

Stormwater Regulations

Parts 1, 2 and 3

Part I

Definitions, Purpose, and Applicability

4VAC50-60-10. Definitions.

The following words and terms used in this chapter have the following meanings unless the context clearly indicates otherwise. The permit issuing authority may establish an alternative definition for any of the terms defined below as part of a qualifying local program approved by DCR.

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

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

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

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

"Approval authority" means the Virginia Soil and Water Conservation Board or its designee.

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

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

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

"Best management practice or "BMP" means schedules of activities, prohibitions of practices, including both structural and nonstructural practices, maintenance procedures, and other management practices to prevent or reduce the pollution of surface waters and groundwater systems from the impacts of land-disturbing activities.

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

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

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

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

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

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

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

61 "Contiguous zone" means the entire zone established by the United States under
62 Article 24 of the Convention on the Territorial Sea and the Contiguous Zone (37 FR
63 11906 June 15, 1972).

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

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

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

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

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

79 "Daily discharge" means the discharge of a pollutant measured during a calendar
80 day or any 24-hour period that reasonably represents the calendar day for purposes of
81 sampling. For pollutants with limitations expressed in units of mass, the daily discharge
82 is calculated as the total mass of the pollutant discharged over the day. For pollutants
83 with limitations expressed in other units of measurement, the daily discharge is
84 calculated as the average measurement of the pollutant over the day.

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

86 "Development" means land disturbance and the resulting landform associated with
87 the construction of residential, commercial, industrial, institutional, recreation,
88 transportation, or utility facilities or structures or the clearing of land for nonagricultural or
89 nonsilvicultural purposes.

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

91 "Director" means the Director of the Department of Conservation and Recreation or
92 his designee.

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

94 "Discharge of a pollutant" means:

- 95 1. Any addition of any pollutant or combination of pollutants to state waters from
96 any point source; or
97 2. Any addition of any pollutant or combination of pollutants to the waters of the
98 contiguous zone or the ocean from any point source other than a vessel or other
99 floating craft which is being used as a means of transportation.

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

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

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

114 "Drainage area" means a land area, water area, or both from which runoff flows to a
115 common point.

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

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

121 "Environmental Protection Agency" or "EPA" means the United States Environmental
122 Protection Agency.

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

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

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

132 "Facility or activity" means any VSMP point source or treatment works treating
133 domestic sewage or any other facility or activity (including land or appurtenances
134 thereto) that is subject to regulation under the VSMP.

135 "Flood fringe" ~~is~~ means the portion of the floodplain outside the floodway that is
136 usually covered with water from the 100-year storm event. This includes, but is not
137 limited to, the flood fringe designated by the Federal Emergency Management Agency.

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

141 "Floodplain" means ~~any land~~ the area adjoining adjacent to a channel, river, stream,
142 or other water body that is susceptible to being inundated by water. ~~It includes the~~
143 ~~floodway and flood fringe areas~~ normally associated with the 100-year storm event. This
144 includes, but it is not limited to, the floodplain designated by the Federal Emergency
145 Management Agency.

146 "Flood-prone area" means the component of a natural or restored stormwater
147 conveyance system that is outside the main channel. Flood-prone areas may include,
148 but are not limited to, the floodplain, the floodway, the flood fringe, wetlands, riparian
149 buffers or other areas adjacent to the main channel.

150 "Floodway" means the channel of a river or other watercourse and the adjacent land
151 areas, usually associated with flowing water, that must be reserved in order to discharge
152 the ~~base flood~~ 100-year storm event without cumulatively increasing the water surface
153 elevation more than one foot. This includes, but is not limited to, the floodway or as
154 otherwise designated by the Federal Emergency Management Agency.

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

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

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

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

166 "Impervious cover" means a man-made surface composed of any material that
167 significantly impedes or prevents natural infiltration of water into soil. ~~Impervious~~
168 ~~surfaces include, but are not limited to, conventional roofs, buildings, streets, parking~~
169 ~~areas, and any conventional concrete, asphalt, or gravel surface that is or may become~~
170 ~~compacted.~~

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

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

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

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

186 "Interstate agency" means an agency of two or more states established by or under
187 an agreement or compact approved by Congress, or any other agency of two or more

188 states having substantial powers or duties pertaining to the control of pollution as
189 determined and approved by the administrator under the CWA and regulations.

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

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

195 "Land disturbance" or "land-disturbing activity" means a manmade change to the
196 land surface that potentially changes its runoff characteristics including any clearing,
197 grading, or excavation associated with a construction activity regulated pursuant to the
198 CWA, the Act, and this chapter.

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

204 "Large municipal separate storm sewer system" means all municipal separate storm
205 sewers that are either:

206 1. Located in an incorporated place with a population of 250,000 or more as
207 determined by the 1990 decennial census by the Bureau of Census (40 CFR Part
208 122 Appendix F (2000));

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

212 3. Owned or operated by a municipality other than those described in subdivision
213 1 or 2 of this definition and that are designated by the board as part of the large
214 or medium municipal separate storm sewer system due to the interrelationship
215 between the discharges of the designated storm sewer and the discharges from
216 municipal separate storm sewers described under subdivision 1 or 2 of this
217 definition. In making this determination the board may consider the following
218 factors:

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

220 b. The location of discharges from the designated municipal separate storm
221 sewer relative to discharges from municipal separate storm sewers described
222 in subdivision 1 of this definition;

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

224 d. The nature of the receiving surface waters; and

225 e. Other relevant factors.

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

231 "Layout" means a conceptual drawing sufficient to provide for the specified
232 stormwater management facilities required at the time of approval.

233 "Linear development project" means a land-disturbing activity that is linear in nature
234 such as, but not limited to, (i) the construction of electric and telephone utility lines, and

235 natural gas pipelines; (ii) construction of tracks, rights-of-way, bridges, communication
236 facilities and other related structures of a railroad company; (iii) highway construction
237 projects; (iv) construction of stormwater channels and stream restoration activities; and
238 (v) water and sewer lines. Private subdivision roads or streets shall not be considered
239 linear development projects.

240 "Local stormwater management program" or "local program" means the various
241 methods employed by a locality ~~or the department~~ to manage the quality and quantity of
242 runoff resulting from land-disturbing activities and shall include such items as local
243 ordinances, permit requirements, policies and guidelines, technical materials, plan
244 review, inspection, enforcement, and evaluation consistent with the Act and this chapter.
245 Upon board approval of a ~~locality-administered~~ local stormwater management program,
246 it shall be recognized as a qualifying local program.

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

248 "Localized flooding" refers to smaller scale flooding that may occur outside of a
249 stormwater conveyance system. This may include high water, ponding or standing water
250 from stormwater runoff, which is likely to cause property damage or unsafe conditions.

251 "Main channel" means the portion of the stormwater conveyance system that
252 contains the base flow and ~~smaller, more small~~ frequent storm events.

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

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

258 "Major municipal separate storm sewer outfall" or "major outfall" means a municipal
259 separate storm sewer outfall that discharges from a single pipe with an inside diameter
260 of 36 inches or more or its equivalent (discharge from a single conveyance other than
261 circular pipe which is associated with a drainage area of more than 50 acres); or for
262 municipal separate storm sewers that receive stormwater from lands zoned for industrial
263 activity (based on comprehensive zoning plans or the equivalent), with an outfall that
264 discharges from a single pipe with an inside diameter of 12 inches or more or from its
265 equivalent (discharge from other than a circular pipe associated with a drainage area of
266 two acres or more).

267 "Manmade" means constructed by man.

268 ~~"Manmade stormwater conveyance system" means a pipe, ditch, vegetated swale, or~~
269 ~~other conveyance constructed by man.~~

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

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

280 "Medium municipal separate storm sewer system" means all municipal separate
281 storm sewers that are either:

- 282 1. Located in an incorporated place with a population of 100,000 or more but less
283 than 250,000 as determined by the 1990 decennial census by the Bureau of
284 Census (40 CFR Part 122 Appendix G (2000));
- 285 2. Located in the counties listed in 40 CFR Part 122 Appendix I (2000), except
286 municipal separate storm sewers that are located in the incorporated places,
287 townships or towns within such counties;
- 288 3. Owned or operated by a municipality other than those described in subdivision
289 1 or 2 of this definition and that are designated by the board as part of the large
290 or medium municipal separate storm sewer system due to the interrelationship
291 between the discharges of the designated storm sewer and the discharges from
292 municipal separate storm sewers described under subdivision 1 or 2 of this
293 definition. In making this determination the board may consider the following
294 factors:
- 295 a. Physical interconnections between the municipal separate storm sewers;
 - 296 b. The location of discharges from the designated municipal separate storm
297 sewer relative to discharges from municipal separate storm sewers described
298 in subdivision 1 of this definition;
 - 299 c. The quantity and nature of pollutants discharged to surface waters;
 - 300 d. The nature of the receiving surface waters; or
 - 301 e. Other relevant factors.
- 302 4. The board may, upon petition, designate as a medium municipal separate
303 storm sewer system, municipal separate storm sewers located within the
304 boundaries of a region defined by a stormwater management regional authority
305 based on a jurisdictional, watershed, or other appropriate basis that includes one
306 or more of the systems described in subdivisions 1, 2 and 3 of this definition.
- 307 "Minor modification" means, for the purposes of this chapter, minor modification or
308 amendment of an existing permit before its expiration for the reasons listed at 40 CFR
309 122.63 and as specified in 4VAC50-60-640. Minor modification for the purposes of this
310 chapter also means other modifications and amendments not requiring extensive review
311 and evaluation including, but not limited to, changes in EPA promulgated test protocols,
312 increasing monitoring frequency requirements, changes in sampling locations, and
313 changes to compliance dates within the overall compliance schedules. A minor permit
314 modification or amendment does not substantially alter permit conditions, substantially
315 increase or decrease the amount of surface water impacts, increase the size of the
316 operation, or reduce the capacity of the facility to protect human health or the
317 environment.
- 318 "Municipal separate storm sewer" means a conveyance or system of conveyances
319 otherwise known as a municipal separate storm sewer system, including roads with
320 drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade
321 channels, or storm drains:
- 322 1. Owned or operated by a federal, state, city, town, county, district, association,
323 or other public body, created by or pursuant to state law, having jurisdiction or
324 delegated authority for erosion and sediment control and stormwater
325 management, or a designated and approved management agency under § 208
326 of the CWA that discharges to surface waters;
 - 327 2. Designed or used for collecting or conveying stormwater;
 - 328 3. That is not a combined sewer; and

329 4. That is not part of a publicly owned treatment works.

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

333 "Municipal Separate Storm Sewer System Management Program" or "MS4 Program"
334 means a management program covering the duration of a permit for a municipal
335 separate storm sewer system that includes a comprehensive planning process that
336 involves public participation and intergovernmental coordination, to reduce the discharge
337 of pollutants to the maximum extent practicable, to protect water quality, and to satisfy
338 the appropriate water quality requirements of the CWA and regulations and the Act and
339 attendant regulations, using management practices, control techniques, and system,
340 design and engineering methods, and such other provisions that are appropriate.

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

345 "National Pollutant Discharge Elimination System" or "NPDES" means the national
346 program for issuing, modifying, revoking and reissuing, terminating, monitoring and
347 enforcing permits, and imposing and enforcing pretreatment requirements under §§ 307,
348 402, 318, and 405 of the CWA. The term includes an approved program.

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

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

355 "Natural stream" means a tidal or nontidal watercourse that is part of the natural
356 topography. It usually maintains a continuous or seasonal flow during the year and is
357 characterized as being irregular in cross-section with a meandering course. Constructed
358 channels such as drainage ditches or swales shall not be considered natural streams ;
359 however, channels designed utilizing natural channel design concepts may be
360 considered natural streams.

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

- 362 1. From which there is or may be a discharge of pollutants;
363 2. That did not commence the discharge of pollutants at a particular site prior to
364 August 13, 1979;
365 3. Which is not a new source; and
366 4. Which has never received a finally effective VPDES or VSMP permit for
367 discharges at that site.

368 This definition includes an indirect discharger that commences discharging into
369 surface waters after August 13, 1979. It also includes any existing mobile point source
370 (other than an offshore or coastal oil and gas exploratory drilling rig or a coastal oil and
371 gas developmental drilling rig) such as a seafood processing rig, seafood processing
372 vessel, or aggregate plant, that begins discharging at a site for which it does not have a
373 permit; and any offshore or coastal mobile oil and gas exploratory drilling rig or coastal
374 mobile oil and gas developmental drilling rig that commences the discharge of pollutants
375 after August 13, 1979.

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

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

381 1. After promulgation of standards of performance under § 306 of the CWA that
382 are applicable to such source; or

383 2. After proposal of standards of performance in accordance with § 306 of the
384 CWA that are applicable to such source, but only if the standards are
385 promulgated in accordance with § 306 of the CWA within 120 days of their
386 proposal.

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

391 "Operator" means the owner or operator of any facility or activity subject to the
392 VSMP permit regulation. In the context of stormwater associated with a large or small
393 construction activity, operator means any person associated with a construction project
394 that meets either of the following two criteria: (i) the person has direct operational control
395 over construction plans and specifications, including the ability to make modifications to
396 those plans and specifications or (ii) the person has day-to-day operational control of
397 those activities at a project that are necessary to ensure compliance with a stormwater
398 pollution prevention plan for the site or other permit conditions (i.e., they are authorized
399 to direct workers at a site to carry out activities required by the stormwater pollution
400 prevention plan or comply with other permit conditions). In the context of stormwater
401 discharges from Municipal Separate Storm Sewer Systems (MS4s), operator means the
402 operator of the regulated MS4 system.

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

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

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

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

423 "Percent impervious" means the impervious area within the site divided by the area
424 of the site multiplied by 100.

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

429 "Permit-issuing authority" means the board, the department, or a locality that is
430 delegated authority by the board to issue, deny, revoke, terminate, or amend stormwater
431 permits under the provisions of the Act and this chapter with a qualifying local program.
432 For the purposes of Parts II and III of these regulations, the permit-issuing authority shall
433 mean the department administered program in the absence of a board-approved local
434 stormwater management program.

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

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

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

446 "Point of discharge" means a location at which concentrated stormwater runoff is
447 released.

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

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

- 460 1. Sewage from vessels; or
461 2. Water, gas, or other material that is injected into a well to facilitate production
462 of oil or gas, or water derived in association with oil and gas production and
463 disposed of in a well if the well used either to facilitate production or for disposal
464 purposes is approved by the board and if the board determines that the injection
465 or disposal will not result in the degradation of ground or surface water
466 resources.

467 "Pollutant discharge" means the average amount of a particular pollutant measured
468 in pounds per year or other standard reportable unit as appropriate, delivered by
469 stormwater runoff.

470 "Pollution" means such alteration of the physical, chemical or biological properties of
471 any state waters as will or is likely to create a nuisance or render such waters (a)
472 harmful or detrimental or injurious to the public health, safety or welfare, or to the health
473 of animals, fish or aquatic life; (b) unsuitable with reasonable treatment for use as
474 present or possible future sources of public water supply; or (c) unsuitable for
475 recreational, commercial, industrial, agricultural, or other reasonable uses, provided that
476 (i) an alteration of the physical, chemical, or biological property of state waters, or a
477 discharge or deposit of sewage, industrial wastes or other wastes to state waters by any
478 owner which by itself is not sufficient to cause pollution, but which, in combination with
479 such alteration of or discharge or deposit to state waters by other owners, is sufficient to
480 cause pollution; (ii) the discharge of untreated sewage by any owner into state waters;
481 and (iii) contributing to the contravention of standards of water quality duly established
482 by the State Water Control Board, are "pollution" for the terms and purposes of this
483 chapter.

484 "Postdevelopment" refers to conditions that reasonably may be expected or
485 anticipated to exist after completion of the land development activity on a specific site or
486 tract of land.

487 "Predevelopment" refers to the conditions that exist at the time that plans for the land
488 development of a tract of land are submitted to the plan approval authority. Where
489 phased development or plan approval occurs (preliminary grading, demolition of existing
490 structures, roads and utilities, etc.), the existing conditions at the time prior to the first
491 item being submitted shall establish predevelopment conditions.

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

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

499 "Proposed permit" means a VSMP permit prepared after the close of the public
500 comment period (and, when applicable, any public hearing and administrative appeals)
501 that is sent to EPA for review before final issuance. A proposed permit is not a draft
502 permit.

