MARYLAND LAW AND REGULATIONS

Groundwater

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JWM LAW

Overview

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Fundamentals – Definitions

What is groundwater?

- Subsurface water that occurs beneath the water table in soils and geologic formations that are fully saturated.
  - *Groundwater*, Allan Freeze and John Cherry, Prentice-Hall. Inc., (1979) at 2.
- COMAR 26.04.02.01 (21) "Ground water" means underground water in a zone of saturation.
  - Waters "which ooze, seep or filter through soil beneath the surface, without a defined channel, or in a course that is unknown and not discoverable from surface indications."
    - *Bausch Lomb v. Utica Mutual*, 330 Md. 758, 784 (Md. 1993). The main question was whether UM had to defend or indemnify the insured, BL, for groundwater pollution discovered on an industrial site. BL cleaned-up the site without having been subjected to legal proceedings and without a written administrative directive by a government agency that it take such action. The above definition arose from an older case to distinguish surface water and has limited use.

Fundamentals - Hydrologic Cycle

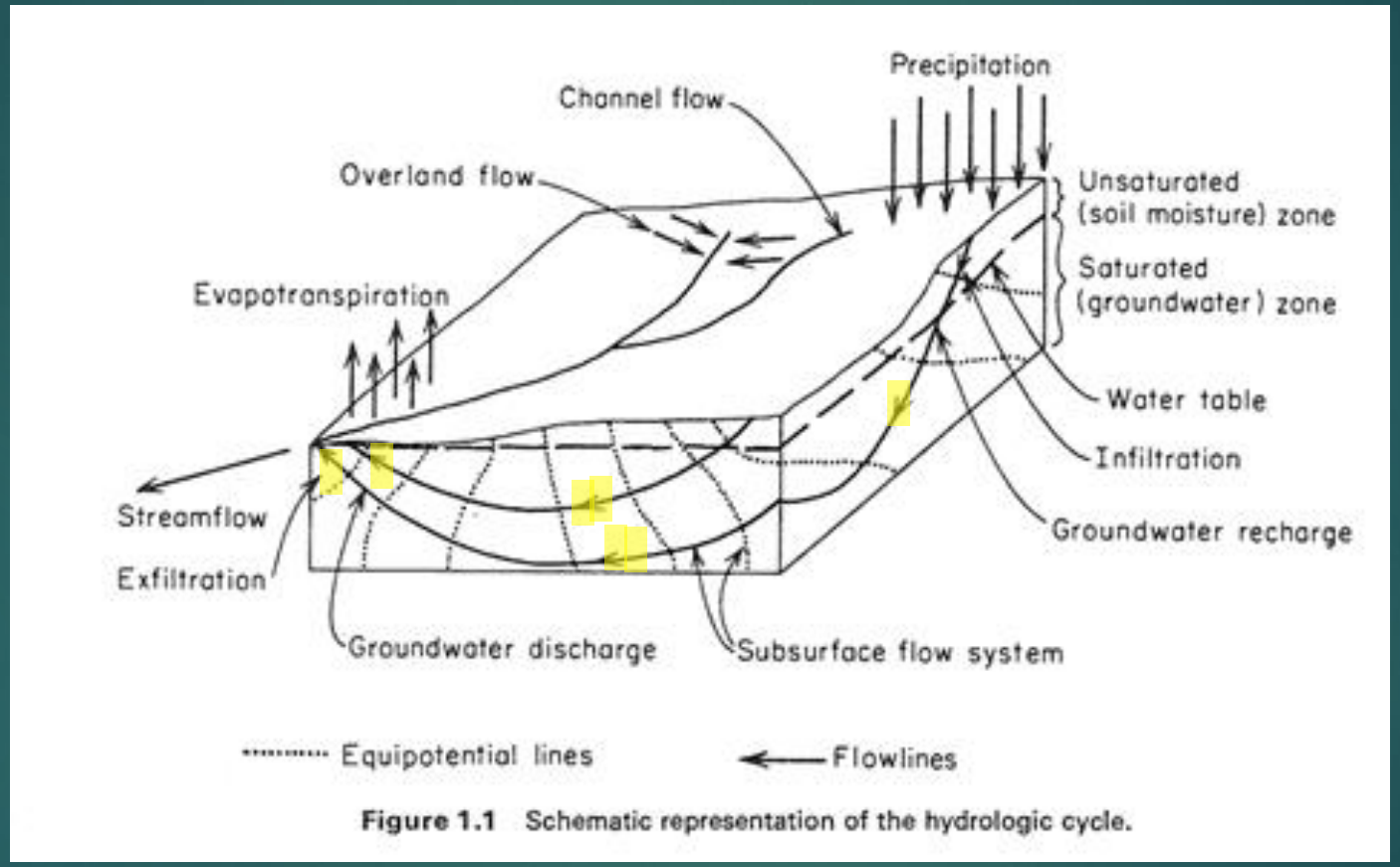


Figure 1.1 Schematic representation of the hydrologic cycle.

- Source: Allan Freeze and John Cherry, Groundwater, Prentice-Hall. Inc., (1979)

Fundamentals - Pollutant Migration

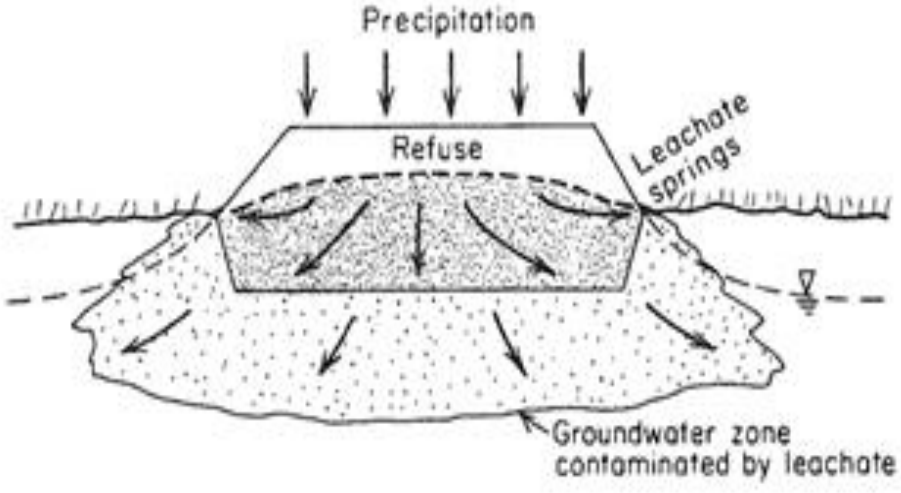


Figure 9.24 Water-table mound beneath a landfill, causing leachate springs and migration of contaminants deeper into the groundwater zone.

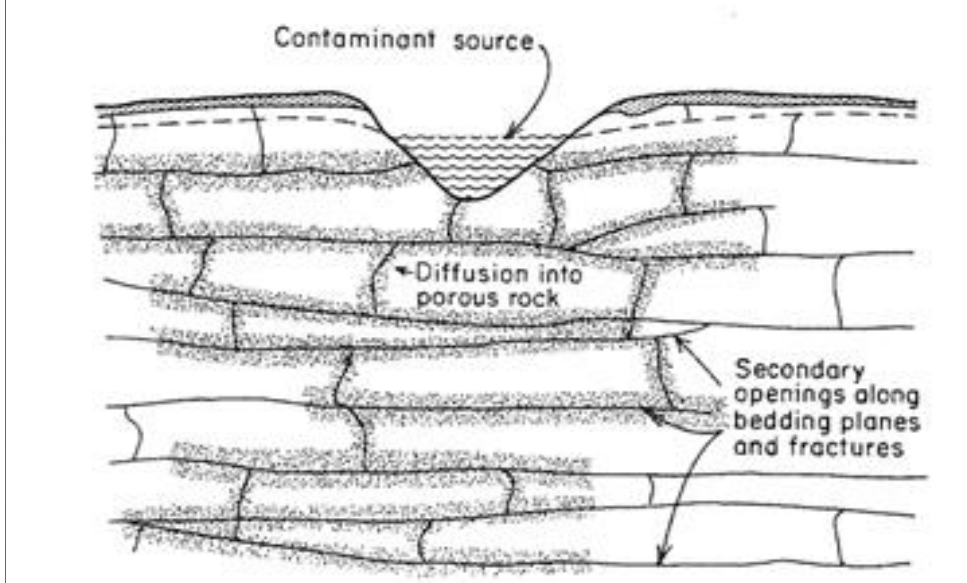


Figure 9.16 Schematic representation of contaminant migration from a surface source through fractured porous limestone.

