load of a new development project disturbing greater
1075 than or equal to one acre in the Chesapeake Bay watershed shall not exceed
1076 0.28 pounds per acre per year, as calculated pursuant to 4VAC50-60-65.

1077 b. Within Should the board establish by regulatory action a standard more
1078 stringent than 0.45 pounds per acre per year in the Chesapeake Bay
1079 watershed, then a qualifying local program may establish a standard of no
1080 greater than 0.45 pounds per acre per year to be applied within] urban
1081 development areas designated pursuant to § 15.2-2223.1 of the Code of
1082 Virginia [in the Chesapeake Bay watershed a qualifying local program may
1083 establish a phosphorus standard between 0.28 and 0.45 pounds per acre per
1084 year-] for projects greater than or equal to one acre in order to encourage
1085 compact development that achieves superior water quality benefits. The
1086 qualifying local program shall provide to the board for approval a justification
1087 for any standards established [if greater than 0.28] and shall define the
1088 types of projects within a UDA that would qualify for the [relaxed] standards.
1089 The standard shall be based upon factors including, but not limited to,
1090 number of housing units per acre for residential development, floor area ratio
1091 for nonresidential development, level of imperviousness, brownfield
1092 remediation potential, mixed-use and transit oriented development potential,
1093 proximity to the Chesapeake Bay or local waters of concern, and the
1094 presence of impaired waters. This provision shall not apply to department-
1095 administered local programs.

1096 [e. Localities b. Should the board establish by regulatory action a standard
1097 more stringent than 0.45 pounds per acre per year in the Chesapeake Bay
1098 watershed, localities] that have lands that drain to both the Chesapeake Bay
1099 watershed and other non-Chesapeake Bay watersheds may choose to apply
1100 [the 0.28 pounds per acre per year the more stringent] phosphorus standard
1101 [for the Chesapeake Bay watershed] to land-disturbing activities that
1102 discharge to watersheds other than the Chesapeake Bay watershed.

1103 [c. Upon the completion of the Virginia TMDL Implementation Plan for the
1104 Chesapeake Bay Nutrient and Sediment TMDL approved by EPA, the board
1105 shall by regulatory action establish a water quality design criteria for new
1106 development activities that is consistent with the pollutant loadings called for
1107 in the approved Implementation Plan.]

1108 2. Development on prior developed lands.

1109 a. The total phosphorus load of projects a project occurring on prior
1110 developed lands and [distributing disturbing] greater than or equal to one
1111 acre shall be reduced to an amount at least 20% below the predevelopment
1112 total phosphorus load.

1113 ~~However, the~~ b. The total phosphorus load of a project occurring on prior
 1114 developed lands and disturbing less than one acre shall be reduced to an
 1115 amount at least 10% below the predevelopment total phosphorus load.
 1116 c. The total phosphorus load shall not be required to be reduced to
 1117 below 0.28 pounds per acre per year the applicable standard for new
 1118 development unless a more stringent standard has been established by a
 1119 qualifying local program.
 1120 3. Compliance with subdivisions 1 and 2 of this section shall be determined in
 1121 accordance with 4VAC50-60-65 shall constitute compliance with subdivisions 1
 1122 and 2 of this section.
 1123 4. TMDL. In addition to the above requirements, if a specific WLA for a pollutant
 1124 has been established in a TMDL and is assigned to stormwater discharges from
 1125 a construction activity, necessary control measures must be implemented by the
 1126 operator to meet the WLA in accordance with the requirements established in the
 1127 General Permit for Discharges of Stormwater from Construction Activities or an
 1128 individual permit, which address both construction and postconstruction
 1129 discharges.
 1130 5. Nothing in this section shall prohibit a qualifying local program from
 1131 establishing a more stringent standard.

1132 **4VAC50-60-65. Water quality compliance.**

1133 A. Compliance with the water quality design criteria set out in subdivisions 1 and 2 of
 1134 4VAC50-60-63 shall be determined by utilizing the Virginia Runoff Reduction Method or
 1135 another methodology that is demonstrated by the qualifying local program to achieve
 1136 equivalent or more stringent results and is approved by the board.

1137 B. The BMPs listed in Table 1 or the BMPs available on the Virginia Stormwater
 1138 BMP Clearinghouse website shall be utilized as necessary to effectively reduce the
 1139 phosphorus load in accordance with the Virginia Runoff Reduction Method. Design
 1140 specifications for the BMPs listed in Table 1 can be found on the Virginia Stormwater
 1141 BMP Clearinghouse Website at <http://www.vwrrc.vt.edu/swc>. Other approved BMPs
 1142 available on this website may also be utilized.

TABLE 1
 BMP Pollutant Removal Efficiencies

<u>Practice</u>	<u>Removal of Total Phosphorus by Runoff Volume Reduction (RR, as %) (based upon 1 inch of rainfall --90% storm)</u>	<u>Removal of Total Phosphorus by Treatment -- Pollutant Concentration Reduction (PR, as %)</u>	<u>Total Mass Load Removal of Total Phosphorus (TR, as %) [⁵]</u>
<u>Green Vegetated Roof 1</u>	<u>45</u>	<u>0</u>	<u>45</u>
<u>Green Vegetated Roof 2</u>	<u>60</u>	<u>0</u>	<u>60</u>
<u>Rooftop Disconnection <u>±</u>²</u>	<u>25 or 50¹</u>	<u>0</u>	<u>25 or 50¹</u>

<u>Rooftop Disconnection 2</u>	<u>50</u>	<u>0</u>	<u>50</u>
<u>Rain Tanks/Cisterns + Rainwater Harvesting</u>	<u>actual volume x .75 up to 90³ [5]</u>	<u>0</u>	<u>actual volume x .75 up to 90³ [5]</u>
<u>Soil Amendments 1</u>	<u>50</u>	<u>0</u>	<u>50</u>
<u>Soil Amendments 2</u>	<u>75</u>	<u>0</u>	<u>75</u>
<u>Soil Amendments</u>	<u>Can be used to decrease runoff coefficient for turf cover at site. See designs for Rooftop Disconnection, Sheet Flow, and Grass Channel practices.</u>		
<u>Permeable Pavement 1</u>	<u>45</u>	<u>25</u>	<u>59</u>
<u>Permeable Pavement 2</u>	<u>75</u>	<u>25</u>	<u>81</u>
<u>Grass Channel 1</u>	<u>10 or 20¹</u>	<u>15</u>	<u>23</u>
<u>Grass Channel 2</u>	<u>20</u>	<u>15</u>	<u>32</u>
<u>Bioretention 1 (also applies to Urban Bioretention)</u>	<u>40</u>	<u>25</u>	<u>55</u>
<u>Bioretention 2</u>	<u>80</u>	<u>50</u>	<u>90</u>
<u>Infiltration 1</u>	<u>50</u>	<u>25</u>	<u>63</u>
<u>Infiltration 2</u>	<u>90</u>	<u>25</u>	<u>93</u>
<u>Dry Swale 1</u>	<u>40</u>	<u>20</u>	<u>52</u>
<u>Dry Swale 2</u>	<u>60</u>	<u>40</u>	<u>76</u>
<u>Wet Swale 1</u>	<u>0</u>	<u>20</u>	<u>20</u>
<u>Wet Swale 2</u>	<u>0</u>	<u>40</u>	<u>40</u>
<u>Sheet Flow to Conserved Filter/Open Space 1</u>	<u>0 25 or 50¹</u>	<u>50 0</u>	<u>25 or 50¹</u>
<u>Sheet Flow to Conserved Filter/Open Space 2 [52]</u>	<u>0 50 or 75¹</u>	<u>75 0</u>	<u>50 or 75¹</u>
<u>Extended Detention Pond 1</u>	<u>0</u>	<u>15</u>	<u>15</u>
<u>Extended Detention Pond 2</u>	<u>15</u>	<u>15</u>	<u>28 31</u>
<u>Filtering Practice 1</u>	<u>0</u>	<u>60</u>	<u>60</u>
<u>Filtering Practice 2</u>	<u>0</u>	<u>65</u>	<u>65</u>

<u>Constructed Wetland 1</u>	<u>0</u>	<u>50</u>	<u>50</u>
<u>Constructed Wetland 2</u>	<u>0</u>	<u>75</u>	<u>75</u>
<u>Wet Pond 1</u>	<u>0</u>	<u>50 (45⁴)</u>	<u>50 (45⁴)</u>
<u>Wet Pond 2</u>	<u>0</u>	<u>75 (65⁴)</u>	<u>75 (65⁴)</u>

¹ Lower rate is for Hydrologic Soil Group (HSG) class C and D soils; higher rate is for HSG class A and B soils.

² The removal can be increased to 50% for C and D soils by adding soil compost amendments, and may be higher yet if combined with secondary runoff reduction practices.

³ Credit up to 90% is possible if all water from storms 1" or less is used through demand, and tank is sized such that no overflow occurs. Total credit is not to exceed 90%.

⁴ Lower nutrient removals in parentheses apply to wet ponds in coastal plain terrain.

⁵ See BMP design specification for an explanation of how additional pollutant removal can be achieved.

1143 C. BMPs differing from those listed in Table 1 shall be reviewed and approved by the
1144 director in accordance with procedures established by the BMP Clearinghouse
1145 Committee and approved by the board.

1146 D. A qualifying local program may establish use limitations on the use of specific
1147 BMPs following the submission of the proposed use limitation and written justification to
1148 the department.

1149 E. Where the land-disturbing activity only occurs on a portion of the site, the local
1150 program may review the stormwater management plan based upon the portion of the
1151 site that is proposed to be developed, provided that the local program has established
1152 guidance for such a review. Such portion shall be deemed to include any area left
1153 undeveloped pursuant to any local requirement or proffer accepted by a locality. Any
1154 such guidance shall be provided to the department.

1155 F. If a comprehensive watershed stormwater management plan has been adopted
1156 pursuant to 4VAC50-60-96 for the watershed within which a project is located, then the
1157 qualifying local program may allow offsite controls in accordance with the plan to achieve
1158 the postdevelopment pollutant load water quality technical criteria set out in subdivisions
1159 1 and 2 of 4VAC50-60-63. Such offsite controls shall achieve the required pollutant
1160 reductions either completely offsite in accordance with the plan or in a combination of
1161 onsite and offsite controls. The local program shall have the discretion to allow for
1162 application of the criteria to each drainage area of the site. However, where a site drains
1163 to more than one HUC, the pollutant load reduction requirements shall be applied
1164 independently within each HUC unless reductions are achieved in accordance with a
1165 comprehensive watershed stormwater management plan in accordance with 4VAC50-
1166 60-92.

1167 G. Where no plan exists pursuant to subsection F of this section, offsite controls may
1168 be used to meet the postdevelopment pollutant load water quality technical criteria set
1169 out in subdivisions 1 and 2 of 4VAC50-60-63 provided:

- 1170 1. The local program allows for offsite controls;
1171 2. The applicant demonstrates to the satisfaction of the local program that offsite
1172 reductions equal to or greater than those that would otherwise be required for the
1173 site are achieved;
1174 3. The applicant demonstrates to the satisfaction of the local program that the
1175 development's runoff and the runoff from any offsite treatment area shall be
1176 controlled in accordance with 4VAC50-60-66;
1177 4. Offsite controls must be located within the same HUC or the adjacent
1178 downstream HUC to the land-disturbing site; and
1179 5. The applicant demonstrates to the satisfaction of the local program that the
1180 right to utilize the offsite control area and any necessary easements has been
1181 obtained and maintenance agreements for the stormwater management facilities
1182 have been established pursuant to 4VAC50-60-124.

1183 H. Alternatively, the local program may waive the requirements of subdivisions 1 and
1184 2 of 4VAC50-60-63 through the granting of an exception pursuant to 4VAC50-60-122. G.
1185 Offsite alternatives where allowed in accordance with 4VAC50-60-69 may be utilized to
1186 meet the design criteria of subdivisions 1 and 2 of 4VAC50-60-63.

1187 **4VAC50-60-66. Water quantity.**

1188 A. Channel protection and flood protection shall be addressed in accordance with the
1189 minimum standards set out in this section, which are established pursuant to the
1190 requirements of subdivision 7 of § 10.1-603.4 of the Code of Virginia. Nothing in this
1191 section shall prohibit a qualifying local program from establishing a more stringent
1192 standard.

1193 B. Channel protection. Concentrated stormwater flow from the site and offsite
1194 contributing areas shall be released into a stormwater conveyance system and shall
1195 meet one of the following criteria as demonstrated by use of accepted hydrologic and
1196 hydraulic methodologies:

1197 1. Concentrated stormwater flow to manmade stormwater conveyance systems.
1198 The point of discharge releases stormwater into a manmade stormwater
1199 conveyance system that, following the land-disturbing activity, conveys the
1200 postdevelopment peak flow rate from the two-year 24-hour storm without causing
1201 erosion of the system.