503 "Publicly owned treatment works" or "POTW" means a treatment works as defined
504 by § 212 of the CWA that is owned by a state or municipality (as defined by § 502(4) of
505 the CWA). This definition includes any devices and systems used in the storage,
506 treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid
507 nature. It also includes sewers, pipes, and other conveyances only if they convey
508 wastewater to a POTW treatment plant. The term also means the municipality as defined
509 in § 502(4) of the CWA, that has jurisdiction over the indirect discharges to and the
510 discharges from such a treatment works.

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

514 "Qualifying local stormwater management program" or "qualifying local program"
515 means a local program that local stormwater management program, administered by a
516 locality, that has been authorized by the board, to issue at least as stringent as the
517 VSMP General Permit for Discharges of Stormwater from Construction Activities that
518 has been approved by the board. To authorize a qualifying local program, the Board

519 must find that the ordinances adopted by the locality are consistent with the VSMP
520 General Permit for Discharges of Stormwater from Construction Activities.

521 "Recommencing discharger" means a source that recommences discharge after
522 terminating operations.

523 "Regional administrator" means the Regional Administrator of Region III of the
524 Environmental Protection Agency or the authorized representative of the regional
525 administrator.

526 ~~"Restored stormwater conveyance system" means a stormwater conveyance system~~
527 ~~that has been designed and constructed using natural channel design concepts,~~
528 ~~including the main channel, floodway, and flood fringe.~~

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

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

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

535 "Runoff characteristics" include ~~velocity,~~ peak flow rate, volume, ~~time of~~
536 ~~concentration,~~ and flow duration, ~~and their influence on channel morphology including~~
537 ~~sinuosity, channel cross-sectional area, and channel slope.~~

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

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

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

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

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

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

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

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

566 "Small construction activity" means:

567 1. Construction activities including clearing, grading, and excavating that results
568 in land disturbance of equal to or greater than one acre, or equal to or greater
569 than 2,500 square feet in all areas of the jurisdictions designated as subject to
570 the Chesapeake Bay Preservation Area Designation and Management
571 Regulations adopted pursuant to the Chesapeake Bay Preservation Act, and less
572 than five acres. Small construction activity also includes the disturbance of less
573 than one acre of total land area that is part of a larger common plan of
574 development or sale if the larger common plan will ultimately disturb equal to or
575 greater than one and less than five acres. Small construction activity does not
576 include routine maintenance that is performed to maintain the original line and
577 grade, hydraulic capacity, or original purpose of the facility. The board may waive
578 the otherwise applicable requirements in a general permit for a stormwater
579 discharge from construction activities that disturb less than five acres where
580 stormwater controls are not needed based on a "total maximum daily load"
581 (TMDL) approved or established by EPA that addresses the pollutant(s) of
582 concern or, for nonimpaired waters that do not require TMDLs, an equivalent
583 analysis that determines allocations for small construction sites for the
584 pollutant(s) of concern or that determines that such allocations are not needed to
585 protect water quality based on consideration of existing in-stream concentrations,
586 expected growth in pollutant contributions from all sources, and a margin of
587 safety. For the purpose of this subdivision, the pollutant(s) of concern include
588 sediment or a parameter that addresses sediment (such as total suspended
589 solids, turbidity or siltation) and any other pollutant that has been identified as a
590 cause of impairment of any water body that will receive a discharge from the
591 construction activity. The operator must certify to the board that the construction
592 activity will take place, and stormwater discharges will occur, within the drainage
593 area addressed by the TMDL or equivalent analysis.

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

598 "Small municipal separate storm sewer system" or "small MS4" means all separate
599 storm sewers that are (i) owned or operated by the United States, a state, city, town,
600 borough, county, parish, district, association, or other public body (created by or
601 pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes,
602 stormwater, or other wastes, including special districts under state law such as a sewer
603 district, flood control district or drainage district, or similar entity, or an Indian tribe or an
604 authorized Indian tribal organization, or a designated and approved management
605 agency under § 208 of the CWA that discharges to surface waters and (ii) not defined as
606 "large" or "medium" municipal separate storm sewer systems or designated under
607 4VAC50-60-380 A 1. This term includes systems similar to separate storm sewer
608 systems in municipalities, such as systems at military bases, large hospital or prison
609 complexes, and highway and other thoroughfares. The term does not include separate
610 storm sewers in very discrete areas, such as individual buildings.

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

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

- 616 "State" means the Commonwealth of Virginia.
- 617 "State/EPA agreement" means an agreement between the regional administrator
618 and the state that coordinates EPA and state activities, responsibilities and programs
619 including those under the CWA and the Act.
- 620 "State project" means any land development project that is undertaken by any state
621 agency, board, commission, authority or any branch of state government, including
622 state-supported institutions of higher learning.
- 623 "State Water Control Law" means Chapter 3.1 (§ 62.1-44.2 et seq.) of Title 62.1 of
624 the Code of Virginia.
- 625 "State waters" means all water, on the surface and under the ground, wholly or
626 partially within or bordering the Commonwealth or within its jurisdiction, including
627 wetlands.
- 628 "Stormwater" means precipitation that is discharged across the land surface or
629 through conveyances to one or more waterways and that may include stormwater runoff,
630 snow melt runoff, and surface runoff and drainage.
- 631 "Stormwater conveyance system" means ~~any of the following~~ a combination of
632 drainage components that are used to convey stormwater discharge, either within or
633 downstream of the land-disturbing activity. This includes:
- 634 (i) ~~a manmade~~ "Manmade stormwater conveyance system," means a pipe, ditch,
635 vegetated swale, or other stormwater conveyance system constructed by a man except
636 for restored stormwater conveyance systems;
- 637 (ii) ~~a natural~~ "Natural stormwater conveyance system," means the main channel of a
638 natural stream and the flood-prone area adjacent to the main channel; or
- 639 (iii) ~~a restored~~ "Restored stormwater conveyance system" means a stormwater
640 conveyance system that has been designated designed and constructed using natural
641 channel design concepts. Restored stormwater conveyance systems include the main
642 channel and the flood-prone area adjacent to the main channel.
- 643 "Stormwater discharge associated with construction activity" means a discharge of
644 pollutants in stormwater runoff from areas where land-disturbing activities (e.g., clearing,
645 grading, or excavation); construction materials or equipment storage or maintenance
646 (e.g., fill piles, borrow area, concrete truck washout, fueling); or other industrial
647 stormwater directly related to the construction process (e.g., concrete or asphalt batch
648 plants) are located.
- 649 "Stormwater discharge associated with large construction activity" means the
650 discharge of stormwater from large construction activities.
- 651 "Stormwater discharge associated with small construction activity" means the
652 discharge of stormwater from small construction activities.
- 653 "Stormwater management facility" means a device that controls stormwater runoff
654 and changes the characteristics of that runoff including, but not limited to, the quantity
655 and quality, the period of release or the velocity of flow.
- 656 "Stormwater management plan" means a document(s) containing material for
657 describing how existing runoff characteristics will be maintained by a land-disturbing
658 activity and methods for complying with the requirements of the local program or this
659 chapter.
- 660 "Stormwater Management Program" means a program established by a locality that
661 is consistent with the requirements of the Act, this chapter and associated guidance
662 documents.

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

666 "Stormwater Pollution Prevention Plan" or "SWPPP" means a document that is
667 prepared in accordance with good engineering practices and that identifies potential
668 sources of pollutants that may reasonably be expected to affect the quality of stormwater
669 discharges from the construction site or its associated land-disturbing activities. In
670 addition the document shall identify and require the implementation of control measures,
671 and shall include, but not be limited to the inclusion of, or the incorporation by reference
672 of, an approved erosion and sediment control plan, ~~a post construction~~ an approved
673 stormwater management plan, ~~a spill prevention control and countermeasure (SPCC)~~
674 and a pollution prevention plan for regulated land disturbing activities, ~~and other~~
675 ~~practices that will be used to minimize pollutants in stormwater discharges from land-~~
676 ~~disturbing activities in compliance with the terms and conditions of this chapter. All plans~~
677 ~~incorporated by reference into the SWPPP shall be enforceable under the permit issued~~
678 ~~or general permit coverage authorized. In context with a Qualifying Local Program, a~~
679 ~~SWPPP consists of an approved Erosion and Sediment Control Plan, a stormwater~~
680 ~~pollution prevention plan for during construction activities and a stormwater management~~
681 ~~plan.~~

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

683 "Surface waters" means:

- 684 1. All waters that are currently used, were used in the past, or may be
685 susceptible to use in interstate or foreign commerce, including all waters that are
686 subject to the ebb and flow of the tide;
- 687 2. All interstate waters, including interstate wetlands;
- 688 3. All other waters such as intrastate lakes, rivers, streams (including intermittent
689 streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows,
690 playa lakes, or natural ponds the use, degradation, or destruction of which would
691 affect or could affect interstate or foreign commerce including any such waters:
 - 692 a. That are or could be used by interstate or foreign travelers for recreational
693 or other purposes;
 - 694 b. From which fish or shellfish are or could be taken and sold in interstate or
695 foreign commerce; or
 - 696 c. That are used or could be used for industrial purposes by industries in
697 interstate commerce.
- 698 4. All impoundments of waters otherwise defined as surface waters under this
699 definition;
- 700 5. Tributaries of waters identified in subdivisions 1 through 4 of this definition;
- 701 6. The territorial sea; and
- 702 7. Wetlands adjacent to waters (other than waters that are themselves wetlands)
703 identified in subdivisions 1 through 6 of this definition.

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

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

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

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

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

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

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

731 "Variance" means any mechanism or provision under § 301 or § 316 of the CWA or
732 under 40 CFR Part 125 (2000), or in the applicable federal effluent limitations guidelines
733 that allows modification to or waiver of the generally applicable effluent limitation
734 requirements or time deadlines of the CWA. This includes provisions that allow the
735 establishment of alternative limitations based on fundamentally different factors or on §
736 301(c), § 301(g), § 301(h), § 301(i), or § 316(a) of the CWA.

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

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

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

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

754 "Virginia Stormwater Management Program" or "VSMP" means the Virginia program
755 for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing

756 permits, and imposing and enforcing requirements pursuant to the CWA, the Act, this
757 chapter, and associated guidance documents.

758 "Virginia Stormwater Management Program permit" or "VSMP permit" means a
759 document issued by the permit-issuing authority pursuant to the Virginia Stormwater
760 Management Act and this chapter authorizing, under prescribed conditions, the potential
761 or actual discharge of pollutants from a point source to surface waters. Under the
762 approved state program, a VSMP permit is equivalent to a NPDES permit.

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

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

769 "Water quality standards" or "WQS" means provisions of state or federal law that
770 consist of a designated use or uses for the waters of the Commonwealth and water
771 quality criteria for such waters based on such uses. Water quality standards are to
772 protect the public health or welfare, enhance the quality of water, and serve the
773 purposes of the State Water Control Law (§ 62.1-44.2 et seq. of the Code of Virginia),
774 the Act (§ 10.1-603.1 et seq. of the Code of Virginia), and the CWA (33 USC § 1251 et
775 seq.).

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

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

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

787 **4VAC50-60-20. Purposes.**

788 The purposes of this chapter are to provide a framework for the administration,
789 implementation and enforcement of the Virginia Stormwater Management Act (Act) and
790 to delineate the procedures and requirements to be followed in connection with VSMP
791 permits issued by the board or its designee pursuant to the Clean Water Act (CWA) and
792 the Virginia Stormwater Management Act, while at the same time providing flexibility for
793 innovative solutions to stormwater management issues. The chapter also establishes the
794 board's procedures for the authorization of a qualifying local program, board and
795 department oversight authorities for an authorized qualifying local program, the board's
796 procedures for utilization by the department in administering a local program in localities
797 where no qualifying local program is authorized, and the components of a stormwater
798 management program including but not limited to stormwater management standards.

799 **4VAC50-60-30. Applicability.**

800 This chapter is applicable to:

801 1. Every private, local, state, or federal entity that establishes a stormwater
802 management program or a MS4 program;

- 803 2. The department in its oversight of locally administered programs or in its
 804 administration of a local program;
 805 3. Every state agency project regulated under the Act and this chapter; and
 806 4. Every land-disturbing activity regulated under § 10.1-603.8 of the Code of
 807 Virginia unless otherwise exempted in § 10.1-603.8 B.

808 Part II A

809 Stormwater Management Program Technical Criteria

810 **4VAC50-60-40. Authority.**

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

821 **4VAC50-60-45. Applicability.**

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

829 **4VAC50-60-48. Grandfathering.**

830 A. Land-disturbing activities that receive coverage under the VSMP General Permit
 831 for Discharges of Stormwater from Construction Activities prior to the ~~adoption of a local~~
 832 ~~stormwater management program within their jurisdiction~~ July 1, 2014 shall not be
 833 subject to the technical criteria of Part II A, but shall be subject to the technical criteria of
 834 Part II B, until the expiration of that permit on ~~June 30, 2014~~ June 30, 2019. Should
 835 permit coverage not be maintained or if the land-disturbing activity continues beyond
 836 June 3, 2019, portions of the project not completed shall be subject to the Part II A
 837 technical criteria.

838 B. ~~If the operator of a project, as of July 1, 2010, (i) obtained or is the beneficiary of a~~
 839 ~~significant affirmative governmental act that remains in effect allowing development of a~~
 840 ~~specific project, (ii) relied in good faith on the significant affirmative governmental act, (iii)~~
 841 ~~incurred extensive obligations or substantial expenses in diligent pursuit of the specific~~
 842 ~~project in reliance on the significant affirmative governmental act, and (iv) obtained~~
 843 ~~VSMP general permit coverage prior to July 1, 2010, then the land-disturbing activity~~
 844 ~~associated with the project is grandfathered and shall remain subject to the Part II B~~
 845 ~~Technical Criteria until June 30, 2014. If permit coverage continuously remains in effect~~
 846 ~~for the land-disturbing activity within the entire project area, then the project shall remain~~
 847 ~~subject to the Part II B Technical Criteria until June 30, 2019. Should permit coverage~~
 848 ~~not be maintained or if the land-disturbing activity continues beyond June 30, 2019,~~
 849 ~~portions of the project not completed shall be subject to the Part II A Technical Criteria.~~
 850 ~~In the event that the qualifying significant affirmative governmental act or the VSMP~~

851 permit is subsequently modified or amended in a manner such that there is no increase
852 in the amount of phosphorus leaving the site through stormwater runoff, and such that
853 there is no increase in the volume or rate of runoff, the grandfathering shall continue as
854 before.

855 ~~For purposes of this subsection and without limitation, the following are deemed to~~
856 ~~be significant affirmative governmental acts allowing development of a specific project:~~
857 ~~(i) the governing body has accepted proffers or proffered conditions that specify use~~
858 ~~related to a zoning amendment; (ii) the governing body has approved an application for~~
859 ~~a rezoning for a specific use or density; (iii) the governing body or board of zoning~~
860 ~~appeals has granted a special exception or use permit with conditions; (iv) the board of~~
861 ~~zoning appeals has approved a variance; (v) the governing body or its designated agent~~
862 ~~has approved a preliminary subdivision plat, site plan, or plan of development for the~~
863 ~~landowner's property and the applicant diligently pursues approval of the final plat or~~
864 ~~plan within a reasonable period of time under the circumstances; or (vi) the governing~~
865 ~~body or its designated agent has approved a final subdivision plat, site plan or plan of~~
866 ~~development for the landowner's property. For the purposes of this subsection and~~
867 ~~without limitation, for state and federal projects, the approval of state or federal funding~~
868 ~~for a project or the approval of a stormwater management plan are deemed to be~~
869 ~~significant affirmative governmental acts.~~

870 Until June 30, 2019, any land-disturbing activity for which a currently valid proffered
871 or conditional zoning plan, preliminary or final subdivision plat, preliminary or final site
872 plan or zoning with a plan of development, or any document certified by the locality as
873 being equivalent thereto, was approved by a locality prior to the effective date of this
874 Part, and for which no coverage under the VSMP General Permit for Discharges of
875 Stormwater from Construction Activities has been issued prior to July 1, 2014, shall be
876 considered grandfathered by the local program and shall not be subject to the technical
877 criteria of Part II A, but shall be subject to the technical criteria of Part II B for those
878 areas that were included in the approval, provided that the local program finds that such
879 proffered or conditional zoning plan, preliminary or final subdivision plat, preliminary or
880 final site plan or zoning with a plan of development, or any document certified by the
881 locality as being equivalent thereto, (i) provides for a layout; and (ii) the resulting land-
882 disturbing activity is consistent will be compliant with the requirements of Part II B. In the
883 event that the proffered or conditional zoning plan, preliminary or final subdivision plat,
884 preliminary or final site plan or zoning with a plan of development is subsequently
885 modified or amended in a manner such that there is no increase over the previously
886 approved plat or plan in the amount of phosphorus leaving each point of discharge of the
887 land-disturbing activity through stormwater runoff, and such that there is no increase
888 over the previously approved plat or plan in the volume or rate of runoff, the
889 grandfathering shall continue as before.