- Source: Allan Freeze and John Cherry, Groundwater, Prentice-Hall. Inc., (1979)

Fundamentals – Aquifers

- Aquifers are lithologic features capable of producing significant volumes of groundwater.
- Two major types.
  - Unconsolidated Coastal Plain aquifers found east of the Atlantic Seaboard Fall Line, a geologic divide that generally coincides with the Interstate 95 corridor.
  - Hard rock or fractured rock aquifers found in the western part of the state.
    - Source: Maryland Department of the Environment, Groundwater Protection Program, Report to the Maryland General Assembly (December 2021).

Fundamentals – Aquifers

- Unconfined aquifers – the primary source of groundwater in the western part of the state.
  - Principally recharged by precipitation during the fall and winter months.
- Confined aquifers – confined by relatively impervious layers such as silt, clay, or rock.
  - Recharged from outcrop areas.
    - Source: Maryland Department of the Environment, Groundwater Protection Program, Report to the Maryland General Assembly (December 2021).

Maryland Aquifers

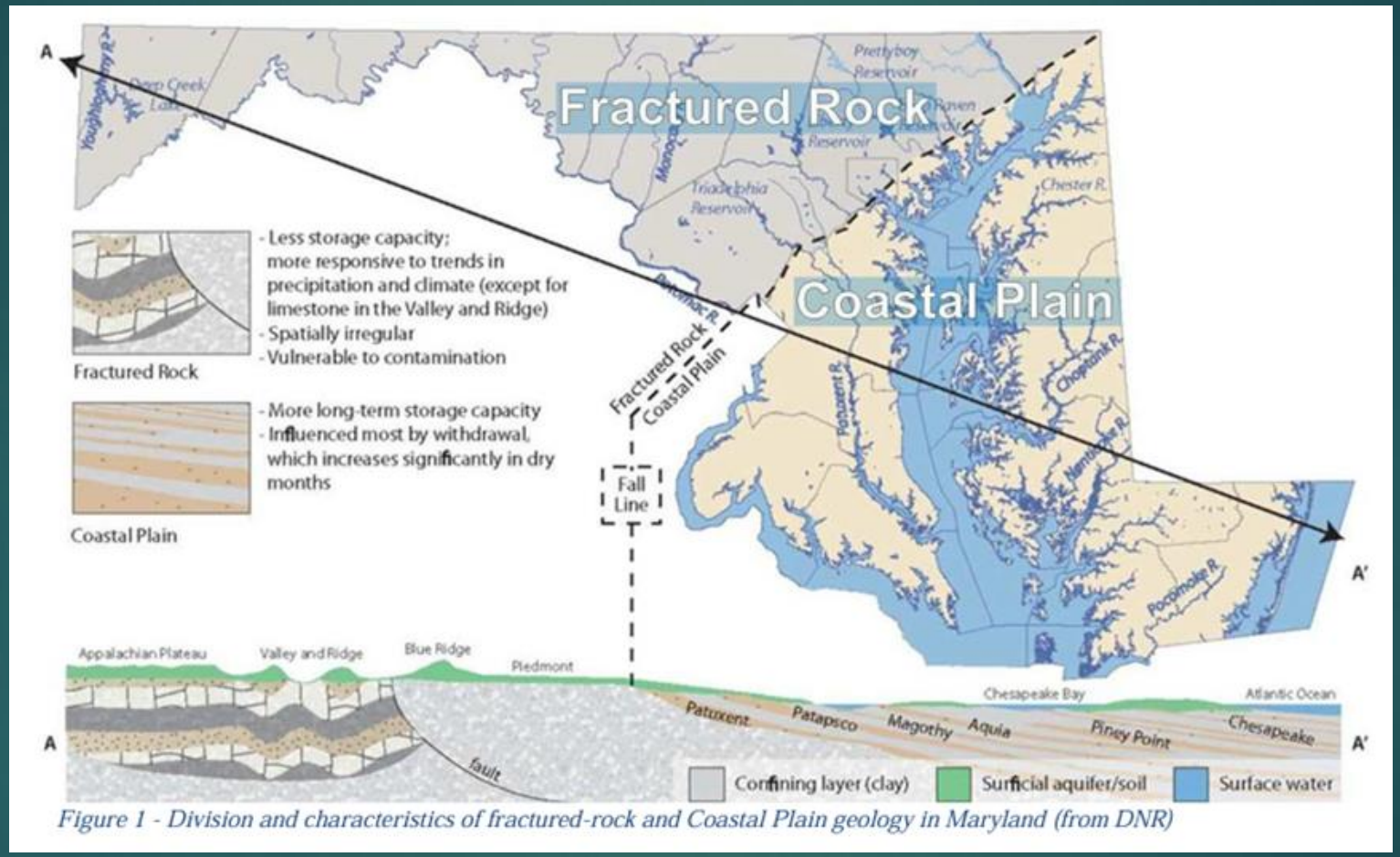


Figure 1 - Division and characteristics of fractured-rock and Coastal Plain geology in Maryland (from DNR)

- Source: MDE, Groundwater Protection Program, Report to the Maryland General Assembly (December 2021).

Maryland Groundwater Users

- The primary uses of groundwater in Maryland are:
  - domestic (self-supplied)
  - public supply
  - irrigation
  - industrial, mining, livestock watering, aquaculture, and thermoelectric use (power plants) accounted for smaller withdrawal amounts.
    - Source: Maryland Geologic Surveyhttp://www.mgs.md.gov/groundwater/index.html

Maryland Groundwater Users

- Four out of every ten Marylanders rely on groundwater sources for domestic water, with one out of ten using an individual well.
- Groundwater is the source of base flows to Maryland's rivers, streams, and wetlands and is also a substantial source of the freshwater that flows to the Chesapeake Bay and coastal bays.
  - Source: Maryland Department of the Environment, Groundwater Protection Program, Report to the Maryland General Assembly (December 2021)

Maryland Water Protection Act

- Title 5 of Maryland Code Environment Article (available free online)
  - Subtitle 5—Appropriation or Use of Waters, Reservoirs, and Dams
  - Subtitle 5b—Maryland Water Conservation