1202 2. Concentrated stormwater flow to restored stormwater conveyance systems.
1203 The point of discharge releases stormwater into a stormwater conveyance
1204 system that (i) has been restored and is functioning as designed or (ii) will be
1205 restored. The applicant must demonstrate that the runoff following the land-
1206 disturbing activity, in combination with other existing stormwater runoff, will not
1207 exceed the design of the restored stormwater conveyance system nor result in
1208 instability of the system.

1209 3. Concentrated stormwater flow to stable natural stormwater conveyance
1210 systems. The point of discharge releases stormwater into a natural stormwater
1211 conveyance system that is stable and, following the land-disturbing activity, (i)
1212 will not become unstable as a result of the discharge from the one-year 24-hour
1213 storm, and (ii) provides a peak flow rate from the one-year 24-hour storm
1214 calculated as follows or in accordance with another methodology that is

1215 demonstrated by the local program to achieve equivalent results and is approved
1216 by the board:

1217 $Q_{\text{Developed}} * RV_{\text{Developed}} \leq Q_{\text{Pre-Developed}} * RV_{\text{Pre-Developed}}$, where

1218 $Q_{\text{Developed}}$ = The allowable peak flow rate of runoff from the developed site.

1219 [Such peak flow rate must be less than or equal to $Q_{\text{Pre-Developed}}$.]

1220 $Q_{\text{Pre-Developed}}$ = The peak flow rate of runoff from the site in the predeveloped
1221 condition.

1222 $RV_{\text{Pre-Developed}}$ = The volume of runoff from the site in the predeveloped
1223 condition.

1224 $RV_{\text{Developed}}$ = The volume of runoff from the developed site.

1225 4. ~~Concentrated~~ Except as set out in subdivision 5 of this subsection,
1226 concentrated stormwater flow to unstable natural stormwater conveyance
1227 systems. Where the point of discharge releases stormwater into a natural
1228 stormwater conveyance system that is unstable, stormwater runoff following a
1229 land-disturbing activity shall be released into a channel at or below a peak flow
1230 rate ($Q_{\text{Developed}}$) based on the one-year 24-hour storm, calculated as follows or in
1231 accordance with another methodology that is demonstrated by the local program
1232 to achieve equivalent or more stringent results and is approved by the board:

1233 $Q_{\text{Developed}} * RV_{\text{Developed}} \leq Q_{\text{Forested Good Pasture}} * RV_{\text{Forested Good Pasture}}$, where

1234 $Q_{\text{Developed}}$ = The allowable peak flow rate from the developed site. [Such peak
1235 flow rate must be equal to or less than $Q_{\text{Good Pasture}}$].

1236 $Q_{\text{Forested Good Pasture}}$ = The peak flow rate from the site in a forested good
1237 pasture condition.

1238 $RV_{\text{Forested Good Pasture}}$ = The volume of runoff from the site in a forested good
1239 pasture condition.

1240 $RV_{\text{Developed}}$ = The volume of runoff from the developed site.

1241 However, in the case that the predeveloped condition is forested, [both the peak
1242 flow rate and the volume of runoff from the developed site shall be held to the
1243 forested condition the forested condition shall be utilized instead of the good
1244 pasture condition in all instances in the calculation above].

1245 5. This subdivision shall apply to concentrated stormwater flow to unstable
1246 natural stormwater conveyance systems from (i) a land-disturbing activity less
1247 than five acres on prior developed lands, or (ii) a regulated land-disturbing
1248 activity less than one acre for new development. Where the point of discharge
1249 releases stormwater into a natural stormwater conveyance system that is
1250 unstable, stormwater runoff following a land-disturbing activity shall provide a
1251 peak flow rate from the one-year 24-hour storm, calculated as follows or in
1252 accordance with another methodology that is demonstrated by the local program
1253 to achieve equivalent or more stringent results and is approved by the board:

1254 $Q_{\text{Developed}} * RV_{\text{Developed}} < Q_{\text{Pre-Developed}} * RV_{\text{Pre-Developed}}$, where

1255 $Q_{\text{Developed}}$ = The allowable peak flow rate from the developed site. Such peak
1256 flow rate must be less than $Q_{\text{Pre-Developed}}$.

1257 $Q_{\text{Pre-Developed}}$ = The peak flow rate from the site in pre-development condition.

1258 $RV_{\text{Pre-Developed}}$ = The volume of runoff from the site in pre-development
1259 condition.

1260 RV_{Developed} = The volume of runoff from the developed site. [Such volume
1261 must be less than RV_{Pre-Developed}].

1262 C. Flood protection. Concentrated stormwater flow shall be released into a
1263 stormwater conveyance system and shall meet one of the following criteria as
1264 demonstrated by use of accepted hydrologic and hydraulic methodologies:

1265 1. Concentrated stormwater flow to manmade stormwater conveyance systems.
1266 The point of discharge releases stormwater into a manmade stormwater
1267 conveyance system that, following the land-disturbing activity, confines the
1268 postdevelopment peak flow rate from the 10-year 24-hour storm within the
1269 manmade stormwater conveyance system.

1270 2. Concentrated stormwater flow to restored stormwater conveyance systems.
1271 The point of discharge releases stormwater into a stormwater conveyance
1272 system that (i) has been restored and is functioning as designed or (ii) will be
1273 restored. The applicant must demonstrate that the peak flow rate from the 10-
1274 year 24-hour storm following the land-disturbing activity will be confined within
1275 the system.

1276 3. Concentrated stormwater flow to natural stormwater conveyance systems. The
1277 point of discharge releases stormwater into a natural stormwater conveyance
1278 system that currently does not flood during the 10-year 24-hour storm and,
1279 following the land-disturbing activity, confines the postdevelopment peak flow
1280 rate from the 10-year 24-hour storm within the system.

1281 4. Concentrated stormwater flow to natural stormwater conveyance systems
1282 where localized flooding exists during the 10-year 24-hour storm. The point of
1283 discharge releases a postdevelopment peak flow rate for the 10-year 24-hour
1284 storm that shall not exceed the predevelopment peak flow rate from the 10-year
1285 24-hour storm based on forested good pasture conditions, unless the
1286 predeveloped condition is forested, in which case the peak flow rate from the
1287 developed site shall be held to the forested condition.

1288 5. ~~A local program may adopt alternate flood protection design criteria that (i)~~
1289 ~~achieve equivalent or more stringent results, (ii) are based upon geographic, land~~
1290 ~~use, topographic, geologic, or other downstream conveyance factors, and (iii) are~~
1291 ~~approved by the board.~~ Subdivision C 4 of this subsection notwithstanding, this
1292 subdivision shall apply to concentrated stormwater flow to natural stormwater
1293 conveyance systems where localized flooding exists during the 10-year 24-hour
1294 storm from (i) a land-disturbing activity less than five acres on prior developed
1295 lands, or (ii) a regulated land-disturbing activity less than one acre for new
1296 development. The point of discharge releases a postdevelopment peak flow rate
1297 for the 10-year 24-hour storm that is less than the predevelopment peak flow rate
1298 from the 10-year 24-hour storm.

1299 D. One percent rule. If either of the following criteria are met, subsections A B and B
1300 C of this section do not apply, nor is the analysis of subsection H required:

1301 1. Based on area. Prior to any land disturbance, the site's contributing drainage
1302 area to a point of discharge from the site is less than or equal to 1.0% of the total
1303 watershed area draining to that point of discharge; or

1304 2. Based on peak flow rate. Based on the postdevelopment land cover conditions
1305 prior to the implementation of any stormwater quantity control measures, the
1306 development of the site results in an increase in the peak flow rate from the one-
1307 year 24-hour storm that is less than 1.0% of the existing peak flow rate from the

1308 one-year 24-hour storm generated by the total watershed area draining to that
1309 point of discharge.

1310 E. Increased volumes of sheet flow resulting from pervious or disconnected
1311 impervious areas, or from physical spreading of concentrated flow through level
1312 spreaders, must be identified and evaluated for potential impacts on down gradient
1313 properties or resources. Increased volumes of sheet flow that will cause or contribute to
1314 erosion, sedimentation, or flooding of down gradient properties or resources shall be
1315 diverted to a ~~detention~~ stormwater management facility or a stormwater conveyance
1316 system that conveys the runoff without causing down gradient erosion, sedimentation, or
1317 flooding. If all runoff from the site is sheet flow and the conditions of this subsection are
1318 met, no further water quantity controls are required.

1319 F. For purposes of computing predevelopment runoff from prior developed sites, all
1320 pervious lands on the site shall be assumed to be in good hydrologic condition in
1321 accordance with the U.S. Department of Agriculture's Natural Resources Conservation
1322 Service (NRCS) standards, regardless of conditions existing at the time of computation.
1323 Predevelopment runoff calculations utilizing other hydrologic conditions may be utilized
1324 provided that it is demonstrated to and approved by the local program that actual site
1325 conditions warrant such considerations.

1326 G. Predevelopment runoff characteristics and site hydrology shall be verified by site
1327 inspections, topographic surveys, available soil mapping or studies, and calculations
1328 consistent with good engineering practices ~~in accordance with guidance.~~ Guidance
1329 provided in the Virginia Stormwater Management Handbook and ~~by the qualifying local~~
1330 ~~program~~ shall be considered appropriate standards.

1331 H. Except where the compliance options under subdivisions B 4 and 5 and C 4 and 5
1332 of this section are utilized, flooding and channel erosion impacts to stormwater
1333 conveyance systems shall be analyzed for each point of discharge in accordance with
1334 channel analysis guidance provided in Technical Bulletin # 1, Stream Channel Erosion
1335 Control, or in accordance with more stringent channel analysis guidance established by
1336 the qualifying local program and provided to the department. Such analysis shall include
1337 estimates of runoff from the developed site and the entire upstream watershed that
1338 contributes to that point of discharge. Good engineering practices and calculations in
1339 accordance with department guidance shall be used to evaluate postdevelopment runoff
1340 characteristics and site hydrology, and flooding and channel erosion impacts.

1341 If the downstream owner or owners refuse to give permission to access the property
1342 for the collection of data, evidence of this refusal shall be given and arrangements made
1343 satisfactory to the local program to provide an alternative method for the collection of
1344 data to complete the analysis, such as through the use of photos, aerial surveys, "as
1345 built" plans, topographic maps, soils maps, and any other relevant information.

1346 **4VAC50-60-69. Offsite compliance options.**

1347 A. A qualifying local program shall have the authority to consider the use of the
1348 following offsite compliance options:

1349 1. If a comprehensive watershed stormwater management plan has been
1350 adopted pursuant to 4VAC50-60-92 for the local watershed within which a project
1351 is located, then the qualifying local program may allow offsite controls in
1352 accordance with the plan to achieve the water quality reductions, quantity
1353 reductions, or both required for a site by this chapter. Such offsite controls shall
1354 achieve the required reductions either completely offsite in accordance with the
1355 plan or by a combination of on site and offsite controls.

1356 2. A pro rata fee in accordance with § 15.2-2243 of the Code of Virginia or similar
1357 [local] funding mechanism through which the water quality and quantity
1358 reductions required for a site by this chapter may be achieved by the payment of
1359 a fee sufficient to fund improvements necessary to adequately achieve offsite
1360 reductions equal to or greater than those that would otherwise be required for the
1361 site.

1362 3. The nonpoint nutrient offset program established by § 10.1-603.8:1 of the
1363 Code of Virginia.

1364 4. Where no comprehensive watershed stormwater management plan or pro rata
1365 fee exists, or where a qualifying local program otherwise elects to allow the use
1366 of this subdivision, offsite stormwater management facilities may be used by the
1367 operator of a land-disturbing activity to meet the water quality reductions required
1368 for a site by this chapter provided:

1369 a. The operator demonstrates to the satisfaction of the local program that
1370 offsite reductions equal to or greater than those that would otherwise be
1371 required for the site are achieved;

1372 b. The operator demonstrates to the satisfaction of the local program that the
1373 development's runoff and the runoff from any offsite treatment area shall be
1374 controlled in accordance with 4VAC50-60-66;

1375 c. Offsite stormwater management facilities must be located within the HUC
1376 or within the upstream HUCs in the local watershed that the land-disturbing
1377 activity directly discharges to or within the same watershed, as determined by
1378 the local program; and

1379 d. The operator demonstrates to the satisfaction of the local program that the
1380 right to utilize the offsite area and any necessary easements have been
1381 obtained and maintenance agreements for the stormwater management
1382 facilities have been established pursuant to 4VAC50-60-124.