890 C. Until June 30, 2019, for locality, state, and federal projects for which there has
891 been an obligation of locality, state, or federal funding, in whole or in part, prior to the
892 effective date of this Part or for which the Department has approved a stormwater
893 management plan prior to the effective date of this Part, such projects shall be
894 considered grandfathered by the local program and shall not be subject to the technical
895 criteria of Part II A, but shall be subject to the technical criteria of Part II B for those
896 areas that were included in the approval.

897 CD. Where a land-disturbing activity is part of a common plan of development or sale
898 that has obtained VSMP general permit coverage from the department prior to July 1,
899 2010 July 1, 2014, the land-disturbing activity shall be considered grandfathered by the
900 local program and will shall be subject to the technical criteria of Part II B. The

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

903 ~~DE.~~ In cases where governmental bonding or public debt financing has been issued
904 for a project prior to ~~July 1, 2010~~ the effective date of this Part, such project shall be
905 subject to the technical criteria of Part II B.

906

907 NOTE: "the effective date of this Part" will be replaced with an actual date when the
908 regulation is published. The current target date is October 7, 2011.

909

910 **4VAC50-60-50. Repealed.**

911 **4VAC50-60-53. General requirements.**

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

918 **4VAC50-60-56. Applicability of other laws and regulations.**

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

926 **4VAC50-60-60. Repealed.**

927 **4VAC50-60-63. Water quality design criteria requirements.**

928 In order to protect the quality of state waters and to control the discharge of
929 stormwater pollutants from regulated activities, the following minimum technical design
930 criteria and statewide standards for stormwater management shall be applied to the site
931 of a land-disturbing construction activity.

932 1. New development. The total phosphorus load of new development projects
933 shall not exceed ~~0.45~~ 0.36 pounds per acre per year, as calculated pursuant to
934 4VAC50-60-65, ~~except:~~

935 a. ~~Should the board establish by regulatory action a standard more stringent~~
936 ~~than 0.45 pounds per acre per year in the Chesapeake Bay watershed, then~~
937 ~~a qualifying local program may establish a standard of no greater than 0.45~~
938 ~~pounds per acre per year to be applied within urban development areas~~
939 ~~designated pursuant to § 15.2-2223.1 of the Code of Virginia for projects~~
940 ~~greater than or equal to one acre in order to encourage compact~~
941 ~~development that achieves superior water quality benefits. The qualifying~~
942 ~~local program shall provide to the board for approval a justification for any~~
943 ~~standards established and shall define the types of projects within a UDA that~~
944 ~~would qualify for the standards. The standard shall be based upon factors~~
945 ~~including, but not limited to, number of housing units per acre for residential~~
946 ~~development, floor area ratio for nonresidential development, level of~~
947 ~~imperviousness, brownfield remediation potential, mixed use and transit~~

- 948 ~~oriented development potential, proximity to the Chesapeake Bay or local~~
949 ~~waters of concern, and the presence of impaired waters. This provision shall~~
950 ~~not apply to department administered local programs.~~
- 951 ~~b. Should the board establish by regulatory action a standard more stringent~~
952 ~~than 0.45 pounds per acre per year in the Chesapeake Bay watershed,~~
953 ~~localities that have lands that drain to both the Chesapeake Bay watershed~~
954 ~~and other non-Chesapeake Bay watersheds may choose to apply the more~~
955 ~~stringent phosphorus standard for the Chesapeake Bay watershed to land-~~
956 ~~disturbing activities that discharge to watersheds other than the Chesapeake~~
957 ~~Bay watershed.~~
- 958 ~~c. Upon the completion of the Virginia TMDL Implementation Plan for the~~
959 ~~Chesapeake Bay Nutrient and Sediment TMDL approved by EPA, the board~~
960 ~~shall by regulatory action establish a water quality design criteria for new~~
961 ~~development activities that is consistent with the pollutant loadings called for~~
962 ~~in the approved Implementation Plan.~~
- 963 2. Development on prior developed lands.
- 964 a. ~~The total phosphorus load of a project occurring on prior developed lands~~
965 ~~and For projects disturbing greater than or equal to one acre that result in no~~
966 ~~net increase in impervious cover from the predevelopment condition, the total~~
967 ~~phosphorus load shall be reduced to an amount at least 20% below the~~
968 ~~predevelopment total phosphorus load.~~
- 969 b. ~~The total phosphorus load of a project occurring on prior developed lands~~
970 ~~and For projects disturbing less than one acre that result in no net increase in~~
971 ~~impervious cover from the predevelopment condition, the total phosphorus~~
972 ~~load shall be reduced to an amount at least 10% below the predevelopment~~
973 ~~total phosphorus load.~~
- 974 c. ~~For projects that result in a net increase in impervious cover over the~~
975 ~~predevelopment condition, the design criteria fro new development shall be~~
976 ~~applied to the entire disturbed acreage.~~
- 977 d. ~~In lieu of (c), the total phosphorus load of a linear development project~~
978 ~~occurring on prior developed lands may be reduced 20%.~~
- 979 e. ~~The total phosphorus load shall not be required to be reduced to below the~~
980 ~~applicable standard for new development unless a more stringent standard~~
981 ~~has been established by a qualifying local program.~~
- 982 3. Compliance with subdivisions 1 and 2 of this section shall be determined in
983 accordance with 4VAC50-60-65.
- 984 4. TMDL. In addition to the above requirements, if a specific WLA for a pollutant
985 has been established in a TMDL and is assigned to stormwater discharges from
986 a construction activity, necessary control measures must be implemented by the
987 operator to meet the WLA in accordance with the requirements established in the
988 General Permit for Discharges of Stormwater from Construction Activities or an
989 individual permit, which address both construction and postconstruction
990 discharges.
- 991 5. Chesapeake Bay. Upon the completion of the Virginia TMDL Implementation
992 Plan for the Chesapeake Bay Nutrient and Sediment TMDL approved by EPA,
993 the board shall by regulatory action establish a water quality design criteria for
994 development activities that is consistent with the pollutant loadings called for in
995 the approved Implementation Plan.

996 56. Nothing in this section shall prohibit a qualifying local program from
 997 establishing a more stringent standard.

998 **4VAC50-60-65. Water quality compliance.**

999 A. Compliance with the water quality design criteria set out in subdivisions 1 and 2 of
 1000 4VAC50-60-63 shall be determined by utilizing the Virginia Runoff Reduction Method or
 1001 another equivalent methodology that is ~~demonstrated by the qualifying local program to~~
 1002 ~~achieve equivalent or more stringent results and is~~ has been approved by the board.

1003 B. The BMPs listed in ~~Table 1 on the Virginia Stormwater Management~~
 1004 Clearinghouse website shall be utilized as necessary to effectively reduce the
 1005 phosphorus load in accordance with the Virginia Runoff Reduction Method. Design
 1006 specifications for the BMPs listed in Table 1 can be found on the Virginia Stormwater
 1007 BMP Clearinghouse Website at <http://www.vwrrc.vt.edu/swc>. ~~Other approved BMPs~~
 1008 ~~available on this website may also be utilized.~~

1009 (Agency Note: further discussion relevant to the removal of the table is necessary)

TABLE 1
 BMP Pollutant Removal Efficiencies

Practice	Removal of Total Phosphorus by Runoff Volume Reduction (RR, as %) (based upon 1 inch of rainfall — 90% storm)	Removal of Total Phosphorus by Treatment — Pollutant Concentration Reduction (PR, as %)	Total Mass Load Removal of Total Phosphorus (TR, as %) ⁵
Vegetated Roof 1	45	0	45
Vegetated Roof 2	60	0	60
Rooftop Disconnection ²	25 or 50 ¹	0	25 or 50 ¹
Rainwater Harvesting	up to 90 ³	0	up to 90 ³
Soil Amendments	Can be used to decrease runoff coefficient for turf cover at site. See designs for Rooftop Disconnection, Sheet Flow, and Grass Channel practices.		
Permeable Pavement 1	45	25	59
Permeable Pavement 2	75	25	81
Grass Channel	10 or 20 ¹	15	23
Bioretention 1 (also applies to Urban Bioretention)	40	25	55
Bioretention 2	80	50	90
Infiltration 1	50	25	63

Infiltration 2	90	25	93
Dry Swale 1	40	20	52
Dry Swale 2	60	40	76
Wet Swale 1	0	20	20
Wet Swale 2	0	40	40
Sheet Flow to Filter/ Open Space 1	25 or 50 ¹	0	25 or 50 ¹
Sheet Flow to Filter/ Open Space 2 ²	50 or 75 ¹	0	50 or 75 ¹
Extended Detention Pond 1	0	15	15
Extended Detention Pond 2	15	15	31
Filtering Practice 1	0	60	60
Filtering Practice 2	0	65	65
Constructed Wetland 1	0	50	50
Constructed Wetland 2	0	75	75
Wet Pond 1	0	50 (45 ⁴)	50 (45 ⁴)
Wet Pond 2	0	75 (65 ⁴)	75 (65 ⁴)

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.

1010 C. BMPs differing from those listed in Table 1 shall be reviewed and approved by the
1011 director in accordance with procedures established by the BMP Clearinghouse
1012 Committee and approved by the board.

1013 DC. A qualifying local program may establish limitations on the use of specific BMPs
1014 following the submission of the proposed limitation and written justification to the
1015 department.

1016 ~~E~~D. Where the land-disturbing activity only occurs on a portion of the site, the local
 1017 program may review the stormwater management plan based upon the portion of the
 1018 site that is proposed to be developed, provided that the local program has established
 1019 guidance for such a review. Such portion shall be deemed to include any area left
 1020 undeveloped pursuant to any local requirement or proffer accepted by a locality. Any
 1021 such guidance shall be provided to the department.

1022 ~~F~~E. The local program shall have the discretion to allow for application of the criteria
 1023 to each drainage area of the site. However, where a site drains to more than one HUC,
 1024 the pollutant load reduction requirements shall be applied independently within each
 1025 HUC unless reductions are achieved in accordance with a comprehensive watershed
 1026 stormwater management plan in accordance with 4VAC50-60-92.

1027 ~~G~~F. Offsite alternatives where allowed in accordance with 4VAC50-60-69 may be
 1028 utilized to meet the design criteria of subdivisions 1 and 2 of 4VAC50-60-63.

1029 **4VAC50-60-66. Water quantity.**

1030 A. Channel protection and flood protection shall be addressed in accordance with the
 1031 minimum standards set out in this section, which are established pursuant to the
 1032 requirements of subdivision 7 of § 10.1-603.4 of the Code of Virginia. Nothing in this
 1033 section shall prohibit a qualifying local program from establishing a more stringent
 1034 standard.

1035 B. Channel protection. Concentrated stormwater flow ~~from the site and offsite~~
 1036 ~~contributing areas shall be released into a stormwater conveyance system and shall~~
 1037 ~~meet one of the following criteria as demonstrated by use of accepted hydrologic and~~
 1038 ~~hydraulic methodologies:~~

1039 ~~1. Concentrated stormwater flow to manmade stormwater conveyance systems.~~
 1040 ~~The point of discharge releases stormwater into a manmade stormwater~~
 1041 ~~conveyance system that, following the land-disturbing activity, either:~~

1042 ~~(i) conveys the postdevelopment peak flow rate from the two-year 24 hour storm~~
 1043 ~~without causing erosion of the system or to a point that satisfies the "one percent~~
 1044 ~~rule" in 4VAC50-60-66D. This also allows for the provision of detention or~~
 1045 ~~downstream improvements as part of the project or~~

1046 ~~(ii) provides a peak flow rate from the one-year 24 hour storm calculated as~~
 1047 ~~follows or in accordance with another methodology that is demonstrated by the~~
 1048 ~~local program to achieve equivalent results and is board approved:~~

1049 ~~$$Q_{\text{Developed}} \leq IF * [Q_{\text{Pre-Developed}} * RV_{\text{Pre-Developed}}] / RV_{\text{Developed}}$$~~

1050 ~~But in no event shall $Q_{\text{Developed}}$ be required to be less than: $[Q_{\text{Forested}} * RV_{\text{Forested}}]$~~
 1051 ~~$/RV_{\text{Developed}}$; and~~

1052 ~~$$Q_{\text{Developed}} \leq Q_{\text{Pre-Developed}}$$~~

1053 ~~where~~

1054 ~~$Q_{\text{Developed}}$ = The allowable peak flow rate of runoff from the developed site.~~
 1055 ~~Such peak flow rate must be less than or equal to $Q_{\text{Pre-developed}}$.~~

1056 ~~$Q_{\text{Pre-Developed}}$ = The peak flow rate of runoff from the site in the predeveloped~~
 1057 ~~condition.~~

1058 ~~$RV_{\text{Pre-Developed}}$ = The volume of runoff from the site in the predeveloped~~
 1059 ~~condition.~~

1060 ~~$RV_{\text{Developed}}$ = The volume of runoff from the developed site.~~

1061 ~~IF=0.8 for sites >1 acre or 0.9 for sites ≤ 1 acre.~~

1062 2. Concentrated stormwater flow to restored stormwater conveyance systems.
 1063 The point of discharge releases stormwater into a stormwater conveyance
 1064 system that, following the land disturbing activity, has been restored using
 1065 natural channel design concepts and

1066 (i) has been restored and is functioning as designed or (ii) will be restored. The
 1067 applicant must demonstrate that the runoff following the land disturbing activity
 1068 was considered, in combination with other existing stormwater runoff, in the
 1069 design parameters will not exceed the design of the restored stormwater
 1070 conveyance system nor result in instability of the system or

1071 (ii) provides a peak flow rate from the one year 24 hour storm calculated as
 1072 follows or in accordance with another methodology that is demonstrated by the
 1073 local program to achieve equivalent results and is approved by the board:

1074
$$Q_{\text{Developed}} \leq IF \times [Q_{\text{Pre-developed}} \times RV_{\text{Pre-developed}}] \div RV_{\text{Developed}}$$

1075 But in no event shall $Q_{\text{Developed}}$ be required to be less than:

1076
$$[Q_{\text{Forested}} \times RV_{\text{Forested}}] \div RV_{\text{Developed}};$$
 and

1077
$$Q_{\text{Developed}} \leq Q_{\text{Pre-developed}}$$

1078 where

1079 $Q_{\text{Developed}}$ = The allowable peak flow rate of runoff from the developed site.

1080 Q_{Forested} = The peak flow rate of runoff from the site in a good forested
 1081 condition.

1082 $Q_{\text{Pre-developed}}$ = The peak flow rate of runoff from the site in the pre-developed
 1083 condition.

1084 $RV_{\text{Pre-developed}}$ = The volume of runoff from the site in the pre-developed
 1085 condition.

1086 $RV_{\text{Developed}}$ = The volume of runoff from the site in the developed condition.

1087 RV_{Forested} = The volume of runoff from the site in a good forested condition.

1088 and

1089 $IF = 0.8$ for sites > 1 acre or 0.9 for sites ≤ 1 acre.

1090 3. Concentrated stormwater flow to stable natural stormwater conveyance
 1091 systems. The point of discharge releases stormwater into a natural stormwater
 1092 conveyance system that is stable and, following the land disturbing activity, (i)
 1093 will not become unstable as a result of the discharge from the one year 24-hour
 1094 storm, and (ii) provides a peak flow rate from the one year 24-hour storm
 1095 calculated as follows or in accordance with another methodology that is
 1096 demonstrated by the local program to achieve equivalent results and is approved
 1097 by the board:

1098
$$Q_{\text{Developed}} \leq IF * [Q_{\text{Pre-Developed}} * RV_{\text{Pre-Developed}}] / RV_{\text{Developed}}$$

1099 But in no event shall $Q_{\text{Developed}}$ be required to be less than: $[Q_{\text{Forested}} * RV_{\text{Forested}}]$
 1100 $/RV_{\text{Developed}};$ and

1101
$$Q_{\text{Developed}} \leq Q_{\text{Pre-Developed}}$$

1102 where

1103 $Q_{\text{Developed}}$ = The allowable peak flow rate of runoff from the developed site.

1104 Q_{Forested} = The peak flow rate of runoff from the site in a good forested
 1105 condition.

1106 $Q_{\text{Pre-developed}}$ = The peak flow rate of runoff from the site in the pre-developed
 1107 condition.