- Code of Maryland Regulations (COMAR) (available free online)
  - Maryland Water Appropriation Permit Regulations 26.17.06

Maryland Water Protection Act

- MD Code, Environment, § 5-501. Declaration of policy
  - … to conserve, protect, and use water resources of the State in accordance with the best interests of the people of Maryland, it is the policy of the State to control, so far as feasible, appropriation or use of surface waters and groundwaters of the State.
  - Also, … to promote public safety and welfare and control and supervise, so far as is feasible, construction, reconstruction, and repair of dams, reservoirs, and other waterworks in any waters of the State.

Powers and Duties of MDE

- MD Code, Environment, § 5-203. Powers and duties of Department
  - The Department has general supervisory power, regulation, and control over the water resources of the State within the boundaries of the tidal waters as provided in this article.
    - Note: "Department" means the Maryland Department of the Environment (MDE).
  - Water Appropriation Permits Link: https://mde.maryland.gov/programs/Water/water_supply/Pages/WaterAppropriationsOrUsePermits.aspx

Definitions

- MD Code, Environment, § 5-101. Definitions
  - "Waters of the State" includes:
    - (1) Both surface and underground waters within the boundaries of the State subject to its jurisdiction;
    - (2) That portion of the Atlantic Ocean within the boundaries of the State;
    - (3) The Chesapeake Bay and its tributaries;
    - (4) All ponds, lakes, rivers, streams, public ditches, tax ditches, and public drainage systems within the State, other than those designed and used to collect, convey, or dispose of sanitary sewage; and
    - (5) The floodplain of free-flowing waters determined by the Department on the basis of the 100-year flood frequency.

Appropriation Permit Required

- MD Code, Environment, § 5-502. Permit to appropriate or use waters of the State
- Permit required
  - (a) Every person is required to obtain a permit from the Department to appropriate or use or begin to construct any plant, building, or structure which may appropriate or use any waters of the State, whether surface water or groundwater.
  - The applicant shall provide the Department with satisfactory proof that the proposed withdrawal of water will not jeopardize the State's natural resources.