1383 B. [Should the Board establish by regulatory action a standard more stringent than
1384 0.45 pounds per acre per year in the Chesapeake Bay watershed, the offsite compliance
1385 option provided by this subsection shall be available as follows.] Where the offsite
1386 options of subsection A of this section are not available for use, where the fee
1387 established by a qualifying local program to offset a pound of phosphorus onsite
1388 pursuant to subdivision A 2 exceeds \$23,900, or where a qualifying local program
1389 otherwise elects to allow the use of this subsection, offsite compliance may be achieved
1390 through a payment in accordance with the following:

1391 1. When the land-disturbing activity is in an urban development area the payment
1392 shall be \$15,000 per pound of phosphorus and shall be calculated based on the
1393 poundage not treated on site. In all other cases the payment shall be \$23,900 per
1394 pound of phosphorus. Payment amounts shall be determined based upon the
1395 nearest 0.01 of a pound of phosphorus.

1396 2. All payments shall be deposited and utilized in accordance with the following:

1397 a. Payments shall be made prior to commencement of the land-disturbing
1398 activity and shall be deposited to the Virginia Stormwater Management Fund
1399 and held in a subaccount.

1400 b. The board shall establish priorities for the use of these funds by December
1401 1 of each year. Payments held in the fund shall be promptly applied to ensure
1402 that nutrient reduction practices are being implemented. Priorities for the
1403 funds shall be established in accordance with the following:

1404 (1) At least 50% of the funds shall be utilized for projects to address local
1405 stormwater quality issues related to the impacts of development activities
1406 including but not limited to urban retrofits, urban stream restorations, and
1407 reduction of impervious areas.

1408 (2) Priority use for the remaining funds shall be for the acquisition of certified
1409 nonpoint nutrient offsets at a rate not to exceed \$23,900 per pound of
1410 phosphorus. Any remaining funds shall be utilized to fund long-term contracts
1411 for agricultural best management practices no less than 20 years in duration
1412 or long-term best management practices including but not limited to stream
1413 fencing, alternative water supplies, and riparian buffers in accordance with
1414 practice standards established within the Virginia Agricultural BMP Cost
1415 Share Program administered by the department.

1416 (3) In establishing priorities, the board shall consider targeting equivalent
1417 reductions in the same local watershed as where the payment came from;
1418 implementing urban practices/retrofits that address TMDLs; securing
1419 permanent practices; and achieving measurable reductions. When
1420 purchasing agricultural best management practices, the board shall consider
1421 purchasing practices beyond the baseline established under the Chesapeake
1422 Bay Watershed Nutrient Credit Exchange Program (§ 62.1-44.19:12 et seq.
1423 of the Code of Virginia).

1424 c. The department shall track the payment amount, the associated poundage
1425 of phosphorus purchased, the jurisdiction where the payment originated, the
1426 regulated MS4 name, if any, and the HUC for the land-disturbing activity. The
1427 department shall additionally track the annual expenditure of the funds
1428 including the locality and regulated MS4 name, if any, where the moneys are
1429 expended, the associated poundage of phosphorus reduced, and the cost per
1430 pound for phosphorus reductions associated with the nutrient reduction
1431 practices.

1432 d. The department may annually utilize up to 6.0% of the payments to
1433 administer the stormwater management program.

1434 e. The board shall periodically review the payment amount, at least every five
1435 years or in conjunction with the development of a new construction general
1436 permit, and shall evaluate the performance of the fund and the sufficiency of
1437 the payment rate in achieving the needed offsite pollution reductions. The
1438 board shall adjust the payment amount based upon this analysis.

1439 3. Utilization of a payment to achieve compliance with the water quality technical
1440 criteria shall be subject to the following limitations:

1441 a. A new development project disturbing greater than or equal to one acre in
1442 the Chesapeake Bay watershed must reduce its phosphorus discharge to a
1443 level of 0.45 pounds per acre per year of phosphorus on site, or less, and
1444 then may achieve all or a portion of the remaining required phosphorus
1445 reductions through a payment.

1446 b. A new development project disturbing less than one acre in the
1447 Chesapeake Bay watershed may achieve all necessary phosphorus
1448 reductions through a payment.

1449 c. A new development project outside of the Chesapeake Bay watershed
1450 must achieve all necessary phosphorus reductions on site.

1451 d. Development on prior developed lands disturbing greater than or equal to
1452 one acre must achieve at least a 10% reduction from the predevelopment
1453 total phosphorus load on site and then may achieve the remaining required
1454 phosphorus reductions through a payment.

1455 e. Development on prior developed lands disturbing less than one acre may
1456 achieve all necessary phosphorus reductions through a payment.

1457 4. Nitrogen or other pollutant reductions achieved through payments into the fund
1458 must be retired and shall not be made available to other parties.

1459 C. Where the department is administering a local program, only offsite options set
1460 out in subdivisions A 3 and A 4 [,] and [, when available,] subsection B of this section
1461 shall be available.

1462 **4VAC50-60-70. Stream channel erosion. (Repealed.)**

1463 ~~A. Properties and receiving waterways downstream of any land-disturbing activity~~
1464 ~~shall be protected from erosion and damage due to changes in runoff rate of flow and~~
1465 ~~hydrologic characteristics, including but not limited to, changes in volume, velocity,~~
1466 ~~frequency, duration, and peak flow rate of stormwater runoff in accordance with the~~
1467 ~~minimum design standards set out in this section.~~

1468 ~~B. The permit-issuing authority shall require compliance with subdivision 19 of~~
1469 ~~4VAC50-30-40 of the Erosion and Sediment Control Regulations, promulgated pursuant~~
1470 ~~to Article 4 (§ 10.1-560 et seq.) of Chapter 5 of Title 10.1 of the Code of Virginia.~~

1471 ~~C. The permit-issuing authority may determine that some watersheds or receiving~~
1472 ~~stream systems require enhanced criteria in order to address the increased frequency of~~
1473 ~~bankfull flow conditions (top of bank) brought on by land-disturbing activities. Therefore,~~
1474 ~~in lieu of the reduction of the two-year post-developed peak rate of runoff as required in~~
1475 ~~subsection B of this section, the land development project being considered shall~~
1476 ~~provide 24-hour extended detention of the runoff generated by the one-year, 24-hour~~
1477 ~~duration storm.~~

1478 ~~D. In addition to subsections B and C of this section permit-issuing authorities, by~~
1479 ~~local ordinance may, or the board by state regulation may, adopt more stringent channel~~
1480 ~~analysis criteria or design standards to ensure that the natural level of channel erosion,~~
1481 ~~to the maximum extent practicable, will not increase due to the land-disturbing activities.~~
1482 ~~These criteria may include, but are not limited to, the following:~~

- 1483 ~~1. Criteria and procedures for channel analysis and classification.~~
- 1484 ~~2. Procedures for channel data collection.~~
- 1485 ~~3. Criteria and procedures for the determination of the magnitude and frequency~~
1486 ~~of natural sediment transport loads.~~
- 1487 ~~4. Criteria for the selection of proposed natural or man-made channel linings.~~

1488 **4VAC50-60-72. Design storms and hydrologic methods.**

1489 A. Unless otherwise specified, the prescribed design storms are the one-year, two-
1490 year, and 10-year 24-hour storms using the site-specific rainfall precipitation frequency
1491 data recommended by the U.S. National Oceanic and Atmospheric Administration
1492 (NOAA) Atlas 14. Partial duration time series shall be used for the precipitation data.

1493 B. All Unless otherwise specified, all hydrologic analyses shall be based on the
1494 existing watershed characteristics and the ultimate development condition of the subject
1495 project.

1496 C. The U.S. Department of Agriculture's Natural Resources Conservation Service
1497 (NRCS) synthetic 24-hour rainfall distribution and models, including, but not limited to

1498 TR-55 and TR-20; hydrologic and hydraulic methods developed by the U.S. Army Corps
1499 of Engineers; or other standard hydrologic and hydraulic methods, shall be used to
1500 conduct the analyses described in this part.

1501 D. The local program may allow for the use of the Rational Method for evaluating
1502 peak discharges or the Modified Rational Method for evaluating volumetric flows to
1503 stormwater conveyances with drainage areas of 200 acres or less.

1504 **4VAC50-60-74. Stormwater harvesting.**

1505 In accordance with § 10.1-603.4 of the Code of Virginia, stormwater harvesting is
1506 encouraged for the purposes of landscape irrigation systems, fire protection systems,
1507 flushing water closets and urinals, and other water handling systems to the extent such
1508 systems are consistent with federal, state, and local regulatory authorities.

1509 **4VAC50-60-76. Linear development projects.**

1510 Unless exempt pursuant to § 10.1-603.8 B of the Code of Virginia, linear
1511 development projects shall control postdevelopment stormwater runoff in accordance
1512 with a site-specific stormwater management plan or a comprehensive watershed
1513 stormwater management plan developed in accordance with these regulations.

1514 **4VAC50-60-80. Flooding. (Repealed.)**

1515 ~~A. Downstream properties and waterways shall be protected from damages from~~
1516 ~~localized flooding due to changes in runoff rate of flow and hydrologic characteristics,~~
1517 ~~including but not limited to, changes in volume, velocity, frequency, duration, and peak~~
1518 ~~flow rate of stormwater runoff in accordance with the minimum design standards set out~~
1519 ~~in this section.~~

1520 ~~B. The 10-year post-developed peak rate of runoff from the development site shall~~
1521 ~~not exceed the 10-year pre-developed peak rate of runoff.~~

1522 ~~C. In lieu of subsection B of this section, localities may, by ordinance, adopt alternate~~
1523 ~~design criteria based upon geographic, land use, topographic, geologic factors or other~~
1524 ~~downstream conveyance factors as appropriate.~~

1525 ~~D. Linear development projects shall not be required to control post-developed~~
1526 ~~stormwater runoff for flooding, except in accordance with a watershed or regional~~
1527 ~~stormwater management plan.~~

1528 **4VAC50-60-85. Stormwater management impoundment structures or facilities.**

1529 A. Construction of stormwater management impoundment structures or facilities
1530 within tidal or nontidal wetlands and perennial streams is not recommended.

1531 B. Construction of stormwater management impoundment structures or facilities
1532 within a Federal Emergency Management Agency (FEMA) designated 100-year
1533 floodplain is not recommended.

1534 C. Stormwater management wet ponds and extended detention ponds that are not
1535 covered by the Impounding Structure Regulations (4VAC50-20) shall, at a minimum, be
1536 engineered for structural integrity and spillway design for the 100-year storm event.

1537 D. Construction of stormwater management impoundment structures or facilities may
1538 occur in karst areas only after a geological study of the geology and hydrology of the
1539 area has been conducted to determine the presence or absence of karst features that
1540 may be impacted by stormwater runoff and BMP placement.

1541 E. Discharge of stormwater runoff to a karst feature shall meet the water quality
1542 criteria set out in 4VAC50-60-63 and the water quantity criteria set out in 4VAC50-60-66.
1543 Permanent stormwater management impoundment structures or facilities shall only be
1544 constructed in karst features after completion of a geotechnical investigation that

1545 identifies any necessary modifications to the BMP to ensure its structural integrity and
1546 maintain its water quality and quantity efficiencies. The person responsible for the land-
1547 disturbing activity is encouraged to screen for known existence of heritage resources in
1548 the karst features. Any Class V Underground Injection Control Well registration
1549 statements for stormwater discharges to improved sinkholes shall be included in the
1550 SWPPP.

1551 **4VAC50-60-90. Regional (watershed-wide) stormwater management**
1552 **plans. (Repealed.)**

1553 This section enables localities to develop regional stormwater management plans.
1554 State agencies intending to develop large tracts of land such as campuses or prison
1555 compounds are encouraged to develop regional plans where practical.

1556 The objective of a regional stormwater management plan is to address the
1557 stormwater management concerns in a given watershed with greater economy and
1558 efficiency by installing regional stormwater management facilities versus individual, site-
1559 specific facilities. The result will be fewer stormwater management facilities to design,
1560 build and maintain in the affected watershed. It is also anticipated that regional
1561 stormwater management facilities will not only help mitigate the impacts of new
1562 development, but may also provide for the remediation of erosion, flooding or water
1563 quality problems caused by existing development within the given watershed.

1564 If developed, a regional plan shall, at a minimum, address the following:

- 1565 1. The specific stormwater management issues within the targeted watersheds.
- 1566 2. The technical criteria in 4VAC50-60-40 through 4VAC50-60-80 as needed
1567 based on subdivision 1 of this section.
- 1568 3. The implications of any local comprehensive plans, zoning requirements, local
1569 ordinances pursuant to the Chesapeake Bay Preservation Area Designation and
1570 Management Regulations adopted pursuant to the Chesapeake Bay
1571 Preservation Act, and other planning documents.
- 1572 4. Opportunities for financing a watershed plan through cost sharing with
1573 neighboring agencies or localities, implementation of regional stormwater utility
1574 fees, etc.
- 1575 5. Maintenance of the selected stormwater management facilities.
- 1576 6. Future expansion of the selected stormwater management facilities in the
1577 event that development exceeds the anticipated level.

