

**BALTIMORE COUNTY
DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY**

GENERAL REQUIREMENTS FOR HYDROGEOLOGIC STUDIES

As stipulated by Sections 34-1 and 32-4-224 of the Baltimore County Code, a Hydrogeologic Study may be required by the Department for any proposed development or subdivision of land. All proposed commercial developments and major subdivisions must submit the information requested in Parts I through IV. Part V is a Water Balance Assessment which must also be completed for all non-residential developments not served by public water. During the development review process, the Department of Environmental Protection and Sustainability (DEPS) reserves the right to request additional information including, but not limited to, soil boring logs, percolation tests, and chemical analyses of ground water and surface water samples.

Part I General Information

Site Name: _____ Election District: _____

Location: _____

Description of Proposed Development: _____

Owner/Developer: _____

Telephone: _____

Engineer/Consultant: _____

Telephone: _____

Other Consultants: _____

Telephone: _____

Part II Proposed Water Supply and Sewage Disposal

1. Proposed Water Supply () Public
() Individual Well
() Other _____

2. Proposed Sewage Disposal () Public
() Private Septic System
() Other _____

3. Indicate on an attached site plan the location and disposition of any existing wells and septic systems on the property.

Part III Site Geology

1. Geologic formation(s) underlying the property: _____

If more than one formation is present, delineate the approximate geologic contacts on an attached site plan.

Note: Geologic quadrangle maps may be obtained from the Maryland Geological Survey located at 2300 St. Paul Street, Baltimore, MD 21218 (phone: 410-554-5500).

Part IV Ground Water Quality

1. Briefly explain the nature and extent of any known or suspected ground water contamination present at the property. Submit the results of any Environmental Assessments that have been performed on the property.

2. Briefly describe any known or suspected industrial, commercial, or landfilling activities that have occurred on the subject property or adjacent properties.

3. Are there any underground storage tanks on the property? () Yes () No
If yes, locate tank locations on an attached site plan and indicate the tank contents, size, and age, if known.

4. Was the property previously used for agricultural activities or as a golf course? () Yes () No. If yes, briefly describe the type of operations and indicate on the site plan the location of any structures used for pesticide storage and the nature and extent of pesticide applications.

Part V Water Balance Assessment

The following information must be provided for all non-residential development proposals that are not served by public water. Residential and non-residential developments requiring average annual ground water withdrawals of more than 10,000 gallons per day must also submit to DEPS an application for a Water Appropriation Permit (WAP) to be issued by the Maryland Department of Environment, Water Management Administration. A WAP is also required for residential developments of 11 lots or more.

1. Estimate Projected Maximum Ground Water Consumption _____ Gal/Day
(Provide water bills/explanation as necessary to justify consumption estimate)

2. Calculate Total Area of Recharge (Clearly indicate property boundaries and impervious surfaces on attached site plan.)
 - a. Total Area of Site: _____ Acres
 - b. Total Area of Impervious Surfaces: _____ Acres
 - c. Total Area of Recharge (a-b) _____ Acres

3. Is Total Area of Recharge adjusted to include proposed artificial infiltration?
() Yes () No If Yes, attach calculations and include as part of the estimated Recharge Rates in Step 4.

- 4 Calculate Potential Recharge for Property
 - a. Recharge from Precipitation _____ Gal/Day
(for normal conditions assume 800 gal/acre/day)
 - b. Recharge from Precipitation _____ Gal/Day
(for drought conditions assume 400 gal/acre/day)
 - c. Recharge from Septic Effluent _____ Gal/Day
(assume 80% of consumption)
 - d. Recharge from Artificial Infiltration (if applicable) _____ Gal/Day
 - e. Total Recharge to Property Under Normal Conditions _____ Gal/Day
(a+c+d)
 - f. Total Recharge to Property Under Drought Conditions _____ Gal/Day
(b+c+d)

5. Calculate Percentage of Water Consumption vs. Recharge

$$\text{Normal Conditions} = \frac{\text{Max Water Consumption}}{\text{Tot Normal Recharge}} \times 100 = \underline{\hspace{2cm}} \%$$

$$\text{Drought Conditions} = \frac{\text{Max Water Consumption}}{\text{Tot Drought Recharge}} \times 100 = \underline{\hspace{2cm}} \%$$

Part VI Signature

I, _____ acknowledge that I am the owner, contract
(print name)
purchaser, or authorized representative of either; and that the information provided above for the
Hydrogeologic Study requirements is true to the best of my knowledge.

Signature

Date

**Note: Based on DEPS review of any of the information furnished above,
additional information and/or adjustment to proposed plans may be required.**