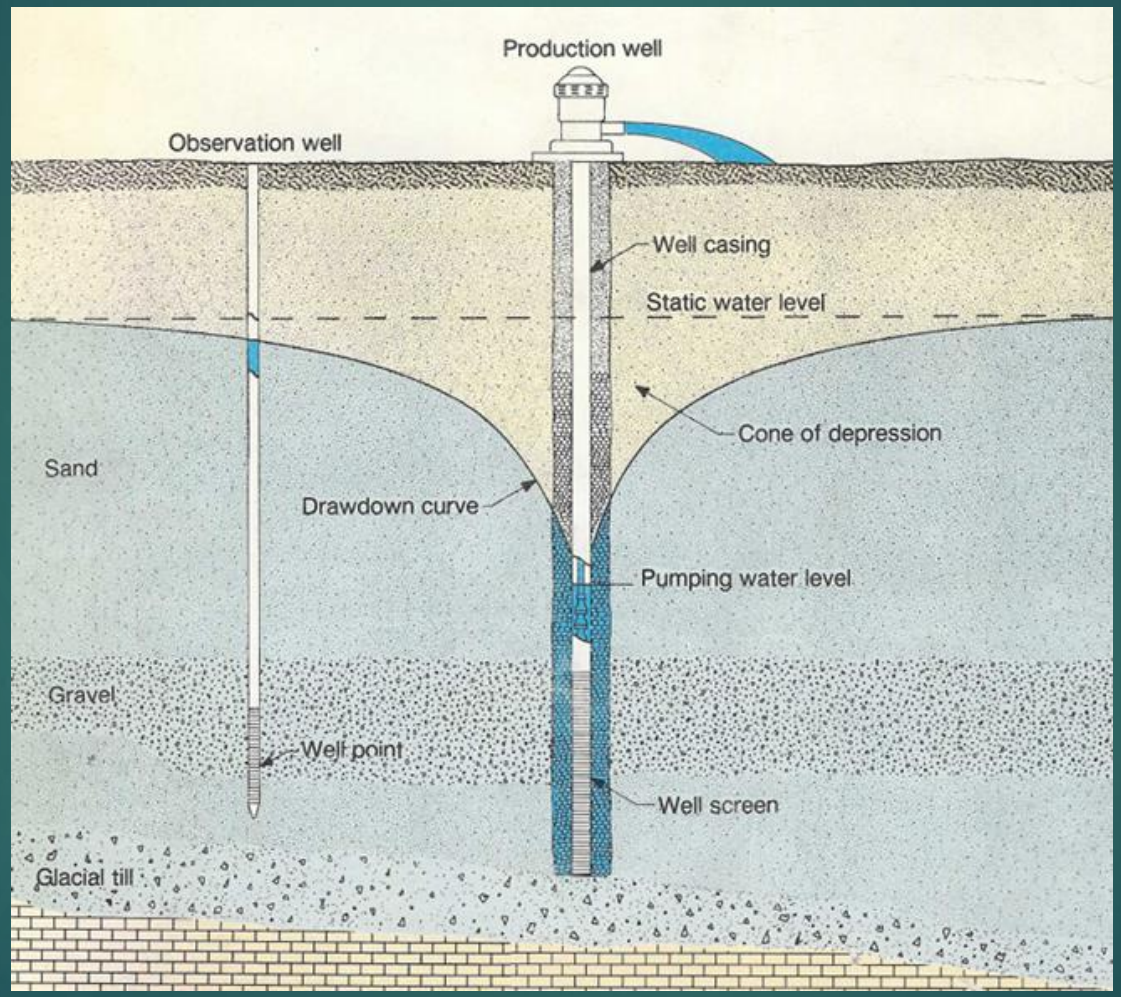
Appropriation Permit Exceptions

- MD Code, Environment, § 5-502. Permit to appropriate or use waters of the State
- (b) This section does not apply to:
  - (1) Use of water for domestic purposes other than for heating and cooling;
  - (2) Use of water for agricultural purposes, if the average annual water use is less than 10,000 gallons per day…
  - (4) Use of groundwater at an average annual water use of 5,000 gallons of water per day or less, provided that:
    - The use is not for a public water system…
    - The use will not occur within a water management strategy area established by the Department…