1578 **4VAC50-60-92. Comprehensive watershed stormwater management plans.**

1579 A. Qualifying local programs may develop comprehensive watershed stormwater
1580 management plans to be approved by the department that meet the water quality
1581 objectives, quantity objectives, or both of this chapter:

- 1582 1. Such plans shall ensure that offsite reductions equal to or greater than those
1583 that would be required on each contributing land-disturbing site are achieved
1584 within the same HUC or within another locally designated watershed. Pertaining
1585 to water quantity objectives, the plan may provide for implementation of a
1586 combination of channel improvement, stormwater detention, or other measures
1587 that are satisfactory to the qualifying local program to prevent downstream
1588 erosion and flooding.
- 1589 2. If the land use assumptions upon which the plan was based change or if any
1590 other amendments are deemed necessary by the qualifying local program, the

1591 qualifying local program shall provide plan amendments to the board for review
1592 and approval.

1593 3. During the plan's implementation, the qualifying local program shall account for
1594 nutrient reductions accredited to the BMPs specified in the plan.

1595 4. State and federal agencies may develop comprehensive stormwater
1596 management plans, and may participate in locality-developed comprehensive
1597 watershed stormwater management plans where practicable and permitted by
1598 the qualifying local program.

1599 **4VAC50-60-93. Stormwater management plan development. (Reserved.)**

1600 A. A stormwater management plan for a land-disturbing activity shall apply these
1601 stormwater management technical criteria to the entire land-disturbing activity.

1602 B. Individual lots or planned phases of developments shall not be considered
1603 separate land-disturbing activities, but rather the entire development shall be considered
1604 a single land-disturbing activity.

1605 C. The stormwater management plan shall consider all sources of surface runoff and
1606 all sources of subsurface and groundwater flows converted to surface runoff.

1607 **Part II B**

1608 **Stormwater Management Program Technical Criteria: Grandfathered Projects**

1609 **4VAC50-60-94. Applicability.**

1610 This part specifies the technical criteria for regulated land-disturbing activities that
1611 are not subject to the technical criteria of Part II A in accordance with 4VAC 50-60-48.

1612 **4VAC50-60-95. General.**

1613 A. Determination of flooding and channel erosion impacts to receiving streams due to
1614 land-disturbing activities shall be measured at each point of discharge from the land
1615 disturbance and such determination shall include any runoff from the balance of the
1616 watershed that also contributes to that point of discharge.

1617 B. The specified design storms shall be defined as either a 24-hour storm using the
1618 rainfall distribution recommended by the U.S. Department of Agriculture's Natural
1619 Resources Conservation Service (NRCS) when using NRCS methods or as the storm of
1620 critical duration that produces the greatest required storage volume at the site when
1621 using a design method such as the Modified Rational Method.

1622 C. For purposes of computing runoff, all pervious lands in the site shall be assumed
1623 prior to development to be in good condition (if the lands are pastures, lawns, or parks),
1624 with good cover (if the lands are woods), or with conservation treatment (if the lands are
1625 cultivated); regardless of conditions existing at the time of computation.

1626 D. Construction of stormwater management facilities or modifications to channels
1627 shall comply with all applicable laws and regulations. Evidence of approval of all
1628 necessary permits shall be presented.

1629 E. Impounding structures that are not covered by the Impounding Structure
1630 Regulations (4VAC50-20) shall be engineered for structural integrity during the 100-year
1631 storm event.

1632 F. Predevelopment and postdevelopment runoff rates shall be verified by
1633 calculations that are consistent with good engineering practices.

1634 G. Outflows from a stormwater management facility or stormwater conveyance
1635 system shall be discharged to an adequate channel.

1636 H. Proposed residential, commercial, or industrial subdivisions shall apply these
1637 stormwater management criteria to the land disturbance as a whole. Individual lots in
1638 new subdivisions shall not be considered separate land-disturbing activities, but rather
1639 the entire subdivision shall be considered a single land development project. Hydrologic
1640 parameters shall reflect the ultimate land disturbance and shall be used in all
1641 engineering calculations.

1642 I. All stormwater management facilities shall have an inspection and maintenance
1643 plan that identifies the owner and the responsible party for carrying out the inspection
1644 and maintenance plan.

1645 J. Construction of stormwater management impoundment structures within a Federal
1646 Emergency Management Agency (FEMA) designated 100-year floodplain shall be
1647 avoided to the extent possible. When this is unavoidable, all stormwater management
1648 facility construction shall be in compliance with all applicable regulations under the
1649 National Flood Insurance Program, 44 CFR Part 59.

1650 K. Natural channel characteristics shall be preserved to the maximum extent
1651 practicable.

1652 L. Land-disturbing activities shall comply with the Virginia Erosion and Sediment
1653 Control Law (§ 10.1-560 et seq. of the Code of Virginia) and attendant regulations.

1654 M. Flood control and stormwater management facilities that drain or treat water from
1655 multiple development projects or from a significant portion of a watershed may be
1656 allowed in resource protection areas defined in the Chesapeake Bay Preservation Act,
1657 provided that (i) the local government has conclusively established that the location of
1658 the facility within the resource protection area is the optimum location; (ii) the size of the
1659 facility is the minimum necessary to provide necessary flood control, stormwater
1660 treatment, or both; and (iii) the facility must be consistent with a stormwater
1661 management program that has been approved by the board, the Chesapeake Bay Local
1662 Assistance Board, or the Board of Conservation and Recreation.

1663 **4VAC50-60-96. Comprehensive watershed stormwater management plans Water**
1664 **quality.**

1665 A. Local programs may develop comprehensive watershed stormwater management
1666 plans to be approved by the department that meet the water quality objectives, quantity
1667 objectives, or both of this chapter:

1668 1. Such plans shall ensure that offsite reductions equal to or greater than those that
1669 would be required on each contributing land-disturbing site are achieved within the same
1670 HUC or within another locally designated watershed. Pertaining to water quantity
1671 objectives, the plan may provide for implementation of a combination of channel
1672 improvement, stormwater detention, or other measures that are satisfactory to the local
1673 program to prevent downstream erosion and flooding.

1674 2. If the land use assumptions upon which the plan was based change or if any other
1675 amendments are deemed necessary by the local program, the local program shall
1676 provide plan amendments to the board for review and approval.

1677 3. During the plan's implementation, the local program shall account for nutrient
1678 reductions accredited to the BMPs specified in the plan.

1679 4. State and federal agencies may participate in comprehensive watershed
1680 stormwater management plans where practicable and permitted by the local program. A.
1681 Compliance with the water quality criteria may be achieved by applying the performance-
1682 based criteria or the technology-based criteria to either the site or a planning area.

1683 B. If the qualifying local program allows for a pro rata fee in accordance with § 15.2-
1684 2243 of the Code of Virginia, then the reductions required for a site by this chapter may
1685 be achieved by the payment of a pro rata fee sufficient to fund improvements necessary
1686 to adequately achieve those requirements in accordance with that section of the Code of
1687 Virginia and this chapter. Performance-based criteria. For land-disturbing activities, the
1688 calculated postdevelopment nonpoint source pollutant runoff load shall be compared to
1689 the calculated predevelopment load based upon the average land cover condition or the
1690 existing site condition. A BMP shall be located, designed, and maintained to achieve the
1691 target pollutant removal efficiencies specified in Table 2 of this section to effectively
1692 reduce the pollutant load to the required level based upon the following four applicable
1693 land development situations for which the performance criteria apply:

1694 1. Situation 1 consists of land-disturbing activities where the existing percent
1695 impervious cover is less than or equal to the average land cover condition and
1696 the proposed improvements will create a total percent impervious cover that is
1697 less than the average land cover condition.

1698 Requirement: No reduction in the after disturbance pollutant discharge is
1699 required.

1700 2. Situation 2 consists of land-disturbing activities where the existing percent
1701 impervious cover is less than or equal to the average land cover condition and
1702 the proposed improvements will create a total percent impervious cover that is
1703 greater than the average land cover condition.

1704 Requirement: The pollutant discharge after disturbance shall not exceed the
1705 existing pollutant discharge based on the average land cover condition.

1706 3. Situation 3 consists of land-disturbing activities where the existing percent
1707 impervious cover is greater than the average land cover condition.

1708 Requirement: The pollutant discharge after disturbance shall not exceed (i) the
1709 pollutant discharge based on existing conditions less 10% or (ii) the pollutant
1710 discharge based on the average land cover condition, whichever is greater.

1711 4. Situation 4 consists of land-disturbing activities where the existing percent
1712 impervious cover is served by an existing stormwater management BMP that
1713 addresses water quality.

1714 Requirement: The pollutant discharge after disturbance shall not exceed the
1715 existing pollutant discharge based on the existing percent impervious cover while
1716 served by the existing BMP. The existing BMP shall be shown to have been
1717 designed and constructed in accordance with proper design standards and
1718 specifications, and to be in proper functioning condition.

1719 C. Technology-based criteria. For land-disturbing activities, the postdeveloped
1720 stormwater runoff from the impervious cover shall be treated by an appropriate BMP as
1721 required by the postdeveloped condition percent impervious cover as specified in Table
1722 2 of this section. The selected BMP shall be located, designed, and maintained to
1723 perform at the target pollutant removal efficiency specified in Table 2 or those found in
1724 4VAC50-60-65. Design standards and specifications for the BMPs in Table 2 that meet
1725 the required target pollutant removal efficiency are available in the 1990 Virginia
1726 Stormwater Management Handbook. Other approved BMPs available on the Virginia
1727 Stormwater BMP Clearinghouse website at <http://www.vwrrc.vt.edu/swc> may also be
1728 utilized.

<u>Water Quality BMP*</u>	<u>Target Phosphorus Removal Efficiency</u>	<u>Percent Impervious Cover</u>
<u>Vegetated filter strip</u>	<u>10%</u>	<u>16-21%</u>
<u>Grassed Swale</u>	<u>15%</u>	
<u>Constructed wetlands</u>	<u>20%</u>	<u>22-37%</u>
<u>Extended detention (2 x WQ Vol)</u>	<u>35%</u>	
<u>Retention basin I (3 x WQ Vol)</u>	<u>40%</u>	
<u>Bioretention basin</u>	<u>50%</u>	<u>38-66%</u>
<u>Bioretention filter</u>	<u>50%</u>	
<u>Extended detention-enhanced</u>	<u>50%</u>	
<u>Retention basin II (4 x WQ Vol)</u>	<u>50%</u>	
<u>Infiltration (1 x WQ Vol)</u>	<u>50%</u>	
<u>Sand filter</u>	<u>65%</u>	<u>67-100%</u>
<u>Infiltration (2 x WQ Vol)</u>	<u>65%</u>	
<u>Retention basin III (4 x WQ Vol with aquatic bench)</u>	<u>65%</u>	
<u>*Innovative or alternate BMPs not included in this table may be allowed at the discretion of the local program administrator or the department. Innovative or alternate BMPs not included in this table that target appropriate nonpoint source pollution other than phosphorous may be allowed at the discretion of the local program administrator or the department.</u>		

1729 4VAC50-60-97. Stream channel erosion.

1730 A. Properties and receiving waterways downstream of any land-disturbing activity
1731 shall be protected from erosion and damage due to changes in runoff rate of flow and
1732 hydrologic characteristics, including, but not limited to, changes in volume, velocity,
1733 frequency, duration, and peak flow rate of stormwater runoff in accordance with the
1734 minimum design standards set out in this section.

1735 B. The permit-issuing authority shall require compliance with subdivision 19 of
1736 4VAC50-30-40 of the Erosion and Sediment Control Regulations, promulgated pursuant
1737 to Article 4 (§ 10.1-560 et seq.) of Chapter 5 of Title 10.1 of the Code of Virginia.

1738 C. The permit-issuing authority may determine that some watersheds or receiving
1739 stream systems require enhanced criteria in order to address the increased frequency of
1740 bankfull flow conditions (top of bank) brought on by land-disturbing activities. Therefore,
1741 in lieu of the reduction of the two-year postdeveloped peak rate of runoff as required in
1742 subsection B of this section, the land development project being considered shall
1743 provide 24-hour extended detention of the runoff generated by the one-year, 24-hour
1744 duration storm.