1108 ~~$RV_{Pre\text{-}developed}$ = The volume of runoff from the site in the pre-developed~~
 1109 ~~condition.~~

1110 ~~$RV_{Developed}$ = The volume of runoff from the site in the developed condition.~~

1111 ~~$RV_{Forested}$ = The volume of runoff from the site in a good forested condition,~~
 1112 ~~and~~

1113 ~~$IF = 0.8$ for sites > 1 acre or 0.9 for sites ≤ 1 acre.~~

1114 ~~$Q_{Developed} * RV_{Developed} \leq Q_{Pre\text{-}Developed} * RV_{Pre\text{-}Developed}$, where~~

1115 ~~$Q_{Developed}$ = The allowable peak flow rate of runoff from the developed site.~~

1116 ~~Such peak flow rate must be less than or equal to $Q_{Pre\text{-}developed}$.~~

1117 ~~$Q_{Pre\text{-}Developed}$ = The peak flow rate of runoff from the site in the predeveloped~~
 1118 ~~condition.~~

1119 ~~$RV_{Pre\text{-}Developed}$ = The volume of runoff from the site in the predeveloped~~
 1120 ~~condition.~~

1121 ~~$RV_{Developed}$ = The volume of runoff from the developed site.~~

1122 ~~4. Except as set out in subdivision 5 of this subsection, concentrated stormwater~~
 1123 ~~flow to unstable natural stormwater conveyance systems. Where the point of~~
 1124 ~~discharge releases stormwater into a natural stormwater conveyance system that~~
 1125 ~~is unstable, stormwater runoff following a land disturbing activity shall be~~
 1126 ~~released into a channel at or below a peak flow rate ($Q_{Developed}$) based on the one-~~
 1127 ~~year 24 hour storm, calculated as follows or in accordance with another~~
 1128 ~~methodology that is demonstrated by the local program to achieve equivalent or~~
 1129 ~~more stringent results and is approved by the board:~~

1130 ~~$Q_{Developed} * RV_{Developed} \leq Q_{Good\text{-}Pasture} * RV_{Good\text{-}Pasture}$, where~~

1131 ~~$Q_{Developed}$ = The allowable peak flow rate from the developed site. Such peak~~
 1132 ~~flow rate must be less than or equal to $Q_{Good\text{-}Pasture}$.~~

1133 ~~$Q_{Good\text{-}Pasture}$ = The peak flow rate from the site in a good pasture condition.~~

1134 ~~$RV_{Good\text{-}Pasture}$ = The volume of runoff from the site in a good pasture condition.~~

1135 ~~$RV_{Developed}$ = The volume of runoff from the developed site.~~

1136 ~~However, in the case that the predeveloped condition is forested, the forested~~
 1137 ~~condition shall be utilized instead of the good pasture condition in all instances in~~
 1138 ~~the calculation above.~~

1139 ~~5. This subdivision shall apply to concentrated stormwater flow to unstable~~
 1140 ~~natural stormwater conveyance systems from (i) a land disturbing activity less~~
 1141 ~~than five acres on prior developed lands, or (ii) a regulated land disturbing~~
 1142 ~~activity less than one acre for new development. Where the point of discharge~~
 1143 ~~releases stormwater into a natural stormwater conveyance system that is~~
 1144 ~~unstable, stormwater runoff following a land disturbing activity shall provide a~~
 1145 ~~peak flow rate from the one-year 24 hour storm, calculated as follows or in~~
 1146 ~~accordance with another methodology that is demonstrated by the local program~~
 1147 ~~to achieve equivalent or more stringent results and is approved by the board:~~

1148 ~~$Q_{Developed} * RV_{Developed} < Q_{Pre\text{-}Developed} * RV_{Pre\text{-}Developed}$, where~~

1149 ~~$Q_{Developed}$ = The allowable peak flow rate from the developed site. Such peak~~
 1150 ~~flow rate must be less than $Q_{Pre\text{-}Developed}$.~~

1151 ~~$Q_{Pre\text{-}Developed}$ = The peak flow rate from the site in pre-development condition.~~

1152 ~~$RV_{Pre\text{-}Developed}$ = The volume of runoff from the site in pre-development~~
 1153 ~~condition.~~

- 1154 ~~$RV_{\text{Developed}}$ = The volume of runoff from the developed site.~~
- 1155 Concentrated stormwater flow shall meet criteria 1, 2, and 3 of this subsection,
- 1156 where applicable, from the point of discharge to a point where, following the land-
- 1157 disturbing activity, either (i) based on land area, the site's contributing drainage area is
- 1158 less than or equal to 1.0% of the total watershed area or (ii) based on peak flow rate, the
- 1159 site's peak flow rate from the one-year 24-hour storm is less than 1.0% of the existing
- 1160 peak flow rate from the one-year 24-hour storm prior to the implementation of any
- 1161 stormwater quantity control measures.
- 1162 1. Manmade stormwater conveyance systems. When stormwater from a
- 1163 development is discharged to a manmade stormwater conveyance system,
- 1164 following the land-disturbing activity, either:
- 1165 a. the manmade stormwater conveyance system shall convey the
- 1166 postdevelopment peak flow rate from the two-year 24-hour storm event
- 1167 without causing erosion of the system (detention of downstream
- 1168 improvements may be incorporated into the approved land-disturbing activity
- 1169 to meet this criteria); or
- 1170 b. the peak discharge requirements for concentrated stormwater flow to
- 1171 natural stormwater conveyance systems in subsection 3 shall be met.
- 1172 2. Restored stormwater conveyance systems. When stormwater from a
- 1173 development is discharged to a restored stormwater conveyance system that has
- 1174 been restored using natural design concepts, either:
- 1175 a. the development shall be consistent, in combination with other stormwater
- 1176 runoff, with the design parameters of the restored stormwater conveyance
- 1177 system (this allows for restored stormwater conveyance systems to be
- 1178 incorporated into the approved land-disturbing activity to meet this
- 1179 requirement); or
- 1180 b. the peak discharge requirements for concentrated stormwater flow to
- 1181 natural stormwater conveyance systems in subsection 3 shall be met.
- 1182 3. Natural stormwater conveyance systems. When stormwater from a
- 1183 development is discharged to a natural stormwater conveyance system, the
- 1184 maximum peak flow rate from the one-year 24 hour storm following the land-
- 1185 disturbing activity shall be calculated either:
- 1186 a. in accordance with the following methodology:
- 1187 $Q_{\text{Developed}} \leq I.F. * [Q_{\text{Pre-Developed}} * RV_{\text{Pre-Developed}}] / RV_{\text{Developed}}$;
- 1188 Under no condition shall $Q_{\text{Developed}}$ be greater than $Q_{\text{Pre-Developed}}$ or shall
- 1189 $Q_{\text{Developed}}$ be required to be less than that calculated by the equation $[Q_{\text{Forest}} *$
- 1190 $RV_{\text{Forest}}] / RV_{\text{Developed}}$; where
- 1191 I.F. (Improvement Factor) = 0.8 for sites > 1 acre or 0.9 for sites ≤ 1 acre.
- 1192 $Q_{\text{Developed}}$ = The allowable peak flow rate of runoff from the developed site,
- 1193 $RV_{\text{Developed}}$ = The volume of runoff from the site in the developed condition,
- 1194 $Q_{\text{Pre-developed}}$ = The peak flow rate of runoff from the site in the pre-developed
- 1195 condition,
- 1196 $RV_{\text{Pre-developed}}$ = The volume of runoff from the site in the pre-developed
- 1197 condition,
- 1198 Q_{Forest} = The peak flow rate of runoff from the site in a forested condition, and
- 1199 RV_{Forest} = The volume of runoff from the site in a forested condition; or

1200 b. in accordance with another methodology that is demonstrated by the local
 1201 program to achieve equivalent results and is approved by the board.

1202 C. Flood protection. Concentrated stormwater flow shall be released into a
 1203 stormwater conveyance system and shall meet one of the following criteria as
 1204 demonstrated by use of ~~accepted~~ acceptable hydrologic and hydraulic methodologies:

1205 1. Concentrated stormwater flow to ~~manmade~~ manmade stormwater conveyance systems
 1206 that currently do not experience localized flooding during the 10-year 24-hour
 1207 storm event. The point of discharge releases stormwater into a ~~manmade~~
 1208 stormwater conveyance system that, following the land-disturbing activity,
 1209 confines the postdevelopment peak flow rate from the 10-year 24-hour storm
 1210 event within the manmade stormwater conveyance system. This allows for the
 1211 provision of detention or downstream improvements to provide capacity as part
 1212 of the project.

1213 2. Concentrated stormwater flow to ~~restored~~ stormwater conveyance systems
 1214 that currently experience localized flooding during the 10-year 24-hour storm
 1215 event. The point of discharge either

1216 a. confines the postdevelopment peak flow rate from the 10-year 24-hour
 1217 storm event within the stormwater conveyance system to avoid the localized
 1218 flooding. (This allows for the provision of detention or downstream
 1219 improvements to provide capacity as part of the project); or

1220 b. releases a postdevelopment peak flow rate for stormwater into a
 1221 stormwater conveyance system that (i) has been restored and is functioning
 1222 as designed or (ii) will be restored. The applicant must demonstrate that the
 1223 peak flow rate from the 10-year 24-hour storm following the land-disturbing
 1224 activity will be confined within the system that is less than the
 1225 predevelopment peak flow rate from the 10-year 24-hour storm. (Downstream
 1226 stormwater conveyance systems do not require any additional analysis to
 1227 show compliance with flood protection criteria if this option is utilized.)

1228 3. Limits of analysis. Unless 2b. above is utilized to comply with the flood
 1229 protection criteria, stormwater conveyance systems shall be analyzed for
 1230 compliance with flood protection criteria to a point where:

1231 a. the site's contributing drainage area is less than or equal to 1.0% of the
 1232 total watershed area draining to a point of analysis in the downstream
 1233 stormwater conveyance system; or

1234 b. based on peak flow rate, the site's peak flow rate from the 10-year 24-hour
 1235 storm is less than 1.0% of the existing peak flow rate from the 10-year 24-
 1236 hour storm prior to the implementation of any stormwater quantity control
 1237 measures; or

1238 c. the stormwater conveyance system enters a mapped floodplain or other
 1239 flood prone area, adopted by ordinance, of any locality.

1240 3. Concentrated stormwater flow to natural stormwater conveyance systems. The
 1241 point of discharge releases stormwater into a natural stormwater conveyance
 1242 system that currently does not flood during the 10-year 24-hour storm and,
 1243 following the land-disturbing activity, confines the postdevelopment peak flow
 1244 rate from the 10-year 24-hour storm within the system.

1245 4. Concentrated stormwater flow to natural stormwater conveyance systems
 1246 where localized flooding exists during the 10-year 24-hour storm. The point of
 1247 discharge releases a postdevelopment peak flow rate for the 10-year 24-hour

1248 storm that shall not exceed the predevelopment peak flow rate from the 10-year
 1249 24-hour storm based on good pasture conditions, unless the predeveloped
 1250 condition is forested, in which case the peak flow rate from the developed site
 1251 shall be held to the forested condition.

1252 5. Subdivision C 4 of this subsection notwithstanding, this subdivision shall apply
 1253 to concentrated stormwater flow to natural stormwater conveyance systems
 1254 where localized flooding exists during the 10-year 24-hour storm from (i) a land-
 1255 disturbing activity less than five acres on prior developed lands, or (ii) a regulated
 1256 land disturbing activity less than one acre for new development. The point of
 1257 discharge releases a postdevelopment peak flow rate for the 10-year 24-hour
 1258 storm that is less than the predevelopment peak flow rate from the 10-year 24-
 1259 hour storm.

1260 D. One percent rule. If either of the following criteria are met, subsections B and C of
 1261 this section do not apply, nor is the analysis of subsection H required:

1262 1. Based on area. Prior to any land disturbance, the site's contributing drainage
 1263 area to a point of discharge from the site is less than or equal to 1.0% of the total
 1264 watershed area draining to that point of discharge; or

1265 2. Based on peak flow rate. Based on the postdevelopment land cover conditions
 1266 prior to the implementation of any stormwater quantity control measures, the
 1267 development of the site results in an increase in the peak flow rate from the one-
 1268 year 24-hour storm that is less than 1.0% of the existing peak flow rate from the
 1269 one-year 24-hour storm generated by the total watershed area draining to that
 1270 point of discharge.

1271 E. Increased volumes of sheet flow resulting from pervious or disconnected
 1272 impervious areas, or from physical spreading of concentrated flow through level
 1273 spreaders, must be identified and evaluated for potential impacts on down gradient
 1274 properties or resources. Increased volumes of sheet flow that will cause or contribute to
 1275 erosion, sedimentation, or flooding of down gradient properties or resources shall be
 1276 diverted to a stormwater management facility or a stormwater conveyance system that
 1277 conveys the runoff without causing down gradient erosion, sedimentation, or flooding. If
 1278 all runoff from the site is sheet flow and the conditions of this subsection are met, no
 1279 further water quantity controls are required.

1280 F. For purposes of computing predevelopment runoff from prior developed sites, all
 1281 pervious lands on the site shall be assumed to be in good hydrologic condition in
 1282 accordance with the U.S. Department of Agriculture's Natural Resources Conservation
 1283 Service (NRCS) standards, regardless of conditions existing at the time of computation.
 1284 Predevelopment runoff calculations utilizing other hydrologic conditions may be utilized
 1285 provided that it is demonstrated to and approved by the local program that actual site
 1286 conditions warrant such considerations.

1287 G. Predevelopment runoff characteristics and site hydrology shall be verified by site
 1288 inspections, topographic surveys, available soil mapping or studies, and calculations
 1289 consistent with good engineering practices. Guidance provided in the Virginia
 1290 Stormwater Management Handbook shall be considered appropriate standards.

1291 H. Except where the compliance options under subdivisions B 4 and 5 and C 4 and 5
 1292 of this section are utilized, flooding and channel erosion impacts to stormwater
 1293 conveyance systems shall be analyzed for each point of discharge in accordance with
 1294 channel analysis guidance provided in Technical Bulletin # 1, Stream Channel Erosion
 1295 Control, or in accordance with more stringent channel analysis guidance established by
 1296 the qualifying local program and provided to the department. Such analysis shall include

1297 estimates of runoff from the developed site and the entire upstream watershed that
1298 contributes to that point of discharge. Good engineering practices and calculations in
1299 accordance with department guidance shall be used to evaluate postdevelopment runoff
1300 characteristics and site hydrology, and flooding and channel erosion impacts.

1301 If the downstream owner or owners refuse to give permission to access the property
1302 for the collection of data, evidence of this refusal shall be given and arrangements made
1303 satisfactory to the local program to provide an alternative method for the collection of
1304 data to complete the analysis, such as through the use of photos, aerial surveys, "as
1305 built" plans, topographic maps, soils maps, and any other relevant information.

1306 **4VAC50-60-69. Offsite compliance options.**

1307 A. A qualifying local program shall have the authority to consider the use of the
1308 following offsite compliance options:

1309 1. If a comprehensive watershed stormwater management plan has been
1310 adopted pursuant to 4VAC50-60-92 for the local watershed within which a project
1311 is located, then the qualifying local program may allow offsite controls in
1312 accordance with the plan to achieve the water quality reductions, quantity
1313 reductions, or both required for a site by this chapter. Such offsite controls shall
1314 achieve the required reductions either completely offsite in accordance with the
1315 plan or by a combination of on site and offsite controls.

1316 2. A pro rata fee in accordance with § 15.2-2243 of the Code of Virginia or similar
1317 local funding mechanism through which the water quality and quantity reductions
1318 required for a site by this chapter may be achieved by the payment of a fee
1319 sufficient to fund improvements necessary to adequately achieve offsite
1320 reductions equal to or greater than those that would otherwise be required for the
1321 site.

1322 3. The nonpoint nutrient offset program established by § 10.1-603.8:1 of the
1323 Code of Virginia.

1324 **4. Any stormwater nutrient program, established by the board, for portions of the**
1325 **Commonwealth that do not drain into the Chesapeake Bay.**

1326 4.5 Where no comprehensive watershed stormwater management plan or pro
1327 rata fee exists, or where a qualifying local program otherwise elects to allow the
1328 use of this subdivision, offsite stormwater management facilities may be used by
1329 the operator of a land-disturbing activity to meet the water quality reductions
1330 required for a site by this chapter provided:

1331 a. The operator demonstrates to the satisfaction of the local program that
1332 offsite reductions equal to or greater than those that would otherwise be
1333 required for the site are achieved;

1334 b. The operator demonstrates to the satisfaction of the local program that the
1335 development's runoff and the runoff from any offsite treatment area shall be
1336 controlled in accordance with 4VAC50-60-66;

1337 c. Offsite stormwater management facilities must be located within the HUC
1338 or within the upstream HUCs in the local watershed that the land-disturbing
1339 activity directly discharges to or within the same watershed, as determined by
1340 the local program; and

1341 d. The operator demonstrates to the satisfaction of the local program that the
1342 right to utilize the offsite area and any necessary easements have been
1343 obtained and maintenance agreements for the stormwater management
1344 facilities have been established pursuant to 4VAC50-60-124.