Water Management Strategy Areas

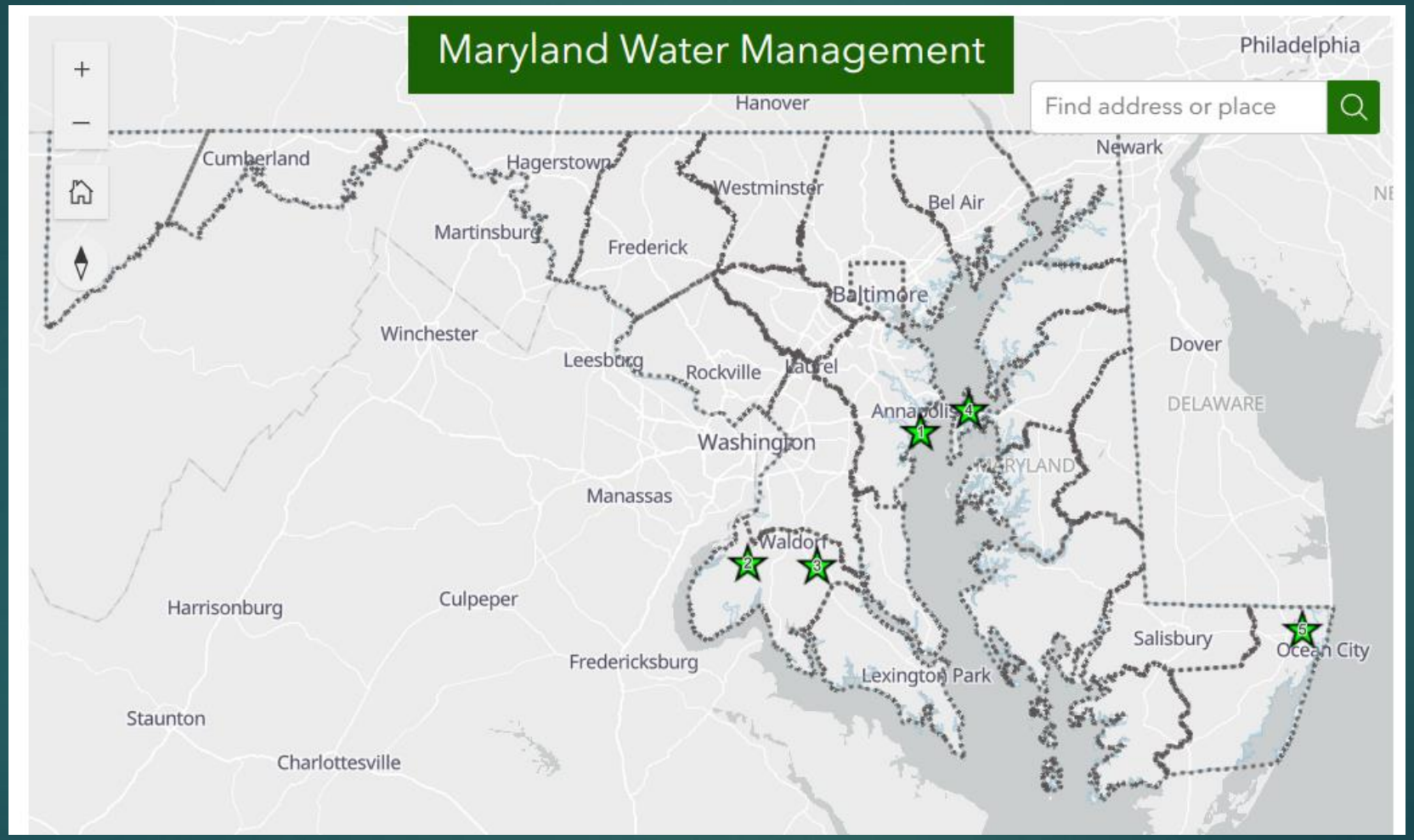
- What is a Water Management Strategy Area?
  - Areas with excessive drawdown and/or salt water intrusion are given special consideration when issuing permits.
  - Options in these areas include limiting withdrawals, directing withdrawals to a different aquifer, or requiring additional scrutiny and/or water level monitoring when permits are requested…
    - Source: https://mde.maryland.gov/programs/Water/water_supply/Pages/WaterManagementStrategyAreas.aspx