1745 D. In addition to subsections B and C of this section, permit-issuing authorities, by
1746 local ordinance may, or the board by state regulation may, adopt more stringent channel
1747 analysis criteria or design standards to ensure that the natural level of channel erosion,

1748 to the maximum extent practicable, will not increase due to the land-disturbing activities.
1749 These criteria may include, but are not limited to, the following:

- 1750 1. Criteria and procedures for channel analysis and classification.
1751 2. Procedures for channel data collection.
1752 3. Criteria and procedures for the determination of the magnitude and frequency
1753 of natural sediment transport loads.
1754 4. Criteria for the selection of proposed natural or manmade channel linings.

1755 **4VAC50-60-98. Flooding.**

1756 A. Downstream properties and waterways shall be protected from damages from
1757 localized flooding due to changes in runoff rate of flow and hydrologic characteristics,
1758 including, but not limited to, changes in volume, velocity, frequency, duration, and peak
1759 flow rate of stormwater runoff in accordance with the minimum design standards set out
1760 in this section.

1761 B. The 10-year postdeveloped peak rate of runoff from the development site shall not
1762 exceed the 10-year predeveloped peak rate of runoff.

1763 C. In lieu of subsection B of this section, localities may, by ordinance, adopt alternate
1764 design criteria based upon geographic, land use, topographic, geologic factors, or other
1765 downstream conveyance factors as appropriate.

1766 D. Linear development projects shall not be required to control postdeveloped
1767 stormwater runoff for flooding, except in accordance with a watershed or regional
1768 stormwater management plan.

1769 **4VAC50-60-99. Regional (watershed []wide) stormwater management plans.**

1770 Water quality and where allowed, water quantity, may be achieved in accordance
1771 with sections 4VAC50-60-69 and 4VAC50-60-92.

1772 Part III
1773 Local Programs

1774 **4VAC50-60-100. Applicability. (Repealed.)**

1775 ~~This part specifies technical criteria, minimum ordinance requirements, and~~
1776 ~~administrative procedures for all localities operating local stormwater management~~
1777 ~~programs.~~

1778 Part III A
1779 Local Programs

1780 **4VAC50-60-102. Authority and applicability.**

1781 If a locality has adopted a local stormwater management program in accordance with
1782 the Virginia Stormwater Management Act (§ 10.1-603.2 et seq. of the Code of Virginia)
1783 and the board has deemed such program adoption consistent with the Virginia
1784 Stormwater Management Act and these regulations in accordance with § 10.1-603.3 F of
1785 the Code of Virginia, the board may authorize a locality to administer a qualifying local
1786 program. Pursuant to § 10.1-603.4, the board is required to establish standards and
1787 procedures for such an authorization.

1788 This part specifies the minimum technical criteria and the local government
1789 ordinance requirements for a local program to be considered a qualifying local program.
1790 Such criteria include but are not limited to administration, plan review, issuance of
1791 coverage under the Virginia Stormwater Management Program (VSMP) General Permit
1792 for Discharges of Stormwater from Construction Activities, inspection, and enforcement.

1793 **4VAC50-60-104. Technical criteria for qualifying local programs.**

1794 A. All qualifying local programs shall require compliance with the provisions of Part II
1795 Part II A and Part II B as applicable (4VAC50-60-40 et seq.) of this chapter unless an
1796 exception is granted pursuant to 4VAC50-60-122 and shall comply with the requirements
1797 of 4VAC50-60-460 L.

1798 B. When a locality operating a qualifying local program has adopted requirements
1799 more stringent than those imposed by this chapter in accordance with § 10.1-603.7 of
1800 the Code of Virginia or implemented a comprehensive stormwater management plan,
1801 the department shall consider such requirements in its review of state projects within that
1802 locality in accordance with Part IV (4VAC50-60-160 et seq.) of this chapter.

1803 C. Nothing in this part shall be construed as authorizing a locality to regulate, or to
1804 require prior approval by the locality for, a state project.

1805 **4VAC50-60-106. Qualifying local program administrative requirements.**

1806 A. A qualifying local program shall provide for the following:

1807 1. Identification of the authority authorizing coverage under the VSMP General
1808 Permit for Discharges of Stormwater from Construction Activities, the plan
1809 reviewing authority, the plan approving authority, the inspection authority, and the
1810 enforcement authority;

1811 2. Technical criteria to be used in the qualifying local program;

1812 3. Procedures for the submission and approval of plans;

1813 4. Inspection and monitoring of land-disturbing activities covered by a permit for
1814 compliance;

1815 5. ~~Procedures or policies for long-term inspection and maintenance of~~
1816 ~~stormwater management facilities~~ Enforcement; and

1817 6. ~~Enforcement~~ Procedures or policies for long-term inspection and maintenance
1818 of stormwater management facilities.

1819 B. A locality qualifying local program shall adopt an ordinance(s) that incorporates
1820 the components set out in subdivisions 1 through 5 of subsection A of this section and
1821 consent to follow procedures provided by the department for the issuance, denial,
1822 revocation, termination, reissuance, transfer, or modifications of coverage under the
1823 VSMP General Permit for Discharges of Stormwater from Construction Activities.

1824 C. A qualifying local program shall report to the department information related to the
1825 administration and implementation of the qualifying local program in accordance with
1826 4VAC50-60-126.

1827 D. A qualifying local program may require the submission of a reasonable
1828 performance bond or other financial surety and provide for the release of such sureties
1829 in accordance with the criteria set forth in § 10.1-603.8 of the Code of Virginia.

1830 **4VAC50-60-108. Qualifying local program stormwater management plan review.**

1831 A. A qualifying local program shall require stormwater management plans to be
1832 submitted for review and be approved prior to commencement of land-disturbing
1833 activities. In addition to the other requirements of this chapter, a stormwater
1834 management plan must be developed in accordance with the following:

1835 1. A stormwater management plan for a land-disturbing activity shall apply the
1836 stormwater management technical criteria to the entire land-disturbing activity.

1837 2. At the discretion of the qualifying local program, individual lots or planned
1838 phases of developments shall not be considered separate land-disturbing

1839 activities, but rather the entire development shall be considered a single land-
1840 disturbing activity.

1841 3. The stormwater management plan shall consider all sources of surface runoff
1842 and all sources of subsurface and groundwater flows converted to surface runoff.

1843 B. A qualifying local program shall approve or disapprove a stormwater management
1844 plan and required accompanying information according to the following:

1845 1. Stormwater management plan review shall begin upon submission of a
1846 complete plan. A complete plan shall include the following elements:

1847 a. The location of all points of stormwater discharge, receiving surface waters
1848 or karst features into which the stormwater discharges, and predevelopment
1849 and postdevelopment conditions for drainage areas, including final drainage
1850 patterns and changes to existing contours;

1851 b. Contact information including the name, address, and telephone number of
1852 the property owner and the tax reference number and parcel number of the
1853 property or properties affected;

1854 c. A narrative that includes a description of current site conditions and
1855 proposed development and final site conditions, including proposed
1856 stormwater management facilities and the mechanism, including an
1857 identification of financially responsible parties, through which the facilities will
1858 be operated and maintained during and after construction activity;

1859 d. The location and the design of the proposed stormwater management
1860 facilities;

1861 e. Information identifying the hydrologic characteristics and structural
1862 properties of soils utilized with the installation of stormwater management
1863 facilities;

1864 f. Hydrologic and hydraulic computations of the predevelopment and
1865 postdevelopment runoff conditions for the required design storms;

1866 g. Good engineering practices and calculations verifying compliance with the
1867 water quality and quantity requirements of this chapter;

1868 h. A map or maps of the site that depicts the topography of the site and
1869 includes:

1870 (1) All contributing drainage areas;

1871 (2) Receiving surface waters or karst features into which stormwater will be
1872 discharged;

1873 (3) Existing streams, ponds, culverts, ditches, wetlands, and other water
1874 bodies;

1875 (4) Soil types, geologic formations, forest cover, and other vegetative areas;

1876 (5) Current land use including existing structures, roads, and locations of
1877 known utilities and easements;

1878 (6) Sufficient information on adjoining parcels to assess the impacts of
1879 stormwater from the site;

1880 (7) The limits of clearing and grading, and the proposed drainage patterns on
1881 the site;

1882 (8) Proposed buildings, roads, parking areas, utilities, and stormwater
1883 management facilities; and

1884 (9) Proposed land use with tabulation of the percentage of surface area to be
1885 adapted to various uses, including but not limited to planned locations of
1886 utilities, roads, and easements.

1887 i. No more than 50% of the required base fee in accordance with 4VAC50-60-
1888 820, and the required fee form must have been submitted.

1889 2. Elements of the stormwater management plans shall be appropriately sealed
1890 and signed by a professional in adherence to all minimum standards and
1891 requirements pertaining to the practice of that profession in accordance with
1892 Chapter 4 (§ 54.1-400 et seq.) of Title 54.1 of the Code of Virginia and attendant
1893 regulations.

1894 3. Completeness of a plan and required accompanying information shall be
1895 determined by the qualifying local program, and the applicant shall be notified of
1896 any determination, within 15 calendar days of receipt.

1897 a. If within those 15 days the plan is deemed to be incomplete based on the
1898 criteria set out in this subsection, the applicant shall be notified in writing of
1899 the reasons the plan is deemed incomplete.

1900 b. If a determination of completeness is made and communicated to the
1901 applicant within the 15 calendar days, an additional 60 calendar days from
1902 the date of the communication will be allowed for the review of the plan.

1903 c. If a determination of completeness is not made and communicated to the
1904 applicant within the 15 calendar days, the plan shall be deemed complete as
1905 of the date of submission and a total of 60 calendar days from the date of
1906 submission will be allowed for the review of the plan.

1907 d. The qualifying local program shall act within 45 days on any plan that has
1908 been previously disapproved and resubmitted.

1909 4. During the review period, the plan shall be approved or disapproved and the
1910 decision communicated in writing to the person responsible for the land-
1911 disturbing activity or his designated agent. If the plan is not approved, the
1912 reasons for not approving the plan shall be provided in writing. Approval or denial
1913 shall be based on the plan's compliance with the requirements of this chapter
1914 and of the qualifying local program. Where available to the applicant, electronic
1915 communication may be considered communication in writing.

1916 5. If a plan meeting all requirements of this chapter and of the qualifying local
1917 program is submitted and no action is taken within the time specified above, the
1918 plan shall be deemed approved.

1919 C. Notwithstanding the requirements of subsection A of this section, if allowed by the
1920 qualifying local program, an initial stormwater management plan may be submitted for
1921 review and approval when it is accompanied by an erosion and sediment control plan,
1922 preliminary stormwater design for the current and future site work, fee form, and no more
1923 than 50% of the base fee required by 4VAC50-60-820. Such plans shall be limited to the
1924 initial clearing and grading of the site unless otherwise allowed by the qualifying local
1925 program. Approval by the qualifying local program of an initial plan does not supersede
1926 the need for the submittal and approval of a complete stormwater management plan and
1927 the updating of the SWPPP prior to the commencement of activities beyond initial
1928 clearing and grading and other activities approved by the local program. The initial plan
1929 shall include information detailed in subsection B of this section to the extent required
1930 by the qualifying local program and such other information as may be required by the
1931 qualifying local program.