~~1345 B. Should the board establish by regulatory action a standard more stringent than
1346 0.45 pounds per acre per year in the Chesapeake Bay watershed, the offsite compliance
1347 option provided by this subsection shall be available as follows. Where the offsite
1348 options of subsection A of this section are not available for use, where the fee
1349 established by a qualifying local program to offset a pound of phosphorus removal onsite
1350 pursuant to subdivision A 2 exceeds \$23,900, or where a qualifying local program
1351 otherwise elects to allow the use of this subsection, offsite compliance may be achieved
1352 through a payment in accordance with the following:~~

~~1353 1. When the land disturbing activity is in an urban development area the payment
1354 shall be \$15,000 per pound of phosphorus and shall be calculated based on the
1355 poundage not treated on site. In all other cases the payment shall be \$23,900 per
1356 pound of phosphorus. Payment amounts shall be determined based upon the
1357 nearest 0.01 of a pound of phosphorus.~~

~~1358 2. All payments shall be deposited and utilized in accordance with the following:~~

~~1359 a. Payments shall be made prior to commencement of the land disturbing
1360 activity and shall be deposited to the Virginia Stormwater Management Fund
1361 and held in a subaccount.~~

~~1362 b. The board shall establish priorities for the use of these funds by December
1363 1 of each year. Payments held in the fund shall be promptly applied to ensure
1364 that nutrient reduction practices are being implemented. Priorities for the
1365 funds shall be established in accordance with the following:~~

~~1366 (1) At least 50% of the funds shall be utilized for projects to address local
1367 stormwater quality issues related to the impacts of development activities
1368 including but not limited to urban retrofits, urban stream restorations, and
1369 reduction of impervious areas.~~

~~1370 (2) Priority use for the remaining funds shall be for the acquisition of certified
1371 nonpoint nutrient offsets at a rate not to exceed \$23,900 per pound of
1372 phosphorus. Any remaining funds shall be utilized to fund long term contracts
1373 for agricultural best management practices no less than 20 years in duration
1374 or long term best management practices including but not limited to stream
1375 fencing, alternative water supplies, and riparian buffers in accordance with
1376 practice standards established within the Virginia Agricultural BMP Cost
1377 Share Program administered by the department.~~

~~1378 (3) In establishing priorities, the board shall consider targeting equivalent
1379 reductions in the same local watershed as where the payment came from;
1380 implementing urban practices/retrofits that address TMDLs; securing
1381 permanent practices; and achieving measurable reductions. When
1382 purchasing agricultural best management practices, the board shall consider
1383 purchasing practices beyond the baseline established under the Chesapeake
1384 Bay Watershed Nutrient Credit Exchange Program (§ 62.1-44.19:12 et seq.
1385 of the Code of Virginia).~~

~~1386 c. The department shall track the payment amount, the associated poundage
1387 of phosphorus purchased, the jurisdiction where the payment originated, the
1388 regulated MS4 name, if any, and the HUC for the land disturbing activity. The
1389 department shall additionally track the annual expenditure of the funds
1390 including the locality and regulated MS4 name, if any, where the moneys are
1391 expended, the associated poundage of phosphorus reduced, and the cost per
1392 pound for phosphorus reductions associated with the nutrient reduction
1393 practices.~~

- 1394 ~~d. The department may annually utilize up to 6.0% of the payments to~~
1395 ~~administer the stormwater management program.~~
- 1396 ~~e. The board shall periodically review the payment amount, at least every five~~
1397 ~~years or in conjunction with the development of a new construction general~~
1398 ~~permit, and shall evaluate the performance of the fund and the sufficiency of~~
1399 ~~the payment rate in achieving the needed offsite pollution reductions. The~~
1400 ~~board shall adjust the payment amount based upon this analysis.~~
- 1401 ~~3. Utilization of a payment to achieve compliance with the water quality technical~~
1402 ~~criteria shall be subject to the following limitations:~~
- 1403 ~~a. A new development project disturbing greater than or equal to one acre in~~
1404 ~~the Chesapeake Bay watershed must reduce its phosphorus discharge to a~~
1405 ~~level of 0.45 pounds per acre per year of phosphorus on site, or less, and~~
1406 ~~then may achieve all or a portion of the remaining required phosphorus~~
1407 ~~reductions through a payment.~~
- 1408 ~~b. A new development project disturbing less than one acre in the~~
1409 ~~Chesapeake Bay watershed may achieve all necessary phosphorus~~
1410 ~~reductions through a payment.~~
- 1411 ~~c. A new development project outside of the Chesapeake Bay watershed~~
1412 ~~must achieve all necessary phosphorus reductions on site.~~
- 1413 ~~d. Development on prior developed lands disturbing greater than or equal to~~
1414 ~~one acre must achieve at least a 10% reduction from the predevelopment~~
1415 ~~total phosphorus load on site and then may achieve the remaining required~~
1416 ~~phosphorus reductions through a payment.~~
- 1417 ~~e. Development on prior developed lands disturbing less than one acre may~~
1418 ~~achieve all necessary phosphorus reductions through a payment.~~
- 1419 ~~4. Nitrogen or other pollutant reductions achieved through payments into the fund~~
1420 ~~must be retired and shall not be made available to other parties.~~

1421 B. Unless otherwise provided for in a qualifying local program, utilization of nonpoint
1422 nutrient offsets or offsets provided for in a stormwater nutrient program to achieve
1423 compliance with the water quality technical criteria shall be subject to the following
1424 limitations:

1425 1. A new development project disturbing greater than or equal to 5.0 acres or with a
1426 required nutrient load reduction greater than 8.0 pounds of phosphorus must achieve a
1427 minimum of 75% of its required phosphorus reductions on site. Additional required
1428 reductions may be achieved, in part or whole, through the use of nonpoint nutrient
1429 offsets or by offsets provided for in a stormwater nutrient program. If an applicant can
1430 demonstrate to the satisfaction of the qualifying local program or the permit-issuing
1431 authority, through an analysis of alternative site designs and BMP technologies, that
1432 75% of the needed phosphorus reductions can not practically be achieved on site, then
1433 the required reductions may be achieved, in part or whole, through the use of nonpoint
1434 nutrient offsets or by offsets provided for in a stormwater nutrient program.

1435 2. A new development project or development on prior developed lands disturbing
1436 less than 5.0 acres or with a required nutrient load reduction less than or equal to 8.0
1437 pounds of phosphorus may achieve all necessary phosphorus reductions through the
1438 use of nonpoint nutrient offsets.

1439 3. Development on prior developed lands disturbing greater than or equal to 5.0
1440 acres or with a required nutrient load reduction greater than 8.0 pounds of phosphorus
1441 must achieve at least a 10% reduction from the predevelopment phosphorus load on site

1442 and then may achieve the remaining required nutrient load reductions through the use of
 1443 nonpoint nutrient offsets.

1444 C. Where no other options are available, a payment may be made to the Water
 1445 Quality Improvement Fund at a rate and manner set by the department.

1446 €D. Where the department is administering a local program, only offsite options set
 1447 out in subdivisions A 3 and A-4, A 4, A 5, B, and, when available, subsection B C of this
 1448 section shall be available.

1449 **4VAC50-60-70. Repealed.**

1450 **4VAC50-60-72. Design storms and hydrologic methods.**

1451 A. Unless otherwise specified, the prescribed design storms are the one-year, two-
 1452 year, and 10-year 24-hour storms using the site-specific rainfall precipitation frequency
 1453 data recommended by the U.S. National Oceanic and Atmospheric Administration
 1454 (NOAA) Atlas 14. Partial duration time series shall be used for the precipitation data.

1455 B. Unless otherwise specified, all hydrologic analyses shall be based on the existing
 1456 watershed characteristics and how the ultimate development condition of the subject
 1457 project will be addressed.

1458 C. The U.S. Department of Agriculture's Natural Resources Conservation Service
 1459 (NRCS) synthetic 24-hour rainfall distribution and models, including, but not limited to
 1460 TR-55 and TR-20; hydrologic and hydraulic methods developed by the U.S. Army Corps
 1461 of Engineers; or other standard hydrologic and hydraulic methods, shall be used to
 1462 conduct the analyses described in this part.

1463 D. The local program may allow for the use of the Rational Method for evaluating
 1464 peak discharges or the Modified Rational Method for evaluating volumetric flows to
 1465 stormwater conveyances with drainage areas of 200 acres or less.

1466 **4VAC50-60-74. Stormwater harvesting.**

1467 In accordance with § 10.1-603.4 of the Code of Virginia, stormwater harvesting is
 1468 encouraged for the purposes of landscape irrigation systems, fire protection systems,
 1469 flushing water closets and urinals, and other water handling systems to the extent such
 1470 systems are consistent with federal, state, and local regulatory authorities.

1471 **4VAC50-60-76. Linear development projects.**

1472 Unless exempt pursuant to § 10.1-603.8 B of the Code of Virginia, linear
 1473 development projects shall control postdevelopment stormwater runoff in accordance
 1474 with a site-specific stormwater management plan or a comprehensive watershed
 1475 stormwater management plan developed in accordance with these regulations.

1476 **4VAC50-60-80. Repealed.**

1477 **4VAC50-60-85. Stormwater management impoundment structures or facilities.**

1478 ~~A. Construction of stormwater management impoundment structures or facilities~~
 1479 ~~within tidal or nontidal wetlands and perennial streams is not recommended.~~

1480 ~~B. Construction of stormwater management impoundment structures or facilities~~
 1481 ~~within a Federal Emergency Management Agency (FEMA) designated 100-year~~
 1482 ~~floodplain is not recommended.~~

1483 ~~€A.~~ Stormwater management wet ponds and extended detention ponds that are not
 1484 covered by the Impounding Structure Regulations (4VAC50-20) shall, at a minimum, be
 1485 engineered for structural integrity for the 100-year storm event.

1486 ~~DB.~~ Construction of stormwater management impoundment structures or facilities
 1487 may occur in karst areas only after a study of the geology and hydrology of the area has

1488 been conducted to determine the presence or absence of karst features that may be
1489 impacted by stormwater runoff and BMP placement.

1490 EC. Discharge of stormwater runoff to a karst feature shall meet the water quality
1491 criteria set out in 4VAC50-60-63 and the water quantity criteria set out in 4VAC50-60-66.
1492 Permanent stormwater management impoundment structures or facilities shall only be
1493 constructed in karst features after completion of a geotechnical investigation that
1494 identifies any necessary modifications to the BMP to ensure its structural integrity and
1495 maintain its water quality and quantity efficiencies. The person responsible for the land-
1496 disturbing activity is encouraged to screen for known existence of heritage resources in
1497 the karst features. Any Class V Underground Injection Control Well registration
1498 statements for stormwater discharges to improved sinkholes shall be included in the
1499 SWPPP.

1500 **4VAC50-60-90. Repealed.**

1501 **4VAC50-60-92. Comprehensive watershed stormwater management plans.**

1502 Qualifying local programs may develop comprehensive watershed stormwater
1503 management plans to be approved by the department that meet the water quality
1504 objectives, quantity objectives, or both of this chapter:

1505 1. Such plans shall ensure that offsite reductions equal to or greater than those
1506 that would be required on each contributing land-disturbing site are achieved
1507 within the same HUC or within another locally designated watershed. Pertaining
1508 to water quantity objectives, the plan may provide for implementation of a
1509 combination of channel improvement, stormwater detention, or other measures
1510 that are satisfactory to the qualifying local program to prevent downstream
1511 erosion and flooding.

1512 2. If the land use assumptions upon which the plan was based change or if any
1513 other amendments are deemed necessary by the qualifying local program, the
1514 qualifying local program shall provide plan amendments to the board for review
1515 and approval.

1516 3. During the plan's implementation, the qualifying local program shall account for
1517 nutrient reductions accredited to the BMPs specified in the plan.

1518 4. State and federal agencies may develop comprehensive stormwater
1519 management plans, and may participate in locality-developed comprehensive
1520 watershed stormwater management plans where practicable and permitted by
1521 the qualifying local program.

1522 **4VAC50-60-93. Reserved.**

Part II B

Stormwater Management Program Technical Criteria: Grandfathered Projects

1523
1524
1525 **4VAC50-60-94. Applicability.**

1526 This part specifies the technical criteria for regulated land-disturbing activities that
1527 are not subject to the technical criteria of Part II A in accordance with 4VAC 50-60-48.

1528 **4VAC50-60-95. General.**

1529 A. Determination of flooding and channel erosion impacts to receiving streams due to
1530 land-disturbing activities shall be measured at each point of discharge from the land
1531 disturbance and such determination shall include any runoff from the balance of the
1532 watershed that also contributes to that point of discharge.

1533 B. The specified design storms shall be defined as either a 24-hour storm using the
1534 rainfall distribution recommended by the U.S. Department of Agriculture's Natural

1535 Resources Conservation Service (NRCS) when using NRCS methods or as the storm of
1536 critical duration that produces the greatest required storage volume at the site when
1537 using a design method such as the Modified Rational Method.

1538 C. For purposes of computing runoff, all pervious lands in the site shall be assumed
1539 prior to development to be in good condition (if the lands are pastures, lawns, or parks),
1540 with good cover (if the lands are woods), or with conservation treatment (if the lands are
1541 cultivated); regardless of conditions existing at the time of computation.

1542 D. Construction of stormwater management facilities or modifications to channels
1543 shall comply with all applicable laws and regulations. Evidence of approval of all
1544 necessary permits shall be presented.

1545 E. Impounding structures that are not covered by the Impounding Structure
1546 Regulations (4VAC50-20) shall be engineered for structural integrity during the 100-year
1547 storm event.

1548 F. Predevelopment and postdevelopment runoff rates shall be verified by
1549 calculations that are consistent with good engineering practices.

1550 G. Outflows from a stormwater management facility or stormwater conveyance
1551 system shall be discharged to an adequate channel.

1552 H. Proposed residential, commercial, or industrial subdivisions shall apply these
1553 stormwater management criteria to the land disturbance as a whole. Individual lots in
1554 new subdivisions shall not be considered separate land-disturbing activities, but rather
1555 the entire subdivision shall be considered a single land development project. Hydrologic
1556 parameters shall reflect the ultimate land disturbance and shall be used in all
1557 engineering calculations.

1558 I. All stormwater management facilities shall have an inspection and maintenance
1559 plan that identifies the owner and the responsible party for carrying out the inspection
1560 and maintenance plan.

1561 J. Construction of stormwater management impoundment structures within a Federal
1562 Emergency Management Agency (FEMA) designated 100-year floodplain shall be
1563 avoided to the extent possible. When this is unavoidable, all stormwater management
1564 facility construction shall be in compliance with all applicable regulations under the
1565 National Flood Insurance Program, 44 CFR Part 59.

1566 K. Natural channel characteristics shall be preserved to the maximum extent
1567 practicable.

1568 L. Land-disturbing activities shall comply with the Virginia Erosion and Sediment
1569 Control Law (§ 10.1-560 et seq. of the Code of Virginia) and attendant regulations.

1570 M. Flood control and stormwater management facilities that drain or treat water from
1571 multiple development projects or from a significant portion of a watershed may be
1572 allowed in resource protection areas defined in the Chesapeake Bay Preservation Act,
1573 provided that (i) the local government has conclusively established that the location of
1574 the facility within the resource protection area is the optimum location; (ii) the size of the
1575 facility is the minimum necessary to provide necessary flood control, stormwater
1576 treatment, or both; and (iii) the facility must be consistent with a stormwater
1577 management program that has been approved by the board, the Chesapeake Bay Local
1578 Assistance Board, or the Board of Conservation and Recreation.

1579 **4VAC50-60-96. Water quality.**

1580 A. Compliance with the water quality criteria may be achieved by applying the
1581 performance-based criteria or the technology-based criteria to either the site or a
1582 planning area.