Drawdown



Source: Groundwater and Wells, Fletcher G. Driscoll, Johnson Division (1986)

Water Management Strategy Areas



Source: https://mde.maryland.gov/programs/Water/water_supply/Pages/WaterManagementStrategyAreas.aspx

Water Management Strategy Areas

Table 2 – Water Management Strategy Areas

Area(s)	County(s)	Target Aquifer(s)	Issue(s)
Annapolis Neck	Anne Arundel	Aquia	Saltwater Intrusion
Indian Head La Plata Waldorf	Charles Prince Georges	Lower and Upper Patapsco	Excessive Drawdown Saltwater Intrusion
Waldorf	Charles	Magothy	Excessive Drawdown
Kent Island	Queen Anne	Aquia	Saltwater Intrusion
St. Martin's River Ocean Pines	Worcester	Columbia	Saltwater Intrusion

Source: Maryland Department of the Environment, Groundwater Protection Program, Report to the Maryland General Assembly (December 2021).

Criteria for Approval

- COMAR 26.17.06.06 Criteria for Approval of Water Appropriation or Use Permits.
- A. General. The Department shall issue a permit only for a beneficial appropriation or use under the following criteria:
  - (1) The amount of water to be appropriated is reasonable in relation to the anticipated level of use during the permit period;
  - (2) The requested appropriation or use does not have an unreasonable impact on:
    - (a) The waters of the State, and
    - (b) Other users of the waters of the State.

Determining Reasonableness

- COMAR 26.17.06.06
- B. Criteria for Determining Reasonableness.
- (1) Except for applications proposing to appropriate or use water for agricultural purposes, the Department, in determining the reasonableness of a proposed appropriation or use, may consider, when appropriate, the following factors:
  - (a) The protection of existing water uses, land values, investments, and enterprises; and
  - (b) The financial hardship of requiring a new user to bear the loss of potential harm… (i.e. of payment of the cost of improving neighboring facilities or on mitigation of the impact on nearby users.)
- (2) In determining the reasonableness of a proposed appropriation or use, the Department shall consider, when appropriate, the following factors:
  - (a) The purpose of the use;
  - (b) The suitability of the use to the watercourse, lake, or aquifer;
  - (c) The extent and the amount of the harm it may cause…

Enforcement

- MD Code, Environment, § 5-513 Injunctions
  - … the circuit court for any county, sitting in equity, may enforce by injunction, compliance with, or restraint from violating or attempting to violate any provisions of this subtitle or any Department order, notice, or regulation made under this subtitle.

Enforcement

- MD Code, Environment, § 5-514 Violations and penalties
- Civil penalty
  - (a)(1) In addition to [] injunctive action [], a person who violates any provision of this subtitle relating to water appropriation and use or any rule, regulation, order, or permit adopted or issued under any such provision is liable for a civil penalty not exceeding $5,000 per violation to be collected in a civil action brought by the Department.
  - (2) Each day a violation occurs or continues is a separate violation under this subsection.
- Other penalties
  - (b) A person who violates a provision of this subtitle or a regulation adopted under this subtitle is subject to the penalties provided in § 9-343 of this article [referring to criminal penalties].

Groundwater Quality Protection Program

- Title 9 of Maryland Code Environment Article
  - Subtitle 3 – Water Pollution Control
- COMAR 26.08.01.00 et seq.
- Safe Drinking Water Act
- Code of Federal Regulations

Groundwater Quality Protection

- MDE has primary responsibility for the protection of Maryland's groundwater resources.
  - Source: Maryland Department of the Environment, Groundwater Protection Program, Report to the Maryland General Assembly (December 2021).
- Groundwater Discharge Permits Link: https://mde.maryland.gov/programs/Water/wwp/Pages/GWDP.aspx