- 1932 D. Each approved plan may be modified in accordance with the following:
- 1933 1. Modifications to an approved stormwater management plan shall be allowed
- 1934 only after review and written approval by the qualifying local program. The
- 1935 qualifying local program shall have 60 calendar days to respond in writing either
- 1936 approving or disapproving such requests.
- 1937 2. Based on an inspection, the qualifying local program may require amendments
- 1938 to the approved stormwater management plan to address the noted deficiencies
- 1939 and notify the permittee of the required modifications.
- 1940 **4VAC50-60-110. Technical criteria for local programs. (Repealed.)**
- 1941 ~~A. All local stormwater management programs shall comply with the general~~
- 1942 ~~technical criteria as outlined in 4VAC50-60-50.~~
- 1943 ~~B. All local stormwater management programs which contain provisions for~~
- 1944 ~~stormwater runoff quality shall comply with 4VAC50-60-60. A locality may establish~~
- 1945 ~~criteria for selecting either the site or a planning area on which to apply the water quality~~
- 1946 ~~criteria. A locality may opt to calculate actual watershed specific or locality wide values~~
- 1947 ~~for the average land cover condition based upon:~~
- 1948 ~~1. Existing land use data at time of local Chesapeake Bay Preservation Act~~
- 1949 ~~Program or department stormwater management program adoption, whichever~~
- 1950 ~~was adopted first;~~
- 1951 ~~2. Watershed or locality size; and~~
- 1952 ~~3. Determination of equivalent values of impervious cover for nonurban land uses~~
- 1953 ~~which contribute nonpoint source pollution, such as agriculture, forest, etc.~~
- 1954 ~~C. All local stormwater management programs which contain provisions for stream~~
- 1955 ~~channel erosion shall comply with 4VAC50-60-70.~~
- 1956 ~~D. All local stormwater management programs must contain provisions for flooding~~
- 1957 ~~and shall comply with 4VAC50-60-80.~~
- 1958 ~~E. All local stormwater management programs which contain provisions for~~
- 1959 ~~watershed or regional stormwater management plans shall comply with 4VAC50-60-110.~~
- 1960 ~~F. A locality that has adopted more stringent requirements or implemented a regional~~
- 1961 ~~(watershed-wide) stormwater management plan may request, in writing, that the~~
- 1962 ~~department consider these requirements in its review of state projects within that locality.~~
- 1963 ~~G. Nothing in this part shall be construed as authorizing a locality to regulate, or to~~
- 1964 ~~require prior approval by the locality for, a state project.~~
- 1965 **4VAC50-60-112. Qualifying local program authorization of coverage under the**
- 1966 **VSMP General Permit for Discharges of Stormwater from Construction Activities.**
- 1967 A. Coverage shall be authorized by the qualifying local program under the VSMP
- 1968 General Permit for Discharges of Stormwater from Construction Activities in accordance
- 1969 with the following:
- 1970 1. The applicant must have an approved initial stormwater management plan or
- 1971 an approved stormwater management plan for the land-disturbing activity.
- 1972 2. The applicant must have submitted proposed right-of-entry agreements or
- 1973 easements from the owner for purposes of inspection and maintenance and
- 1974 proposed maintenance agreements, including inspection schedules, where
- 1975 required in accordance with 4VAC50-60-124.
- 1976 3. The applicant must have an approved registration statement for the VSMP
- 1977 General Permit for Discharges of Stormwater from Construction Activities.

1978 4. The applicant must have submitted the required fee form and total fee required
1979 by 4VAC50-60-820.

1980 5. Applicants submitting registration statements deemed to be incomplete must
1981 be notified within 15 working days of receipt by the qualifying local program that
1982 the registration statement is not complete and be notified (i) of what material
1983 needs to be submitted to complete the registration statement, and (ii) that the
1984 land-disturbing activity does not have coverage under the VSMP General Permit
1985 for Discharges of Stormwater from Construction Activities.

1986 B. Coverage or termination of coverage shall be authorized through a standardized
1987 database or other method provided by the department. Such database shall include, at a
1988 minimum, permit number, operator name, activity name, acres disturbed, date of permit
1989 coverage, and site address and location as well as date of termination.

1990 C. Coverage information pertaining to the VSMP General Permit for Discharges of
1991 Stormwater from Construction Activities shall be reported to the department in
1992 accordance with 4VAC50-60-126 by the qualifying local program.

1993 D. The applicant shall be notified of authorization of permit coverage by the
1994 qualifying local program.

1995 **4VAC50-60-114. Inspections.**

1996 A. The qualifying local program or its designee shall inspect the land-disturbing
1997 activity during construction for compliance with the VSMP General Permit for Discharges
1998 of Stormwater from Construction Activities.

1999 B. The person responsible for the development project or their designated agent
2000 shall submit to a qualifying local program a construction record drawing for permanent
2001 stormwater management facilities, appropriately sealed, and signed by a professional in
2002 accordance with all minimum standards and requirements pertaining to the practice of
2003 that profession pursuant to Chapter 4 (§ 54.1-400 et seq.) of Title 54.1 of the Code of
2004 Virginia and attendant regulations, certifying that the stormwater management facilities
2005 have been constructed in accordance with the approved plan. The qualifying local
2006 program shall have the construction record drawing and certification on file prior to the
2007 release of the portion of the any performance bond or surety associated with the
2008 stormwater management facility. The qualifying local program may elect not to require
2009 construction record drawings for stormwater management facilities for which
2010 maintenance agreements are not required pursuant to 4VAC50-60-124.

2011 C. The owners owner of a stormwater management facilities facility for which a
2012 maintenance agreement is required pursuant to 4VAC50-60-124 shall be required to
2013 conduct inspections in accordance with an inspection schedule in a the recorded
2014 maintenance agreement, and shall submit written inspection and maintenance reports to
2015 the qualifying local program upon request. Such reports, if consistent with a board-
2016 approved inspection program established in subsection D E of this section, may be
2017 utilized by the qualifying local program if the inspection is conducted by a person who is
2018 licensed as a professional engineer, architect, certified landscape architect, or land
2019 surveyor pursuant to Article 1 (§ 54.1-400 et seq.) of Chapter 4 of Title 54.1 or who holds
2020 a certificate of competence from the board. The reports, if so utilized, must be kept on
2021 file with the qualifying local program.

2022 D. A qualifying local program shall develop a strategy for addressing maintenance of
2023 stormwater management facilities designed to treat stormwater runoff [solely primarily]
2024 from an individual residential lot on which they are located. Such a strategy may include
2025 periodic inspections, homeowner outreach and education, or other method targeted at
2026 promoting the long-term maintenance of such facilities. Such facilities shall not be

2027 subject to the requirement for an inspection to be conducted by the qualifying local
2028 program every five years contained within subsection E of this section.

2029 E. A qualifying local program shall establish an inspection program that ensures that
2030 the stormwater management facilities are being maintained as designed. Any inspection
2031 program shall be:

2032 1. Approved by the board prior to implementation;

2033 2. Established in writing;

2034 3. Based on a system of priorities that takes into consideration the purpose and
2035 type of the facility, ownership and the existence of a recorded maintenance
2036 agreement and inspection schedule where required, the contributing drainage
2037 area, and downstream conditions;

2038 4. Demonstrated to be an enforceable inspection program that meets the intent
2039 of the regulations and ensures that each stormwater management facility is
2040 inspected by the qualifying local program or its designee, not to include the
2041 owner, except as provided in subsection subsections C and D of this section, at
2042 least every five years; and

2043 5. Documented by inspection records.

2044 E. F. Inspection reports shall be generated and kept on file in accordance with
2045 4VAC50-60-126 for all stormwater management facilities inspected by the qualifying
2046 local program.

2047 **4VAC50-60-116. Qualifying local program enforcement.**

2048 A. A qualifying local program may incorporate the following components:

2049 1. Informal and formal administrative enforcement procedures including:

2050 a. Verbal warnings and inspection reports;

2051 b. Notices of corrective action;

2052 c. Consent special orders and civil charges in accordance with subdivision 7
2053 of § 10.1-603.2:1 and § 10.1-603.14 D 2 of the Code of Virginia;

2054 d. Notices to comply in accordance with § 10.1-603.11 of the Code of
2055 Virginia;

2056 e. Special orders in accordance with subdivision 7 of § 10.1-603.2:1 of the
2057 Code of Virginia;

2058 f. Emergency special orders in accordance with subdivision 7 of § 10.1-
2059 603.2:1 of the Code of Virginia; and

2060 g. Public notice and comment periods pursuant to 4VAC50-60-660.

2061 2. Civil and criminal judicial enforcement procedures including:

2062 a. Schedule of civil penalties set out in subsection D of this section;

2063 b. Criminal penalties in accordance with § 10.1-603.14 B and C of the Code
2064 of Virginia; and

2065 c. Injunctions in accordance with §§ 10.1-603.12:4, 10.1-603.2:1 and 10.1-
2066 603.14 D 1 of the Code of Virginia.

2067 B. A qualifying local program shall develop policies and procedures that outline the
2068 steps to be taken regarding enforcement actions under the Stormwater Management Act
2069 and attendant regulations and the local ordinance.

2070 C. A qualifying local program may utilize the department's Stormwater Management
2071 Enforcement Manual as guidance in establishing policies and procedures.

2072 D. A court may utilize as guidance the following Schedule of Civil Penalties set by
 2073 the board in accordance with § 10.1-603.14 A of the Code of Virginia. The range
 2074 contained within the schedule reflects the degree of harm caused by the violation, which
 2075 is site-specific and may vary greatly from case to case, as may the economic benefit of
 2076 noncompliance to the violator. Each day of violation of each requirement shall constitute
 2077 a separate offense. Assignment of the degree of harm is a qualitative decision subject to
 2078 the court's discretion. The court has the discretion to impose a maximum penalty of
 2079 \$32,500 per violation per day in accordance with § 10.1-603.14 A of the Code of
 2080 Virginia.

<u>1. Gravity-based Component</u>	<u>Marginal</u>	<u>Moderate</u>	<u>Serious</u>	
<u>Violations* and Frequency of Occurrence **</u>	<u>\$\$ x occurrences</u>	<u>\$\$ x occurrences</u>	<u>\$\$ x occurrences</u>	<u>SUBTOTAL</u>
<u>No Permit Registration (each month w/o coverage = 1 occurrence)</u>	<u>500 x _____</u>	<u>1,000 x _____</u>	<u>2,000 x _____</u>	
<u>No SWPPP (No SWPPP components including E&S Plan) (each month of land-disturbing without SWPPP = 1 occurrence)</u>	<u>1,000 x _____</u>	<u>1,500 x _____</u>	<u>2,000 x _____</u>	
<u>Incomplete SWPPP</u>	<u>300 x _____</u>	<u>500 x _____</u>	<u>1,000 x _____</u>	
<u>SWPPP not on site</u>	<u>100 x _____</u>	<u>300 x _____</u>	<u>500 x _____</u>	
<u>No approved Erosion and Sediment Control Plan</u>	<u>500 x _____</u>	<u>1,000 x _____</u>	<u>2,000 x _____</u>	
<u>Failure to install stormwater BMPs or erosion and sediment ("E&S") controls</u>	<u>300 x _____</u>	<u>500 x _____</u>	<u>1,000 x _____</u>	

<u>Stormwater BMPs or E&S controls improperly installed or maintained</u>	<u>250 x _____</u>	<u>500 x _____</u>	<u>750 x _____</u>	
<u>Operational deficiencies (e.g., failure to initiate stabilization measures as soon as practicable; unauthorized discharges of stormwater; failure to implement control measures for construction debris)</u>	<u>1,000 x _____</u>	<u>2,000 x _____</u>	<u>5,000 x _____</u>	
<u>Failure to conduct required inspections</u>	<u>500 x _____</u>	<u>2,000 x _____</u>	<u>3,000 x _____</u>	
<u>Incomplete, improper or missed inspections (e.g., inspections not conducted by qualified personnel; site inspection reports do not include date, weather information, location of discharge, or are not certified, etc.)</u>	<u>300 x _____</u>	<u>500 x _____</u>	<u>1,000 x _____</u>	
			<u>Subtotal #1</u>	
<u>2. Estimated Economic Benefit of Noncompliance (if applicable)</u>			<u>Subtotal #2</u>	
<u>3. Recommended civil penalty</u>			<u>Total (#1 and #2)</u>	
<p>* <u>Each stormwater BMP or E&S control that is either not installed or improperly installed or maintained is a separate violation.</u></p> <p>** <u>The frequency of occurrence is per event unless otherwise noted.</u></p>				

2081
2082

E. Pursuant to subdivision 2 of § 10.1-603.2:1 of the Code of Virginia, authorization to administer a qualifying local program shall not remove from the board the authority to

2083 enforce the provisions of the Virginia Stormwater Management Act and attendant
2084 regulations.

2085 F. Pursuant to § 10.1-603.14 A of the Code of Virginia, amounts recovered by a
2086 qualifying local program shall be paid into the treasury of the locality in which the
2087 violation occurred and are to be used for the purpose of minimizing, preventing,
2088 managing, or mitigating pollution of the waters of the locality and abating environmental
2089 pollution therein in such manner as the court may, by order, direct.

2090 **4VAC50-60-118. Hearings.**

2091 A qualifying local program shall ensure that any permit applicant or permittee shall
2092 have a right to a hearing pursuant to § 10.1-603.12:6 of the Code of Virginia and shall
2093 ensure that all hearings held under this chapter shall be conducted in accordance with
2094 § 10.1-603.12:7 of the Code of Virginia or as otherwise provided by law.

2095 **4VAC50-60-120. Requirements for local program and ordinance. (Repealed.)**

2096 A. At a minimum, the local stormwater management program and implementing
2097 ordinance shall meet the following:

2098 1. The ordinance shall identify the plan approving authority and other positions of
2099 authority within the program, and shall include the regulations and technical
2100 criteria to be used in the program.

2101 2. The ordinance shall include procedures for submission and approval of plans,
2102 issuance of permits, monitoring and inspections of land development projects.
2103 The party responsible for conducting inspections shall be identified. The local
2104 program authority shall maintain, either on-site or in local program files, a copy of
2105 the approved plan and a record of all inspections for each land development
2106 project.