1583 B. Performance-based criteria. For land-disturbing activities, the calculated
 1584 postdevelopment nonpoint source pollutant runoff load shall be compared to the
 1585 calculated predevelopment load based upon the average land cover condition or the
 1586 existing site condition. A BMP shall be located, designed, and maintained to achieve the
 1587 target pollutant removal efficiencies specified in Table 2 of this section to effectively
 1588 reduce the pollutant load to the required level based upon the following four applicable
 1589 land development situations for which the performance criteria apply:

1590 1. Situation 1 consists of land-disturbing activities where the existing percent
 1591 impervious cover is less than or equal to the average land cover condition and
 1592 the proposed improvements will create a total percent impervious cover that is
 1593 less than the average land cover condition.

1594 Requirement: No reduction in the after disturbance pollutant discharge is
 1595 required.

1596 2. Situation 2 consists of land-disturbing activities where the existing percent
 1597 impervious cover is less than or equal to the average land cover condition and
 1598 the proposed improvements will create a total percent impervious cover that is
 1599 greater than the average land cover condition.

1600 Requirement: The pollutant discharge after disturbance shall not exceed the
 1601 existing pollutant discharge based on the average land cover condition.

1602 3. Situation 3 consists of land-disturbing activities where the existing percent
 1603 impervious cover is greater than the average land cover condition.

1604 Requirement: The pollutant discharge after disturbance shall not exceed (i) the
 1605 pollutant discharge based on existing conditions less 10% or (ii) the pollutant
 1606 discharge based on the average land cover condition, whichever is greater.

1607 4. Situation 4 consists of land-disturbing activities where the existing percent
 1608 impervious cover is served by an existing stormwater management BMP that
 1609 addresses water quality.

1610 Requirement: The pollutant discharge after disturbance shall not exceed the
 1611 existing pollutant discharge based on the existing percent impervious cover while
 1612 served by the existing BMP. The existing BMP shall be shown to have been
 1613 designed and constructed in accordance with proper design standards and
 1614 specifications, and to be in proper functioning condition.

1615 C. Technology-based criteria. For land-disturbing activities, the postdeveloped
 1616 stormwater runoff from the impervious cover shall be treated by an appropriate BMP as
 1617 required by the postdeveloped condition percent impervious cover as specified in Table
 1618 2 of this section. The selected BMP shall be located, designed, and maintained to
 1619 perform at the target pollutant removal efficiency specified in Table 2 or those found in
 1620 4VAC50-60-65. Design standards and specifications for the BMPs in Table 2 that meet
 1621 the required target pollutant removal efficiency are available in the 1990 Virginia
 1622 Stormwater Management Handbook. Other approved BMPs available on the Virginia
 1623 Stormwater BMP Clearinghouse website at <http://www.vwrrc.vt.edu/swc> may also be
 1624 utilized.

Table 2*

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%	
*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.		

1625 4VAC50-60-97. Stream channel erosion.

1626 A. Properties and receiving waterways downstream of any land-disturbing activity
1627 shall be protected from erosion and damage due to changes in runoff rate of flow and
1628 hydrologic characteristics, including, but not limited to, changes in volume, velocity,
1629 frequency, duration, and peak flow rate of stormwater runoff in accordance with the
1630 minimum design standards set out in this section.

1631 B. The permit-issuing authority shall require compliance with subdivision 19 of
1632 4VAC50-30-40 of the Erosion and Sediment Control Regulations, promulgated pursuant
1633 to Article 4 (§ 10.1-560 et seq.) of Chapter 5 of Title 10.1 of the Code of Virginia.

1634 C. The permit-issuing authority may determine that some watersheds or receiving
1635 stream systems require enhanced criteria in order to address the increased frequency of
1636 bankfull flow conditions (top of bank) brought on by land-disturbing activities. Therefore,
1637 in lieu of the reduction of the two-year postdeveloped peak rate of runoff as required in
1638 subsection B of this section, the land development project being considered shall
1639 provide 24-hour extended detention of the runoff generated by the one-year, 24-hour
1640 duration storm.

1641 D. In addition to subsections B and C of this section, permit-issuing authorities, by
1642 local ordinance may, or the board by state regulation may, adopt more stringent channel
1643 analysis criteria or design standards to ensure that the natural level of channel erosion,
1644 to the maximum extent practicable, will not increase due to the land-disturbing activities.
1645 These criteria may include, but are not limited to, the following:

- 1646** 1. Criteria and procedures for channel analysis and classification.
- 1647** 2. Procedures for channel data collection.

1648 3. Criteria and procedures for the determination of the magnitude and frequency
1649 of natural sediment transport loads.

1650 4. Criteria for the selection of proposed natural or manmade channel linings.

1651 **4VAC50-60-98. Flooding.**

1652 A. Downstream properties and waterways shall be protected from damages from
1653 localized flooding due to changes in runoff rate of flow and hydrologic characteristics,
1654 including, but not limited to, changes in volume, velocity, frequency, duration, and peak
1655 flow rate of stormwater runoff in accordance with the minimum design standards set out
1656 in this section.

1657 B. The 10-year postdeveloped peak rate of runoff from the development site shall not
1658 exceed the 10-year predeveloped peak rate of runoff.

1659 C. In lieu of subsection B of this section, localities may, by ordinance, adopt alternate
1660 design criteria based upon geographic, land use, topographic, geologic factors, or other
1661 downstream conveyance factors as appropriate.

1662 D. Linear development projects shall not be required to control postdeveloped
1663 stormwater runoff for flooding, except in accordance with a watershed or regional
1664 stormwater management plan.

1665 **4VAC50-60-99. Regional (watershed-wide) stormwater management plans.**

1666 Water quality and where allowed, water quantity, may be achieved in accordance
1667 with sections 4VAC50-60-69 and 4VAC50-60-92.

1668 **4VAC50-60-100. Repealed.**

1669

1670 **Part II ____**

1671 **Technical criteria for regulated land-disturbing activities**

1672

1673 **4VAC50-60-xxx Stormwater Pollution Prevention Plan Content**

1674 A SWPPP consists of an approved **Erosion erosion** and **Sediment Control Plan**
1675 **sediment control plan**, a pollution prevention plan for regulated land-disturbing activities
1676 and a stormwater management plan.

1677 A. An erosion and sediment control plan consistent with the requirements of the
1678 Virginia Erosion and Sediment Control Law and regulations must be designed and
1679 implemented during construction activities. Prior to land disturbance, this plan must be
1680 approved by either the local erosion and sediment control program or the department in
1681 accordance with the Virginia Erosion and Sediment Control Law and attendant
1682 regulations. The erosion and sediment control plan must implement the following
1683 requirements:

1684 1. Control stormwater volume and velocity within the site to minimize soil
1685 erosion;

1686 2. Control stormwater discharges, including both peak flow rates and total
1687 stormwater volume, to minimize erosion at outlets and to minimize downstream
1688 channel and stream bank erosion;

1689 3. Minimize the amount of soil exposed during construction activity;

1690 4. Minimize the disturbance of steep slopes;

1691 5. Minimize sediment discharges from the site. The design, installation and
1692 maintenance of erosion and sediment controls must address factors such as the

1693 amount, frequency, intensity and duration of precipitation, the nature of resulting
 1694 stormwater runoff, and soil characteristics, including the range of soil particle
 1695 sizes expected to be present on the site;

1696

1697 6. Provide and maintain natural buffers around surface waters, direct stormwater
 1698 to vegetated areas to increase sediment removal and maximize stormwater
 1699 infiltration, unless infeasible;

1700 7. Minimize soil compaction and, unless infeasible, preserve topsoil; and

1701 8. Stabilization of disturbed areas must, at a minimum, be initiated immediately
 1702 whenever any clearing, grading, excavating or other earth disturbing activities
 1703 have permanently ceased on any portion of the site, or temporarily ceased on
 1704 any portion of the site and will not resume for a period exceeding 14 calendar
 1705 days. Stabilization must be completed within a period of time determined by the
 1706 local stormwater management program or permit-issuing authority. In arid,
 1707 semiarid, and drought-stricken areas where initiating vegetative stabilization
 1708 measures immediately is infeasible, alternative stabilization measures must be
 1709 employed as specified by the local stormwater management program or permit-
 1710 issuing authority.

1711 B. ~~An~~ A stormwater management plan consistent with the requirements of the
 1712 Virginia Stormwater Management Act and regulations must be designed and
 1713 implemented during construction activities. Prior to land disturbance, this plan must be
 1714 approved by the local stormwater management program or permit-issuing authority.

1715 C. A pollution prevention plan that identifies potential sources of pollutants that may
 1716 reasonably be expected to affect the quality of stormwater discharges from the
 1717 construction site and describe control measures that will be used to minimize pollutants
 1718 in stormwater discharges from the construction site must be developed before land
 1719 disturbance commences.

1720 **4VAC50-60-xxx. Stormwater Management Plans**

1721 A. A stormwater management plan shall be developed and submitted to the local
 1722 stormwater management program or permit-issuing authority.

1723 The stormwater management plan shall be implemented as approved or modified by
 1724 the local stormwater management program or permit-issuing authority.

1725 1. A stormwater management plan for a land-disturbing activity shall apply the
 1726 stormwater management technical criteria set forth in this Part to the entire land-
 1727 disturbing activity.

1728 2. ~~The~~ A stormwater management plan shall consider all sources of surface
 1729 runoff and all sources of subsurface and groundwater flows converted to surface
 1730 runoff.

1731 B. A complete stormwater management plan shall include the following elements:

1732 ~~a.~~ 1. Information on the type of and location of stormwater discharges,
 1733 information on the features to which stormwater is being discharged including
 1734 surface waters or karst features if present, and predevelopment and
 1735 postdevelopment drainage areas;

1736 ~~b.~~ 2. Contact information including the name, address, and telephone number of
 1737 the owner and the tax reference number and parcel number of the property or
 1738 properties affected;

- 1739 e. 3. A narrative that includes a description of current site conditions and final site
 1740 conditions or if allowed by the local stormwater management program **or permit-**
 1741 **issuing authority**, the information provided and documented during the review
 1742 process that address the current and final site conditions;
- 1743 ~~d. 4.~~ A general description of the proposed stormwater management facilities and
 1744 the mechanism through which the facilities will be operated and maintained after
 1745 construction is complete;
- 1746 e. 5. The location and design of the proposed stormwater management facilities;
- 1747 ~~f. 6.~~ Hydrologic and hydraulic computations;
- 1748 ~~g. 7.~~ ~~Good engineering practices, documentation,~~ Documentation and
 1749 calculations verifying compliance with the water quality and quantity
 1750 requirements;
- 1751 ~~h. 8.~~ A map or maps of the site that depicts the topography of the site and
 1752 includes:
- 1753 (1) a. All contributing drainage areas;
- 1754 (2) b. Existing streams, ponds, culverts, ditches, wetlands, and other water
 1755 bodies;
- 1756 (3) c. Soil types, geologic formations if karst features are present in the area,
 1757 forest cover, and other vegetative areas;
- 1758 (4) d. Current land use including existing structures, roads, and locations of
 1759 known utilities and easements;
- 1760 (5) e. Sufficient information on adjoining parcels to assess the impacts of
 1761 stormwater from the site on these parcels;
- 1762 (6) f. The limits of clearing and grading, and the proposed drainage patterns
 1763 on the site;
- 1764 (7) g. Proposed buildings, roads, parking areas, utilities, and stormwater
 1765 management facilities; and
- 1766 (8) h. Proposed land use with tabulation of the percentage of surface area to
 1767 be adapted to various uses, including but not limited to planned locations of
 1768 utilities, roads, and easements.
- 1769 i. 9. If payment of a fee is required with the stormwater management plan
 1770 submission by the local stormwater management program **or permit-issuing**
 1771 **authority**, the fee and the required fee form in accordance with Part 13 must have
 1772 been submitted.
- 1773 ~~j. The applicant must have submitted executed right-of-entry agreements or~~
 1774 ~~easements, in a form acceptable to the local program from the owner for~~
 1775 ~~purposes of inspection and maintenance and proposed maintenance~~
 1776 ~~agreements, including inspection schedules, where required in accordance with~~
 1777 ~~4VAC50-60-124.~~
- 1778 2-C. Elements of the stormwater management plans shall be appropriately sealed
 1779 and signed by a professional registered in the Commonwealth of Virginia.
- 1780 ~~C. Notwithstanding the requirements of subsection A of this section, if allowed by the~~
 1781 ~~qualifying local program, an initial stormwater management plan may be submitted for~~
 1782 ~~review and approval. Prior to any grading, building or other permit being issued for a~~
 1783 ~~property, proof of VSMP coverage and a certification stating that all land clearing,~~
 1784 ~~construction, disturbance, land development and drainage will be done according to the~~
 1785 ~~approved permit conditions shall be provided.~~

1786 ~~D. Prior to the release to the portion of any performance bond or surety associated with~~
1787 ~~the stormwater management facility, a~~ A construction record drawing for permanent
1788 stormwater management facilities shall be submitted to the local stormwater
1789 management program **or permit-issuing authority**. The construction record drawing shall
1790 be appropriately sealed and signed by a professional registered in the Commonwealth of
1791 Virginia, certifying that the stormwater management facilities have been constructed in
1792 general accordance with the approved plan and will function as designed.

1793

1794 **4VAC50-60-xxx. Pollution Prevention Plans**

1795 A. ~~In addition to an approved erosion and sediment control plan, a~~ A plan for
1796 implementing stormwater pollution prevention measures during construction activities
1797 shall be developed and implemented. The stormwater pollution prevention plan shall
1798 detail the design, installation, implementation and maintenance of effective pollution
1799 prevention measures to minimize the discharge of pollutants. At a minimum, such
1800 measures must be designed, installed, implemented and maintained to:

1801 1. Minimize the discharge of pollutants from equipment and vehicle washing,
1802 wheel wash water, and other wash waters. Wash waters must be treated in a
1803 sediment basin or alternative control that provides equivalent or better treatment
1804 prior to discharge;

1805 2. Minimize the exposure of building materials, building products, construction
1806 wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents,
1807 sanitary waste and other materials present on the site to precipitation and to
1808 stormwater; and

1809 3. Minimize the discharge of pollutants from spills and leaks and implement
1810 chemical spill and leak prevention and response procedures.

1811 C.B. The stormwater pollution prevention plan shall include effective best
1812 management practices to prohibit the following discharges:

1813 1. Wastewater from washout of concrete, unless managed by an appropriate
1814 control;

1815 2. Wastewater from washout and cleanout of stucco, paint, form release oils,
1816 curing compounds and other construction materials;

1817 3. Fuels, oils, or other pollutants used in vehicle and equipment operation and
1818 maintenance; and

1819 4. Soaps or solvents used in vehicle and equipment washing.

1820 **C. Discharges from dewatering activities, including discharges from dewatering of**
1821 **trenches and excavations, are prohibited unless managed by appropriate controls.**

1822

1823 **4VAC50-60-xxx. Exceptions**

1824 A request for an exception for Part IIA and or Part IIB, including the reasons for making
 1825 the request, may be submitted in writing to the local stormwater management program
 1826 or permit-issuing authority. Economic hardship alone is not a sufficient reason to
 1827 request an exception from the requirements of this chapter. The request for an
 1828 exception will be reviewed pursuant to 4VAC50-60-xxx.(Local stormwater management
 1829 program exceptions). A request for an An exception to the requirement that the land
 1830 disturbing activity obtain a VSMP permit will not be granted by the local stormwater
 1831 management program or permit-issuing authority.

1832

 1833 **4VAC50-60-xxx. Maintenance Agreements Responsibility for long term**
 1834 **maintenance of permanent stormwater management facilities**

1835 A. ~~A maintenance agreement shall be provided to the local stormwater management~~
 1836 ~~program and shall be recorded in the property deed. The maintenance agreement shall~~
 1837 ~~require the following:~~

1838 1. ~~the submittal of written inspection and maintenance reports, in accordance with~~
 1839 ~~the inspection and maintenance schedule, to the local stormwater management program~~
 1840 ~~documenting that the facility is being properly maintained;~~

1841 2. ~~notification of the local stormwater management program of any transfer or~~
 1842 ~~conveyance of conveyance of ownership or responsibility for maintenance of a~~
 1843 ~~stormwater management facility; and~~

1844 3. ~~right of entry agreements or easements providing access to the property for~~
 1845 ~~purposes of inspection and maintenance.~~

1846 A. The local stormwater management program or the permit issuing, shall require the
 1847 provision of long term responsibility for and maintenance of stormwater management
 1848 control devices facilities and other techniques specified to manage the quality and
 1849 quantity of runoff. Such requirements shall be set forth in an instrument recorded in the
 1850 local land records prior to permit termination and shall, at a minimum:

1851 a. be submitted to the local stormwater management program for review and
 1852 approval prior to the approval of the stormwater management plan;

1853 b. be stated to run with the land;

1854 c. provide for all necessary access to the property for purposes of maintenance
 1855 and regulatory inspections;

1856 d. provide for inspections and maintenance and the submission of inspection and
 1857 maintenance reports to the local stormwater management program or the permit issuing
 1858 authority; and

1859 e. be enforceable by all appropriate governmental parties.