2107 B. The department shall periodically review each locality's stormwater management
2108 program, implementing ordinance, and amendments. Subsequent to this review, the
2109 department shall determine if the program and ordinance are consistent with the state
2110 stormwater management regulations and notify the locality of its findings. To the
2111 maximum extent practicable the department will coordinate the reviews with other local
2112 government program reviews to avoid redundancy. The review of a local program shall
2113 consist of the following:

2114 1. A personal interview between department staff and the local program
2115 administrator or his designee;

2116 2. A review of the local ordinance and other applicable documents;

2117 3. A review of plans approved by the locality and consistency of application;

2118 4. An inspection of regulated activities; and

2119 5. A review of enforcement actions.

2120 C. Nothing in this chapter shall be construed as limiting the rights of other federal
2121 and state agencies from imposing stricter technical criteria or other requirements as
2122 allowed by law.

2123 **4VAC50-60-122. Qualifying local program exceptions.**

2124 A. A qualifying local program may grant exceptions to the provisions of Part II
2125 (4VAC50-60-40 et seq.) Parts II A and II B of this chapter through an administrative
2126 process. A request for an exception, including the reasons for making the request, shall
2127 be submitted in writing to the qualifying local program. An exception may be granted
2128 provided that (i) the exception is the minimum necessary to afford relief, (ii) reasonable
2129 and appropriate conditions shall be imposed as necessary upon any exception granted

2130 so that the intent of the Act and this chapter are preserved, (iii) granting the exception
2131 will not confer on the permittee any special privileges that are denied to other permittees
2132 who present similar circumstances, and (iv) exception requests are not based upon
2133 conditions or circumstances that are self-imposed or self-created.

2134 B. Economic hardship alone is not sufficient reason to grant an exception from the
2135 requirements of this chapter.

2136 C. Under no circumstance shall the qualifying local program grant an exception to
2137 the requirement that the land-disturbing activity obtain a permit.

2138 D. Any exception to the water quality technical criteria of subdivisions 1 and 2 of
2139 4VAC50-60-63 shall require that all available offsite options be utilized before an
2140 exception is granted and that any necessary phosphorus reductions unable to be
2141 achieved on site or through the available offsite options of subsection A of 4VAC50-60-
2142 69 be achieved through a payment made in accordance with subsection B of 4VAC50-
2143 60-69 [, when such payment option is available]. In the case of the granting of an
2144 exception, the minimum on site thresholds of subsection B of 4VAC50-60-69 shall not
2145 apply.

2146 E. A record of all exceptions applied for and granted shall be maintained by the
2147 qualifying local program and reported to the department in accordance with 4VAC50-60-
2148 126.

2149 **4VAC50-60-124. Qualifying local program stormwater management facility**
2150 **maintenance.**

2151 A. Responsibility for the operation and maintenance of stormwater management
2152 facilities in accordance with this chapter, unless assumed by a governmental agency,
2153 shall remain with the property owner or other legally established entity and shall pass to
2154 any successor.

2155 1. ~~The government entity implementing the~~ qualifying local program shall ~~be a~~
2156 ~~party to each~~ require a maintenance agreement for each stormwater
2157 ~~management facility except as provided in subdivision 2. Such maintenance~~
2158 ~~agreement shall include a schedule for~~ require the owner to (i) perform
2159 ~~inspections by the owner, and, in addition to ensuring that each on a specified~~
2160 ~~schedule, (ii) maintain the facility is maintained as designed, shall ensure that~~
2161 ~~and (iii) maintain the designed flow and drainage patterns from the site to a~~
2162 ~~permanent facility are maintained. Such agreements may also contain provisions~~
2163 ~~specifying that, where maintenance or repair of a stormwater management~~
2164 ~~facility located on the owner's property is neglected, or the stormwater~~
2165 ~~management facility becomes a public health or safety concern and the owner~~
2166 ~~has failed to perform the necessary maintenance and repairs after receiving~~
2167 ~~notice from the locality, the qualifying local program may perform the necessary~~
2168 ~~maintenance and repairs and recover the costs from the owner. In the specific~~
2169 ~~case of a public health or safety danger, the agreement may provide that the~~
2170 ~~written notice may be waived by the locality.~~

2171 2. Maintenance agreements, at the discretion of the qualifying local program,
2172 shall not be required for stormwater management facilities designed to treat
2173 stormwater runoff [~~solely~~ primarily] from an individual residential lot on which
2174 they are located, provided it is demonstrated to the satisfaction of the qualifying
2175 local program that future maintenance of such facilities will be addressed through
2176 a deed restriction or other mechanism enforceable [~~by~~ at the discretion of] the
2177 qualifying local program.

2178 B. Where a maintenance agreement is required for a stormwater management
2179 facility, the qualifying local program shall be notified of any transfer or conveyance of
2180 ownership or responsibility for maintenance of a stormwater management facility.

2181 C. Where a maintenance agreement is required for a stormwater management
2182 facility, the qualifying local program shall require right-of-entry agreements or easements
2183 from the property owner for purposes of inspection and maintenance.

2184 **4VAC50-60-126. Qualifying local program report and recordkeeping.**

2185 A. On a fiscal year basis (July 1 to June 30), a qualifying local program shall report to
2186 the department by October 1 of each year in a format provided by the department. The
2187 information to be provided shall include the following:

2188 1. Information on each permanent stormwater management facility completed
2189 during the fiscal year to include type of stormwater management facility,
2190 coordinates, acres treated, and the surface waters or karst features into which
2191 the stormwater management facility will discharge;

2192 2. Number of VSMP General Permit for Discharges of Stormwater from
2193 Construction Activities projects inspected and the total number of inspections by
2194 acreage categories determined by the department during the fiscal year;

2195 3. Number and type of enforcement actions during the fiscal year; and

2196 4. Number of exceptions applied for and the number granted or denied during the
2197 fiscal year.

2198 B. A qualifying local program shall make information set out in subsection A of this
2199 section available to the department upon request.

2200 C. A qualifying local program shall keep records in accordance with the following:

2201 1. Permit files shall be kept for three years after permit termination. After three
2202 years, the permit file shall be delivered to the department by October 1 of each
2203 year.

2204 2. Stormwater maintenance facility inspection reports shall be kept for five years
2205 from the date of inspection.

2206 3. Stormwater maintenance agreements, design standards and
2207 specifications, ~~postconstruction surveys~~ construction record drawings, and
2208 maintenance records shall be maintained in perpetuity or until a stormwater
2209 management facility is removed due to redevelopment of the site.

2210 **Part III B**

2211 **Department of Conservation and Recreation Administered Local Programs**

2212 **4VAC50-60-128. Authority and applicability.**

2213 In the absence of a qualifying local program, the department, in accordance with an
2214 adoption and implementation schedule set by the board and upon board approval, shall
2215 administer the local stormwater management program in a locality in accordance with §
2216 10.1-603.3 C of the Code of Virginia. This part specifies the minimum technical criteria
2217 for a department-administered local stormwater management program in accordance
2218 with the Virginia Stormwater Management Act (§ 10.1-603.2 et seq. of the Code of
2219 Virginia), and the standards and criteria established in these regulations by the board
2220 pursuant to its authority under that article. Such criteria include but are not limited to
2221 administration, plan review, issuance of coverage under the Virginia Stormwater
2222 Management Program (VSMP) General Permit for Discharges of Stormwater from
2223 Construction Activities, issuance of individual permits, inspection, enforcement, and
2224 education and outreach components.

2225 **4VAC50-60-130. Administrative procedures: stormwater management**
2226 **plans. (Repealed.)**

2227 A. Localities shall approve or disapprove stormwater management plans according
2228 to the following:

2229 1. A maximum of 60 calendar days from the day a complete stormwater
2230 management plan is accepted for review will be allowed for the review of the
2231 plan. During the 60-day review period, the locality shall either approve or
2232 disapprove the plan and communicate its decision to the applicant in writing.
2233 Approval or denial shall be based on the plan's compliance with the locality's
2234 stormwater management program.

2235 2. A disapproval of a plan shall contain the reasons for disapproval.

2236 B. Each plan approved by a locality shall be subject to the following conditions:

2237 1. The applicant shall comply with all applicable requirements of the approved
2238 plan, the local program, this chapter and the Act, and shall certify that all land
2239 clearing, construction, land development and drainage will be done according to
2240 the approved plan.

2241 2. The land development project shall be conducted only within the area
2242 specified in the approved plan.

2243 3. The locality shall be allowed, after giving notice to the owner, occupier or
2244 operator of the land development project, to conduct periodic inspections of the
2245 project.

2246 4. The person responsible for implementing the approved plan shall conduct
2247 monitoring and submit reports as the locality may require to ensure compliance
2248 with the approved plan and to determine whether the plan provides effective
2249 stormwater management.

2250 5. No changes may be made to an approved plan without review and written
2251 approval by the locality.

2252 **4VAC50-60-132. Technical criteria.**

2253 A. The department-administered local stormwater management programs shall
2254 require compliance with the provisions of Part II A and Part II B as applicable
2255 (4VAC50-60-40 et seq.) of this chapter unless an exception is granted pursuant to
2256 4VAC50-60-142 D and shall comply with the requirements of 4VAC50-60-460 L.

2257 B. When reviewing a federal project, the department shall apply the provisions of this
2258 chapter.

2259 C. Nothing in this chapter shall be construed as limiting the rights of other federal
2260 and state agencies to impose stricter technical criteria or other requirements as allowed
2261 by law.

2262 **4VAC50-60-134. Administrative authorities.**

2263 A. The department is the permit-issuing authority, plan approving authority, and the
2264 enforcement authority.

2265 B. The department or its designee is the plan reviewing authority and the inspection
2266 authority.

2267 C. The department shall assess and collect fees.

2268 D. The department may require the submission of a reasonable performance bond or
2269 other financial surety in accordance with the criteria set forth in § 10.1-603.8 of the Code
2270 of Virginia prior to the issuance of coverage under the VSMP General Permit for

2271 Discharges of Stormwater from Construction Activities and in accordance with the
2272 following:

2273 1. The amount of the installation performance security shall be the total
2274 estimated construction cost of the stormwater management BMPs approved
2275 under the stormwater management plan, plus 25%;

2276 2. The performance security shall contain forfeiture provisions for failure, after
2277 proper notice, to complete work within the time specified, or to initiate or maintain
2278 appropriate actions that may be required in accordance with the approved
2279 stormwater management plan;

2280 3. Upon failure by the applicant to take such action as required, the department
2281 may act and may collect from the applicant the difference should the amount of
2282 the reasonable cost of such action exceed the amount of the security held; and

2283 4. Within 60 days of the completion of the requirements and conditions of the
2284 VSMP General Permit for Discharges of Stormwater from Construction Activities
2285 and the department's acceptance of the Notice of Termination, such bond, cash
2286 escrow, letter of credit, or other legal arrangement shall be refunded to the
2287 applicant.

2288 **4VAC50-60-136. Stormwater management plan review.**

2289 A. Stormwater management plans shall be reviewed and approved by the
2290 department prior to commencement of land-disturbing activities.

2291 B. The department shall approve or disapprove a stormwater management plan and
2292 required accompanying information according to the criteria set out for a qualifying local
2293 program in 4VAC50-60-108 B.

2294 C. The department shall not ~~accept~~ review or approve initial stormwater
2295 management plans.

2296 D. Each approved stormwater management plan may be modified in accordance
2297 with the criteria set out for a qualifying local program in 4VAC50-60-108 D.

2298 **4VAC50-60-138. Issuance of coverage under the VSMP General Permit for**
2299 **Discharges of Stormwater from Construction Activities.**

2300 The department shall issue coverage under the VSMP General Permit for
2301 Discharges of Stormwater from Construction Activities in accordance with the following:

2302 1. The applicant must have a department-approved stormwater management
2303 plan for the land-disturbing activity.

2304 2. The applicant must have submitted a complete registration statement for the
2305 VSMP General Permit for Discharges of Stormwater from Construction Activities
2306 in accordance with Part VII (4VAC50-60-360 et seq.) of this chapter and the
2307 requirements of the VSMP General Permit for Discharges of Stormwater from
2308 Construction Activities, which acknowledges that a SWPPP has been developed
2309 and will be implemented, and the registration statement must have been
2310 reviewed and approved prior to the commencement of land disturbance.

2311 3. The applicant must have submitted the required fee form and fee for the
2312 registration statement seeking coverage under the VSMP General Permit for
2313 Discharges of Stormwater from Construction Activities.

2314 4. Applicants submitting registration statements deemed to be incomplete must
2315 be notified within 15 working days of receipt by the department that the
2316 registration statement is not complete and be notified (i) of what material needs
2317 to be submitted to complete the registration statement, and (ii) that the land-

2318 disturbing activity does not have coverage under the VSMP General Permit for
2319 Discharges of Stormwater from Construction Activities.

2320 5. The applicant shall be notified of authorization of permit coverage by the
2321 department.

2322 6. Individual permits for qualifying land-disturbing activities may be issued at the
2323 discretion of the board or its designee pursuant to 4VAC50-60-410 B 3.

2324 **4VAC50-60-140. Administrative procedures: exceptions. (Repealed.)**

2325 ~~A. A request for an exception shall be submitted, in writing, to the locality. An~~
2326 ~~exception from the stormwater management regulations may be granted, provided that:~~
2327 ~~(i) exceptions to the criteria are the minimum necessary to afford relief and (ii)~~
2328 ~~reasonable and appropriate conditions shall be imposed as necessary upon any~~
2329 ~~exception granted so that the intent of the Act and this chapter are preserved.~~

2330 ~~B. Economic hardship is not sufficient reason to grant an exception from the~~
2331 ~~requirements of this chapter.~~

2332 **4VAC50-60-142. Inspections, enforcement, hearings, exceptions, and stormwater**
2333 **management facility maintenance.**

2334 A. Inspections shall be conducted by the department in accordance with 4VAC50-60-
2335 114.

2336 B. Enforcement actions shall be conducted by the department in accordance with
2337 4VAC50-60-116. The department's Stormwater Management Enforcement Manual shall
2338 serve as guidance to be utilized in enforcement actions under the Stormwater
2339 Management Act and attendant regulations. Any amounts assessed by a court as a
2340 result of a summons issued by the board or the department shall be paid into the state
2341 treasury and deposited by the State Treasurer into the Virginia Stormwater Management
2342 Fund established pursuant to § 10.1-603.4:1 of the Code of Virginia.

2343 C. Hearings shall be conducted by the department in accordance with 4VAC50-60-
2344 118.

2345 D. Exceptions may be granted by the department in accordance with 4VAC50-60-
2346 122.

2347 E. Stormwater management facility maintenance shall be conducted in accordance
2348 with 4VAC50-60-124.

2349 **4VAC50-60-150. Administrative procedures: maintenance and**
2350 **inspections. (Repealed.)**

2351 ~~A. Responsibility for the operation and maintenance of stormwater management~~
2352 ~~facilities, unless assumed by a governmental agency, shall remain with the property~~
2353 ~~owner and shall pass to any successor or owner. If portions of the land are to be sold,~~
2354 ~~legally binding arrangements shall be made to pass the basic responsibility to~~
2355 ~~successors in title. These arrangements shall designate for each project the property~~
2356 ~~owner, governmental agency, or other legally established entity to be permanently~~
2357 ~~responsible for maintenance.~~

2358 ~~B. In the case of developments where lots are to be sold, permanent arrangements~~
2359 ~~satisfactory to the locality shall be made to ensure continued performance of this~~
2360 ~~chapter.~~

2361 ~~C. A schedule of maintenance inspections shall be incorporated into the local~~
2362 ~~ordinance. Ordinances shall provide that in cases where maintenance or repair is~~
2363 ~~neglected, or the stormwater management facility becomes a danger to public health or~~

2364 safety, the locality has the authority to perform the work and to recover the costs from
2365 the owner.

2366 D. Localities may require right-of-entry agreements or easements from the applicant
2367 for purposes of inspection and maintenance.

2368 E. Periodic inspections are required for all stormwater management facilities.
2369 Localities shall either:

2370 1. Provide for inspection of stormwater management facilities on an annual basis;
2371 or

2372 2. Establish an alternative inspection program which ensures that stormwater
2373 management facilities are functioning as intended. Any alternative inspection
2374 program shall be:

2375 a. Established in writing;

2376 b. Based on a system of priorities that, at a minimum, considers the purpose
2377 of the facility, the contributing drainage area, and downstream conditions; and

2378 c. Documented by inspection records.

2379 F. During construction of the stormwater management facilities, localities shall make
2380 inspections on a regular basis.

2381 G. Inspection reports shall be maintained as part of a land development project file.

2382 **4VAC50-60-154. Reporting and recordkeeping.**

2383 A. The department shall maintain a current database of permit coverage information
2384 for all projects that includes permit number, operator name, activity name, acres
2385 disturbed, date of permit coverage, and site address and location.

2386 B. On a fiscal year basis (July 1 to June 30), a local program shall report to the
2387 department shall compile a report on the local programs it administers by October 1 in
2388 accordance with 4VAC50-60-126 A.

2389 C. On a fiscal year basis (July 1 to June 30), the department shall compile
2390 information provided by local programs.

2391 D. C. Records shall be maintained by the department in accordance with 4VAC50-
2392 60-126 C.

2393 Part III C

2394 Department of Conservation and Recreation Procedures for Review of Qualifying Local
2395 Programs

2396 **4VAC50-60-156. Authority and applicability.**

2397 This part specifies the criteria that the department will utilize in reviewing a locality's
2398 administration of a qualifying local program pursuant to § 10.1-603.12 of the Code of
2399 Virginia following the board's approval of such program in accordance with the Virginia
2400 Stormwater Management Act and these regulations.

2401 **4VAC50-60-157. Stormwater management program review.**

2402 A. The department shall review each board-approved qualifying local program at
2403 least once every five years on a review schedule approved by the board. The
2404 department may review a qualifying local program on a more frequent basis if deemed
2405 necessary by the board and shall notify the local government if such review is
2406 scheduled.

2407 B. The review of a board-approved qualifying local program shall consist of the
2408 following:

- 2409 1. An interview between department staff and the qualifying local program
2410 administrator or his designee;
2411 2. A review of the local ordinance(s) and other applicable documents;
2412 3. A review of a subset of the plans approved by the qualifying local program and
2413 consistency of application including exceptions granted;
2414 4. An accounting of the receipt and of the expenditure of fees received;
2415 5. An inspection of regulated activities; and
2416 6. A review of enforcement actions and an accounting of amounts recovered
2417 through enforcement actions.

2418 C. To the extent practicable, the department will coordinate the reviews with other
2419 local government program reviews to avoid redundancy.

2420 D. The department shall provide its recommendations to the board within 90 days of
2421 the completion of a review. Such recommendations shall be provided to the locality in
2422 advance of the meeting.

2423 E. The board shall determine if the qualifying local program and ordinance are
2424 consistent with the Act and state stormwater management regulations and notify the
2425 qualifying local program of its findings.

2426 F. If the board determines that the deficiencies noted in the review will cause the
2427 qualifying local program to be out of compliance with the Stormwater Management Act
2428 and its attendant regulations, the board shall notify the qualifying local program
2429 concerning the deficiencies and provide a reasonable period of time for corrective action
2430 to be taken. If the qualifying local program agrees to the corrective action recommended
2431 by the board, the qualifying local program will be considered to be conditionally
2432 compliant with the Stormwater Management Act and its attendant regulations until a
2433 subsequent finding is issued by the board. If the qualifying local program fails to take the
2434 corrective action within the specified time, the board may take action pursuant to § 10.1-
2435 603.12 of the Code of Virginia.

2436 Part III D

2437 Virginia Soil and Water Conservation Board Authorization for Qualifying Local Programs

2438 **4VAC50-60-158. Authority and applicability.**

2439 Subdivision 1 of § 10.1-603.4 of the Code of Virginia requires that the board
2440 establish standards and procedures for authorizing a locality to administer a stormwater
2441 management program. In accordance with that requirement, and with the further
2442 authority conferred upon the board by the Virginia Stormwater Management Act (§ 10.1-
2443 603.2 et seq. of the Code of Virginia), this part specifies the procedures the board will
2444 utilize in authorizing a locality to administer a qualifying local program.

2445 **4VAC50-60-159. Authorization procedures for qualifying local programs.**

2446 A. A locality required to adopt a program in accordance with § 10.1-603.3 A of the
2447 Code of Virginia or those electing to seek authorization to administer a qualifying local
2448 program must submit to the board an application package which, at a minimum, contains
2449 the following:

- 2450 1. The local program ordinance(s);
2451 2. A funding and staffing plan based on the projected permitting fees; and
2452 3. The policies and procedures, including but not limited to, agreements with Soil
2453 and Water Conservation Districts, adjacent localities, or other entities, for the
2454 administration, plan review, permit issuance, inspection, and enforcement
2455 components of the program.

2456 B. Upon receipt of an application package, the board or its designee shall have ~~20~~ 30
2457 calendar days to determine the completeness of the application package. If an
2458 application package is deemed to be incomplete based on the criteria set out in
2459 subsection A of this section, the board or its designee must identify in writing the
2460 reasons the application package is deemed deficient.

2461 C. Upon receipt of a complete application package, the board or its designee shall
2462 have 90 calendar days for the review of the application package. During the 90-day
2463 review period, the board or its designee shall either approve or disapprove the
2464 application, or notify the locality of a time extension for the review, and communicate its
2465 decision to the locality in writing. If the application is not approved, the reasons for not
2466 approving the application shall be provided to the locality in writing. Approval or denial
2467 shall be based on the application's compliance with the Virginia Stormwater
2468 Management Act and these regulations.

2469 D. A locality required to adopt a qualifying local program in accordance with § 10.1-
2470 603.3 A of the Code of Virginia shall submit a complete application package for the
2471 board's review pursuant to a schedule set by the board in accordance with § 10.1-603.3
2472 and shall adopt a qualifying local program consistent with the Act and this chapter within
2473 the timeframe established pursuant to § 10.1-603.3.

2474 E. A locality not required to adopt a qualifying local program in accordance with §
2475 10.1-603.3 A but electing to adopt a qualifying local program shall notify the board in
2476 accordance with the following:

2477 1. A locality electing to adopt a qualifying local program may notify the board of
2478 its intention within six months of the effective date of these regulations. Such
2479 locality shall submit a complete application package for the board's review
2480 pursuant to a schedule set by the board and shall adopt a qualifying local
2481 program within the timeframe established by the board.

2482 2. A locality electing to adopt a qualifying local program that does not notify the
2483 board within the initial six-month period of its intention may thereafter notify the
2484 board at any regular meeting of the board. Such notification shall include a
2485 proposed schedule for adoption of a qualifying local program within a timeframe
2486 agreed upon by the board.

2487 F. The department shall administer the responsibilities of the Act and this chapter in
2488 any locality in which a qualifying local program has not been adopted. The department
2489 shall develop a schedule, to be approved by the board, for adoption and implementation
2490 of the requirements of this chapter in such localities. Such schedule may include phases
2491 of implementation and shall be based upon considerations including the typical number
2492 of permitted projects located within a locality, total number of acres disturbed by such
2493 permitted projects, and such other considerations as may be deemed necessary by the
2494 board.

2495 DOCUMENTS INCORPORATED BY REFERENCE (4VAC50-60)

2496 Illicit Discharge Detection and Elimination – A Guidance Manual for Program
2497 Development and Technical Assessments, EPA Cooperative Agreement X-82907801-0,
2498 October 2004, by Center for Watershed Protection and Robert Pitt, University of
2499 Alabama, available on the Internet at http://www.cwp.org/idde_verify.htm.

2500 Getting in Step – A Guide for Conducting Watershed Outreach Campaigns, EPA-
2501 841-B-03-002, December 2003, U.S. Environmental Protection Agency, Office of
2502 Wetlands, Oceans, and Watersheds, available on the Internet at
2503 <http://www.epa.gov/owow/watershed/outreach/documents/getnstep.pdf>, or may be

- 2504 ordered from National Service Center for Environmental Publications, telephone 1-800-
2505 490-9198.
- 2506 Municipal Stormwater Program Evaluation Guidance, EPA-833-R-07-003, January
2507 2007 (field test version), U.S. Environmental Protection Agency, Office of Wastewater
2508 Management, available on the Internet at
2509 http://cfpub.epa.gov/npdes/docs.cfm?program_id=6&view=allprog&sort=name#ms4_guidance,
2510 or may be ordered from National Technical Information Service, 5285 Port Royal
2511 Road, Springfield, VA 22161, telephone 1-800-553-6847 or (703) 605-6000.
- 2512 Technical Bulletin #1 - Stream Channel Erosion Control, Virginia Department of
2513 Conservation and Recreation, 2000.
- 2514 Technical Memorandum – The Runoff Reduction Method, April 2008, and beta-
2515 version addendum addendums, [~~September~~ December] 2008 2009.
- 2516 Virginia Runoff Reduction Method Worksheet, [~~September~~ December] 2008 2009.
- 2517 Virginia Runoff Reduction Method Worksheet – Redevelopment, [~~September~~
2518 December] 2009.