1860 B. At the discretion of the local stormwater management program or the permit issuing
 1861 authority, maintenance agreements such recorded instruments, at the discretion of the
 1862 local program, may need not be required for stormwater management facilities designed
 1863 to treat stormwater runoff primarily from an individual residential lot on which they are
 1864 located, provided it is demonstrated to the satisfaction of the local stormwater
 1865 management program that future maintenance of such facilities will be addressed
 1866 through a deed restriction or other an enforceable mechanism at the discretion of the
 1867 local stormwater management program or the permit issuing authority.

1868

1869 A recorded instrument shall be submitted to the local stormwater management program
1870 or permit-issuing authority in accordance with 4VAC50-60-xxx. (Long-term maintenance
1871 of stormwater management facilities.)

1872 Long-term maintenance of stormwater management facilities.

1873

1874 **4VAC50-60-xxx Applying for VSMP permit coverage**

1875 The operator must submit a complete and accurate registration statement (VSMP
1876 General Permit for Discharges of Stormwater from Construction Activities (VAR10) -
1877 Registration Statement, DCR 199 146 (03/09)) on the official department form to a local
1878 stormwater management program or permit-issuing authority in order to apply for VSMP
1879 permit coverage. The registration statement must be signed by the operator in
1880 accordance with 4VAC50-60-370.

1881

1882

Part III

1883 **4VAC50-60-101. Purpose**

1884 This part specifies the minimum technical criteria for local stormwater management
1885 programs, including those operated by the Department or a program administered by the
1886 permit-issuing authority where no qualifying local program is authorized, and the
1887 ~~minimum technical criteria for qualifying local programs.~~ Such criteria include but are not
1888 limited to administration, plan review, inspection, and enforcement. This part also
1889 includes the board's procedures for the oversight of local stormwater management
1890 programs and ~~qualifying local program.~~

1891

1892 **4VAC50-60-102. Authority.**

1893 If a locality has adopted a local stormwater management program in accordance with
1894 the Virginia Stormwater Management Act (§ 10.1-603.2 et seq. of the Code of Virginia)
1895 and the board has deemed such program adoption consistent with the Virginia
1896 Stormwater Management Act and these regulations in accordance with § 10.1-603.3 F of
1897 the Code of Virginia, the board may authorize a locality to administer a local stormwater
1898 management program. Pursuant to § 10.1-603.4, the board is required to establish
1899 standards and procedures for such an authorization.

1900 This part specifies the minimum technical criteria and the local government
1901 ordinance requirements for a local stormwater management program ~~to be considered a~~
1902 qualifying local program.

1903

1904

1905 Part III A. Local Stormwater Management Programs or Programs Administered by the
1906 Permit-Issuing Authority

1907

1908 **4VAC50-60-104. ~~Technical criteria~~ Criteria for local stormwater management**
1909 **programs or a program administered by the permit-issuing authority**

1910 A. All local stormwater management programs or the permit-issuing authority shall
1911 require compliance with the provisions of Part II ~~as applicable~~ (4VAC50-60-40 et seq.) of
1912 this chapter.

1913 B. Nothing in this part shall be construed as authorizing a locality to regulate, or to
1914 require prior approval by the locality for a state or federal project unless authorized by
1915 separate statute.

1916 C. When a locality operating a local stormwater management program has adopted
1917 requirements more stringent than those imposed by this chapter in accordance with §
1918 10.1-603.7 of the Code of Virginia or implemented a comprehensive stormwater
1919 management plan, the department shall consider such requirements in its review of state
1920 and federal projects within that locality in accordance with Part IV (4VAC50-60-160 et
1921 seq.) of this chapter.

1922 D. A local stormwater management program **or permit-issuing authority** may require
1923 the submission of a reasonable performance bond or other financial surety and provide
1924 for the release of such sureties in accordance with the criteria set forth in § 10.1-603.8 of
1925 the Code of Virginia.

1926

1927 **4VAC50-60-xxx. Additional Technical Requirements for ~~Locality-operated~~ Locality-**
1928 **administered Local Stormwater Management Programs ~~to be Qualifying Local~~**
1929 **~~Programs under the VSMP General Permit for Discharges of Stormwater from~~**
1930 **~~Construction Activities.~~**

1931 ~~A. As per 4 VAC50-60-460L, in addition to a local stormwater management~~
1932 ~~program's criteria found in 4VAC50-60-104, in order to be considered a qualifying~~
1933 ~~local program under the VSMP General Permit for Discharges of Stormwater from~~
1934 ~~Construction Activities, a locality-administered local stormwater management program~~
1935 ~~shall adopt ordinances that ensure compliance with the requirements set forth in~~
1936 ~~4VAC50-60-460L.~~

1937 ~~A. Adopt by ordinance, inspect and enforce requirements for implementation of~~
1938 ~~appropriate erosion and sediment control best management practices during~~
1939 ~~construction activities. Ordinances shall be consistent with the Virginia Erosion and~~
1940 ~~Sediment Control Law and any more stringent erosion and sediment control~~
1941 ~~requirements required by the VSMP General Permit.~~

1942 ~~B. Adopt by ordinance, inspect and enforce requirements to control waste such as~~
1943 ~~discarded building materials, concrete truck washout, chemicals, litter, and sanitary~~
1944 ~~waste at the construction site that may cause adverse impacts to water quality including~~
1945 ~~any specific requirements required by the VSMP General Permit. [Can make this more~~
1946 ~~general? — put specifics in Part 2]~~

1947 ~~C. Adopt by ordinance, inspect and enforce requirements for development,~~
1948 ~~implementation and maintenance of a stormwater pollution prevention plan. A~~
1949 ~~stormwater pollution prevention plan includes site descriptions; descriptions of~~
1950 ~~appropriate control measures; copies of approved state, tribal or local requirements;~~
1951 ~~maintenance procedures; inspection procedures; and identification of nonstormwater~~
1952 ~~discharges.~~

1953 B. The locality shall adopt ordinances at least as stringent as the provisions of the
1954 General Virginia Stormwater Management Program (VSMP) Permit for Discharges of
1955 Stormwater from Construction Activities.

1956

1957 **4VAC50-60-108. ~~Local program stormwater management program plan review~~**
 1958 **Stormwater Management Plan Review.**

1959 A. A local stormwater management program **or permit-issuing authority** shall require
 1960 ~~review and approve stormwater management plans to be submitted for review and be~~
 1961 ~~approved prior to commencement of land disturbing activities.~~

1962 B. A local stormwater management program **or permit-issuing authority** shall approve
 1963 or disapprove a stormwater management plan according to the following:

1964 1. The local stormwater management program **or permit-issuing authority** shall
 1965 determine the completeness of a plan in accordance with 4VAC50-60-xxx
 1966 (stormwater management plans), and shall notify the applicant of any
 1967 determination, within 15 calendar days of receipt. Where available to the
 1968 applicant, electronic communication may be considered communication in
 1969 writing.

1970 a. If within those 15 days the plan is deemed to be incomplete ~~based on the~~
 1971 ~~criteria set out in this subsection~~, the applicant shall be notified in writing of
 1972 the reasons the plan is deemed incomplete.

1973 b. If a determination of completeness is made and communicated to the
 1974 applicant within the 15 calendar days, an additional 60 calendar days from
 1975 the date of the communication will be allowed for the review of the plan.

1976 c. If a determination of completeness is not made and communicated to the
 1977 applicant within the 15 calendar days, the plan shall be deemed complete as
 1978 of the date of submission and a total of 60 calendar days from the date of
 1979 submission will be allowed for the review of the plan.

1980 d. The local stormwater management program **or permit-issuing authority**
 1981 shall ~~act~~ review within 45 days ~~on~~ any plan that has been previously
 1982 disapproved and resubmitted

1983 ~~3.~~ 2. During the review period, the plan shall be approved or disapproved and the
 1984 decision communicated in writing to the person responsible for the land-
 1985 disturbing activity or his designated agent. If the plan is not approved, the
 1986 reasons for not approving the plan shall be provided in writing. Approval or denial
 1987 shall be based on the plan's compliance with the requirements of this chapter
 1988 and of the local stormwater management program **or program administered by**
 1989 **the permit-issuing authority**. Where available to the applicant, electronic
 1990 communication may be considered communication in writing.

1991 ~~4.~~ 3. If a plan meeting all requirements of this chapter and of the local stormwater
 1992 management program or **program administered by the permit-issuing authority** is
 1993 submitted and no action is taken within the time specified above, the plan shall
 1994 be deemed approved.

1995 ~~5.~~ 4. A local stormwater management program may consider the entire site a
 1996 single land disturbing activity, rather than individual lots or planned phases of
 1997 developments

1998 C. ~~Notwithstanding the requirements of subsection A of this section, if allowed by the~~
 1999 ~~local stormwater management program, an initial stormwater management plan may be~~
 2000 ~~submitted for review and approval. Prior to any grading, building or other permit being~~
 2001 ~~issued for a property, proof of VSMP coverage and a certification stating that all land~~
 2002 ~~clearing, construction, disturbance, land development and drainage will be done~~
 2003 ~~according to the approved permit conditions shall be required.~~

2004 ~~D.~~ C. Each approved plan may be modified in accordance with the following:

2005 1. Modifications to an approved stormwater management plan shall be allowed
2006 only after review and written approval by the local stormwater management
2007 program. The local stormwater management program shall have 60 calendar
2008 days to respond in writing either approving or disapproving such requests.

2009 2. Based on an inspection, the local stormwater management program may
2010 require amendments to the approved stormwater management plan to address
2011 the any deficiencies and notify the permittee of the required modifications found
2012 within a time frame set by the local stormwater management program.

2013 E. D. A local stormwater management program shall not provide authorization to
2014 begin land disturbing activities until provided evidence of VSMP permit coverage.

2015 F. E. Prior to the release to the portion of any performance bond or surety associated
2016 with the stormwater management facility, the The local stormwater management
2017 program or permit-issuing authority shall require the submission of a construction record
2018 drawing for permanent stormwater management facilities in accordance with 4VAC50-
2019 60xxx (stormwater management plans). A local stormwater management program or
2020 permit-issuing authority may elect not to require construction record drawings for
2021 stormwater management facilities for which maintenance agreements are not required
2022 pursuant to 4VAC50-60-124.

2023

2024 **4VAC50-60-xxx. Local stormwater management program facility maintenance**
2025 **Long-term maintenance of stormwater management facilities.**

2026 A. Local stormwater management programs shall require maintenance agreements
2027 recorded instruments in accordance with 4VAC50-60-xxx (long term maintenance). The
2028 local stormwater management program recorded instrument shall ensure, through the
2029 use of maintenance agreements, that unless assumed by a governmental agency, the
2030 responsibility for the operation and maintenance of stormwater management facilities
2031 remains with the property owner or other legally established entity and shall pass to any
2032 successor.

2033 B. In addition to the requirements listed in 4VAC50-60-xxx, the local stormwater
2034 management program may require provisions specifying that, where maintenance or
2035 repair of a stormwater management facility located on the owner's property is neglected,
2036 or the stormwater management facility becomes a public health or safety concern and
2037 the owner has failed to perform the necessary maintenance and repairs after receiving
2038 notice from the locality, the may perform the necessary maintenance and repairs and
2039 recover the costs from the owner. In the specific case of a public health or safety danger,
2040 the agreement may provide that the written notice may be waived by the locality.

2041 C. At the discretion of the local stormwater management program, maintenance
2042 agreements may not be required for stormwater management facilities designed to treat
2043 stormwater runoff primarily from an individual residential lot on which they are located,
2044 provided it is demonstrated to the satisfaction of the local stormwater management
2045 program that future maintenance of such facilities will be addressed through a deed
2046 restriction or other enforceable mechanism

2047 A. The local stormwater management program or permit-issuing authority shall require
 2048 the provision of long-term responsibility for and maintenance of stormwater management
 2049 control devices facilities and other techniques specified to manage the quality and
 2050 quantity of runoff. Such requirements shall be set forth in an instrument recorded in the
 2051 local land records prior to permit termination or earlier as required by the local
 2052 stormwater management program or permit-issuing authority and shall, at a minimum:

- 2053 a. be submitted to the local stormwater management program or permit-issuing
 2054 authority for review and approval prior to the approval of the stormwater management
 2055 plan;
- 2056 b. be stated to run with the land;
- 2057 c. provide for all necessary access to the property for purposes of maintenance
 2058 and regulatory inspections;
- 2059 d. provide for inspections and maintenance and the submission of inspection and
 2060 maintenance reports to the local stormwater management program or permit-issuing
 2061 authority; and
- 2062 e. be enforceable by all appropriate governmental parties.

2063 B. At the discretion of the local stormwater management program or permit-issuing
 2064 authority, maintenance agreements such recorded instruments, at the discretion of the
 2065 local program, may need not be required for stormwater management facilities designed
 2066 to treat stormwater runoff primarily from an individual residential lot on which they are
 2067 located, provided it is demonstrated to the satisfaction of the local stormwater
 2068 management program that future maintenance of such facilities will be addressed
 2069 through a deed restriction or other an enforceable mechanism at the discretion of the
 2070 local stormwater management program or permit-issuing authority.

2071

2072 4VAC50-60-xxx. Inspections.

2073 A. The local stormwater management program shall inspect the land-disturbing
 2074 activity during construction for:

- 2075 1. compliance with the approved erosion and sediment control plan;
- 2076 2. compliance with the approved stormwater management plan; and
- 2077 3. the development, updating, and implementation of a current (updated) pollution
 2078 prevention plan.

2079 B. A local stormwater management program or permit-issuing authority shall
 2080 establish an inspection program that ensures that the stormwater management facilities
 2081 are being adequately maintained as designed after completion of all construction
 2082 activities. ~~Any inspection program~~ Inspection programs shall:

- 2083 1. ~~Approved~~ Be approved by the board;
- 2084 2. Ensures that each stormwater management facility is inspected by the
 2085 ~~qualifying local program~~ local stormwater management program or its designee,
 2086 or permit-issuing authority, not to include the owner, except as provided in
 2087 subsections C and D of this section, at least once every five years; and
- 2088 3. ~~Documented~~ Be documented by ~~inspection~~ records.

2089 C. A local stormwater management program or permit-issuing authority may utilize
 2090 the ~~written~~ inspection and ~~maintenance~~ reports required under a ~~maintenance~~
 2091 ~~agreement~~ 4VAC50-60-xxx (long-term maintenance section) as part of a consistent
 2092 board-approved inspection program established under subsection B of this section if the
 2093 inspection is conducted by a person who is licensed as a professional engineer,
 2094 architect, landscape architect, or land surveyor pursuant to Article 1 (§ 54.1-400 et seq.)

2095 of Chapter 4 of Title 54.1 or who holds a an appropriate certificate of competence from
 2096 the board. ~~The reports, if so utilized, must be kept on file with the qualifying local~~
 2097 ~~program.~~

2098 D. A If a recorded instrument is not required pursuant to 4VAC50-60- xxx (long-term
 2099 maintenance section), a local stormwater management program or permit-issuing
 2100 authority shall develop a strategy for addressing maintenance of stormwater
 2101 management facilities designed to treat stormwater runoff primarily from an individual
 2102 residential lot on which they are located. Such a strategy may include periodic
 2103 inspections, homeowner outreach and education, or other method targeted at promoting
 2104 the long-term maintenance of such facilities. Such facilities shall not be subject to the
 2105 requirement for an inspection to be conducted by the ~~qualifying local program~~ local
 2106 stormwater management program or permit-issuing authority contained ~~within~~
 2107 ~~subsection E of this section.~~

2108 F. ~~Documentation of inspections shall be kept on file in accordance with 4VAC50-60-~~
 2109 ~~126 for all stormwater management facilities inspected by the local stormwater~~
 2110 ~~management program.~~

2111

2112 4VAC50-60-116. Enforcement.

2113 A. A local stormwater management program or permit-issuing authority may
 2114 incorporate, but is not limited to, the following enforcement components:

- 2115 1. Informal and formal administrative enforcement procedures including:
- 2116 a. Verbal warnings and inspection reports;
 - 2117 b. Notices of corrective action;
 - 2118 c. Consent special orders and civil charges in accordance with subdivision 7
 - 2119 of § 10.1-603.2:1 and § 10.1-603.14 D 2 of the Code of Virginia;
 - 2120 d. Notices to comply in accordance with § 10.1-603.11 of the Code of
 - 2121 Virginia;
 - 2122 e. Special orders in accordance with subdivision 7 of § 10.1-603.2:1 of the
 - 2123 Code of Virginia;
 - 2124 f. Emergency special orders in accordance with subdivision 7 of § 10.1-
 - 2125 603.2:1 of the Code of Virginia; and
 - 2126 g. Public notice and comment periods for proposed settlements and consent
 2127 special orders pursuant to 4VAC50-60-660.

- 2128 2. Civil and criminal judicial enforcement procedures including:
- 2129 a. Schedule of civil penalties as permitted by law in accordance with §10.1-
 2130 603.14 of the Code of Virginia;
 - 2131 b. Criminal penalties in accordance with § 10.1-603.14 B and C of the Code
 2132 of Virginia; and
 - 2133 c. Injunctions in accordance with §§ 10.1-603.12:4, 10.1-603.2:1 and 10.1-
 - 2134 603.14 D 1 of the Code of Virginia.

2135 B. Local stormwater management programs or a program administered by a permit-
 2136 issuing authority shall develop policies and procedures that outline the steps to be taken
 2137 regarding enforcement actions under the Stormwater Management Act and attendant
 2138 regulations and the local ordinance ordinances.

2139 C. A court may utilize as guidance the following Schedule of Civil Penalties set by
 2140 the board in accordance with Pursuant to § 10.1-603.14 A of the Code of Virginia, the

2141 permit issuing authority shall use the following schedule of civil penalties for enforcement
 2142 actions. The range contained within the schedule reflects the degree of harm caused by
 2143 the violation, which is site specific and may vary greatly from case to case, as may the
 2144 economic benefit of noncompliance to the violator. Each day of violation of each
 2145 requirement shall constitute a separate offense. Assignment of the degree of harm is a
 2146 qualitative decision subject to the court's discretion. The court has the discretion to
 2147 impose a maximum penalty of \$32,500 per violation per day in accordance with § 10.1-
 2148 603.14 A of the Code of Virginia. Such violation may reflect the degree of harm caused
 2149 by the violation. The court may take into account the economic benefit to the violator
 2150 from noncompliance. Such violations include, but are not limited to:

- 2151 1. No permit registration;
- 2152 2. No SWPPP;
- 2153 3. Incomplete SWPPP;
- 2154 4. SWPPP not on site;
- 2155 5. No approved erosion and sediment control plan;
- 2156 6. Failure to install stormwater BMPs or erosion and sediment control plans;
- 2157 7. Stormwater BMPs or erosion and sediment controls improperly installed or
- 2158 maintained;
- 2159 8. Operational deficiencies;
- 2160 9. Failure to conduct required inspections; and
- 2161 10. Incomplete, improper, or missed inspections.
- 2162

1. Gravity-based Component	Marginal	Moderate	Serious	
Violations* and Frequency of Occurrence **	\$\$ x occurrences	\$\$ x occurrences	\$\$ x occurrences	SUBTOTAL
No Permit Registration (each month w/o coverage = 1 occurrence)	500 x _____	1,000 x _____	2,000 x _____	
No SWPPP (No SWPPP components including E&S Plan) (each month of land-disturbing without SWPPP = 1 occurrence)	1,000 x _____	1,500 x _____	2,000 x _____	
Incomplete SWPPP	300 x _____	500 x _____	1,000 x _____	

SWPPP not on site	100 x _____	300 x _____	500 x _____	!
No approved Erosion and Sediment Control Plan	500 x _____	1,000 x _____	2,000 x _____	!
Failure to install stormwater BMPs or erosion and sediment ("E&S") controls	300 x _____	500 x _____	1,000 x _____	!
Stormwater BMPs or E&S controls improperly installed or maintained	250 x _____	500 x _____	750 x _____	!
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)	1,000 x _____ !	2,000 x _____	5,000 x _____	!
Failure to conduct required inspections	500 x _____	2,000 x _____	3,000 x _____	!
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.)	300 x _____	500 x _____	1,000 x _____	!

	Subtotal #1	
2. Estimated Economic Benefit of Noncompliance (if applicable)	Subtotal #2	
3. Recommended civil penalty	Total (#1 and #2)	
<p>* Each stormwater BMP or E&S control that is either not installed or improperly installed or maintained is a separate violation.</p> <p>** The frequency of occurrence is per event unless otherwise noted.</p>		

2163 E. D. Pursuant to subdivision 2 of § 10.1-603.2:1 of the Code of Virginia,
 2164 authorization to administer local stormwater management programs shall not remove
 2165 from the board the authority to enforce the provisions of the ~~Virginia Stormwater~~
 2166 ~~Management Act~~ and attendant regulations.

2167 F. E. The department may terminate VSMP coverage during its term and require
 2168 application for an individual permit or deny a permit renewal application for failure to
 2169 comply with permit conditions or on its own initiative in accordance with the Act and this
 2170 chapter.

2171 G. F. Pursuant to § 10.1-603.14 A of the Code of Virginia, ~~amounts~~ civil penalties
 2172 recovered by a local stormwater management program shall be paid into the treasury of
 2173 the locality in which the violation occurred and are to be used for the purpose of
 2174 minimizing, preventing, managing, or mitigating pollution of the waters of the locality and
 2175 abating environmental pollution therein in such manner as the court may, by order,
 2176 direct.

2177 H. The department may provide additional guidance concerning suggested penalty
 2178 amounts in its Stormwater Management Enforcement Manual.

2179
 2180 **4VAC50-60-xxx. ~~Local stormwater management program exceptions~~ Exceptions.**

2181 A. A local stormwater management program or permit-issuing authority may grant
 2182 exceptions to the provisions of Parts II A ~~and~~ or II B of this chapter ~~through an~~
 2183 ~~administrative process~~. An exception may be granted provided that (i) the exception is
 2184 the minimum necessary to afford relief, (ii) reasonable and appropriate conditions shall
 2185 be imposed as necessary upon any exception granted so that the intent of the Act and
 2186 this chapter are preserved, (iii) granting the exception will not confer any special
 2187 privileges that are denied to other similar circumstances, and (iv) exception requests are
 2188 not based upon conditions or circumstances that are self-imposed or self-created.

2189 B. Economic hardship alone is not sufficient reason to grant an exception from the
 2190 requirements of this chapter.

2191 C. Under no circumstance shall the ~~qualifying local program~~ local stormwater
 2192 management program grant an exception to the requirement that the land-disturbing
 2193 activity obtain required VSMP permits.

2194 E. D. A record of all exceptions ~~applied for and~~ granted shall be maintained by the
 2195 local stormwater management program and permit-issuing authority in accordance with
 2196 4VAC50-60-126.

2197

2198 **4VAC50-60-118. Hearings.**

2199 Local stormwater management programs or the permit-issuing authority shall ensure
2200 that any permit applicant or permittee aggrieved by any action of the local stormwater
2201 management program or permit-issuing authority taken without a formal hearing, or by
2202 inaction of the local stormwater management program or permit-issuing authority , shall
2203 have a right to a hearing pursuant to § 10.1-603.12:6 of the Code of Virginia and shall
2204 ensure that all hearings held under this chapter shall be conducted in accordance with
2205 § 10.1-603.12:7 of the Code of Virginia or as otherwise provided by law .

2206

2207 **4VAC50-60-126. Report Reports and recordkeeping.**

2208 A. On a fiscal year basis (July 1 to June 30), local stormwater management
2209 programs and qualifying local programs shall report to the department by October 1 of
2210 each year. The information to be provided shall include the following:

- 2211 1. Information on each permanent stormwater management facility completed
2212 during the fiscal year to include type of stormwater management facility,
2213 geographic coordinates, acres treated, and the surface waters or karst features
2214 into which the stormwater management facility will discharge ;
2215 2. Number and type of enforcement actions during the fiscal year; and
2216 3. Number of exceptions applied for and the number granted or denied during the
2217 fiscal year.

2218 B. Local stormwater management programs shall keep records in accordance with
2219 the following:

- 2220 1. Stormwater maintenance management facility inspection reports records shall
2221 be kept documented and retained for at least five years from the date of
2222 inspection.
2223 2. Stormwater maintenance agreements recorded instruments required pursuant
2224 to 4VAC50-60-xxx (Responsibility for long term maintenance of stormwater
2225 management facilities), design standards and specifications, and construction
2226 Construction record drawings shall be maintained in perpetuity or until a
2227 stormwater management facility is removed.
2228 3. All registration statements submitted in accordance with 4VAC50-60-xxx
2229 (Applying for VSMP permit cycle) shall be documented and retained for at least
2230 three years from the date of project completion or permit termination.

2231

2232

Part III C

2233 Department of Conservation and Recreation Procedures for Review of Local Stormwater

2234

Management Programs

2235

2236 **4VAC50-60-156. Authority and applicability.**

2237 This part specifies the criteria that the department will utilize in reviewing a locality's
2238 administration of a local stormwater management program pursuant to § 10.1-603.12 of
2239 the Code of Virginia following the board's approval of such program in accordance with
2240 the Virginia Stormwater Management Act and these regulations.

2241

2242 **4VAC50-60-157. Stormwater management program review.**

2243 A. The department shall review each board-approved local stormwater management
2244 program at least once every five years on a review schedule approved by the board. The
2245 department may review a local stormwater management program on a more frequent
2246 basis if deemed necessary by the board and shall notify the local government if such
2247 review is scheduled.

2248 B. The review of a board-approved local stormwater management program shall
2249 consist of the following:

2250 1. An interview between department staff and the qualifying local stormwater
2251 management program administrator or his designee;

2252 2. A review of the local ordinance(s) and other applicable documents;

2253 3. A review of a subset of the plans approved by the ~~qualifying local program~~
2254 local stormwater management program ~~and for~~ consistency of application
2255 including exceptions granted;

2256 4. ~~A general accounting of the receipt of fees received and the costs of running~~
2257 ~~the locally administered program required by these regulations~~ review of the
2258 funding and staffing plan developed in accordance with 4VAC50-60-159;

2259 5. An inspection of regulated activities; and

2260 6. A review of enforcement actions and an accounting of amounts recovered
2261 through enforcement actions.

2262 C. To the extent practicable, the department will coordinate the reviews with its other
2263 local government program reviews to avoid redundancy.

2264 D. The department shall provide its recommendations to the board within 90 days of
2265 the completion of a review. Such recommendations shall be provided to ~~the~~ a locality at
2266 least two weeks in advance of the meeting where the board will take action on the
2267 locality's program.

2268 E. The board shall determine if the local stormwater management program and
2269 ordinance are consistent with the Act and state stormwater management regulations and
2270 notify the qualifying local stormwater management program of its findings.

2271 F. If the board determines that the deficiencies noted in the review will cause the
2272 local stormwater management program to be out of compliance with the Stormwater
2273 Management Act and its attendant regulations, the board shall notify the local
2274 stormwater management program concerning the deficiencies and provide a reasonable
2275 period of time for corrective action to be taken. If the local stormwater management
2276 program agrees to the corrective action recommended by the board, the local
2277 stormwater management program will be considered to be conditionally compliant with
2278 the Stormwater Management Act and its attendant regulations until a subsequent finding
2279 of compliance is issued by the board. If the local stormwater management program fails
2280 to take the corrective action within the specified time, the board may take action
2281 pursuant to § 10.1-603.12 of the Code of Virginia. A local stormwater management
2282 program that fails to take corrective action in accordance with the ~~Board~~ board
2283 recommendations shall not be considered a qualifying local program for purposes of the
2284 Virginia Stormwater Management Program permitting regulations.

2285

2286

Part III D

2287

Virginia Soil and Water Conservation Board Authorization for Qualifying Local

2288

Stormwater Management Programs

2289

2290

4VAC50-60-158. Authority and applicability.

2291

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

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2298

4VAC50-60-xxx. Local stormwater management program administrative

2299

requirements.

2300

A. A local stormwater management program shall provide for the following:

2301

1. Identification of the authority accepting complete registration statements and for the authorities completing plan review, plan approval, inspection and enforcement.

2302

2303

2304

2. Submission and approval of erosion and sediment control plans in accordance with the Virginia Erosion and Sediment Control Law and attendant regulations and the submission and approval of stormwater management plans;

2305

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2307

3. Requirements to ensure compliance with 4VAC50-60-xxx (Erosion and Sediment Control Plans and Pollution Prevention Plans)

2308

2309

4. ~~Inspection~~ Requirements for inspections and monitoring of construction activities by the operator for compliance with local ordinances;

2310

2311

5. ~~Long-term~~ Requirements for long-term inspection and maintenance of stormwater management facilities;

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2313

6. Collection, distribution to the state if required, and expenditure of fees;

2314

2315

7. Enforcement procedures and civil penalties;

2316

2317

8. Policies and procedures for the collection to obtain and release of bonds, if applicable; and

2318

9. Procedures for complying with the applicable reporting and record keeping requirements in 4VAC50-60-126.

2319

B. A locality-administered local stormwater management program shall adopt and enforce an ordinance(s) that incorporates the components set out in subdivisions 1 through 5 and 7 of subsection A of this section.

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4VAC50-60-159. Authorization procedures for local stormwater management

2324

programs.

2325

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

2326

2327

2328

- 2329 1. The draft local stormwater management program ordinance(s) as required in
2330 4VAC50-60-xxx (local stormwater management program administrative
2331 requirements);
- 2332 2. A funding and staffing plan; and
- 2333 3. The policies and procedures, including but not limited to, agreements with Soil
2334 and Water Conservation Districts, adjacent localities, or other entities, for the
2335 administration, plan review, inspection, and enforcement components of the
2336 program.
- 2337 B. Upon receipt of an application package, the board or its designee shall have 30
2338 calendar days to determine the completeness of the application package. If an
2339 application package is deemed to be incomplete based on the criteria set out in
2340 subsection A of this section, the board or its designee must identify to the locality in
2341 writing the reasons the application package is deemed deficient.
- 2342 C. Upon receipt of a complete application package, the board or its designee shall
2343 have 120 calendar days for the review of the application package, unless an extension
2344 of time is requested. During the 120-day review period, the board or its designee shall
2345 either approve or disapprove the application, or notify the locality of a time extension for
2346 the review, and communicate its decision to the locality in writing. If the application is not
2347 approved, the reasons for not approving the application shall be provided to the locality
2348 in writing. Approval or denial shall be based on the application's compliance with the
2349 Virginia Stormwater Management Act and these regulations.
- 2350 D. A locality required to adopt a local stormwater management program in
2351 accordance with § 10.1-603.3 A of the Code of Virginia shall submit a complete
2352 application package for the board's review pursuant to a schedule set by the board in
2353 accordance with § 10.1-603.3 and shall adopt a local stormwater management program
2354 consistent with the Act and this chapter within the timeframe established pursuant to §
2355 10.1-603.3.
- 2356 E. A locality not required to adopt a local stormwater management program in
2357 accordance with § 10.1-603.3 A but electing to adopt a local stormwater management
2358 program shall notify the board in accordance with the following:
- 2359 1. A locality electing to adopt a local stormwater management program may
2360 notify the board of its intention within six months of the effective date of these
2361 regulations. Such locality shall submit a complete application package for the
2362 board's review pursuant to a schedule set by the board and shall adopt a
2363 qualifying local program within the timeframe established by the board.
- 2364 2. A locality electing to adopt a local stormwater management program that does
2365 not notify the board within the initial six-month period of its intention may
2366 thereafter notify the board at any regular meeting of the board. Such notification
2367 shall include a proposed schedule for adoption of a ~~qualifying local program~~ local
2368 stormwater management program within a timeframe agreed upon by the board.
- 2369 F. A locality administered local stormwater management program approved by the
2370 ~~Board~~ board shall be considered a ~~Qualifying Local Program~~ qualifying local program for
2371 purposes of the Virginia Stormwater Management Program permitting regulations.
- 2372 G. The department shall administer the responsibilities of the Act and this chapter in
2373 any locality in which a ~~qualifying local program~~ local stormwater management program
2374 has not been adopted. The department shall develop a schedule, to be approved by the
2375 board, for adoption and implementation of the requirements of this chapter in such
2376 localities. Such schedule may include phases of implementation and shall be based

2377 upon considerations including the typical number of permitted projects located within a
2378 locality, total number of acres disturbed by such permitted projects, and such other
2379 considerations as may be deemed necessary by the board.

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2381

2382 Note: Strike registration form from documents incorporated by reference

2383