Safe Drinking Water Act and CFR

- Safe Drinking Water Act (SDWA) is the federal law governing drinking water quality in the US.
  - EPA sets standards for drinking water quality (e.g. Maximum Contaminant Levels (MCLs)) and oversees the states, localities, and water suppliers who implement those standards.
    - Source: https://mde.maryland.gov/programs/Water/water_supply/pages/regulations.aspx
- Code of Federal Regulations (CFR)
  - National Primary Drinking Water Regulations
    - 40 CFR 141 - Primary Drinking Water Regulations
    - 40 CFR 143 - Secondary Drinking Water Regulations
    - Source: https://mde.maryland.gov/programs/Water/water_supply/pages/regulations.aspx

Groundwater Quality Protection

- MD Code, Environment, § 9-322 Discharge of pollutants prohibited; exceptions
  - Except as provided in this subtitle and Title 4, Subtitle 4 of this article and the rules and regulations adopted under those subtitles, a person may not discharge any pollutant into the waters of this State.

Definitions

- MD Code, Environment, § 9-101 Definitions
- "Discharge" means:
  - (1) The addition, introduction, leaking, spilling, or emitting of a pollutant into the waters of this State; or
  - (2) The placing of a pollutant in a location where the pollutant is likely to pollute.
- "Pollutant" means:
  - (1) Any waste or wastewater that is discharged from:
    - (i) A publicly owned treatment works; or
    - (ii) An industrial source; or
  - (2) Any other liquid, gaseous, solid, or other substance that will pollute any waters of this State.

Definitions

- COMAR 26.08.01.01 Definitions. B. Terms Defined.
  - (6) "Aquifer" means any formation of soil, sand, rock, gravel, limestone, sandstone, or other material, or any crevice from which underground water is or may be produced.
  - (21) "Discharge permit" means a permit issued by the Department for the discharge of any pollutant or combination of pollutants into the waters of this State.
  - (36) "Ground water" means underground water in a zone of saturation.

Discharge Approval Required

- COMAR 26.08.02.09 Ground Water Quality Standards.
- A. Discharge Approval Required.
- (1) Any discharge or disposal of waters or wastewaters into the underground waters of the State requires the approval of the Department.
  - The approval, if granted, will contain limitations and requirements deemed necessary by the Department to protect the public health and welfare and to prevent pollution of ground and surface waters.

Discharge Approval Required

- COMAR 26.08.02.09 Ground Water Quality Standards.
- A. Discharge Approval Required.
- (2) A separate State (individual) discharge permit is required for:
  - (a) Wastewater effluents disposed of by means of spray or other land treatment or application systems;
  - (b) Ground water recharge systems;
  - (c) Discharge of leachate from a landfill to surface or ground waters except as specified in §A(3)(a); and
  - (d) Other subsurface disposal systems not specifically exempted in this regulation.

Discharge Approval Exceptions

- COMAR 26.08.02.09 Ground Water Quality Standards.
- A. (3) A separate State (individual) discharge permit is not required for:
  - (a) Landfills designed to achieve natural attenuation of leachate [] unless there is a discharge of leachate to surface waters of the State;
  - (b) Subsurface sewage disposal systems using soil absorption and permitted by the Department …
  - (c) Sewage sludge composting or disposal operations permitted by the Department … and
  - (d) Other subsurface disposal systems permitted by the Department under the provisions of COMAR 26.08.04.08.
    - A separate State discharge permit is a discharge permit issued to an individual discharger or point source. A general permit is a State discharge permit issued to a class of dischargers pursuant to COMAR 26.08.04.08. E.g. Storm water discharges; … Ground water heat pumps discharging to waters of this State…
- (4) An Underground Injection Permit issued under COMAR 26.08.07 also constitutes a discharge permit under this regulation…

Permit Programs

- Various permit programs/types serve to protect groundwater in some capacity, either by regulating legal discharges to groundwater, or by preventing pollutants from reaching groundwater.
  - Sources: Maryland Department of the Environment, Groundwater Protection Program, Report to the Maryland General Assembly (December 2021).

Permit Program/Types

- Groundwater Discharge
  - The MDE Wastewater Permits Program issues municipal groundwater discharge permits and industrial groundwater discharge permits.
- Underground Injection Control
  - In 1984, EPA delegated authority for the Underground Injection Control (UIC) program to Maryland.
    - Sources: Maryland Department of the Environment, Groundwater Protection Program, Report to the Maryland General Assembly (December 2021).

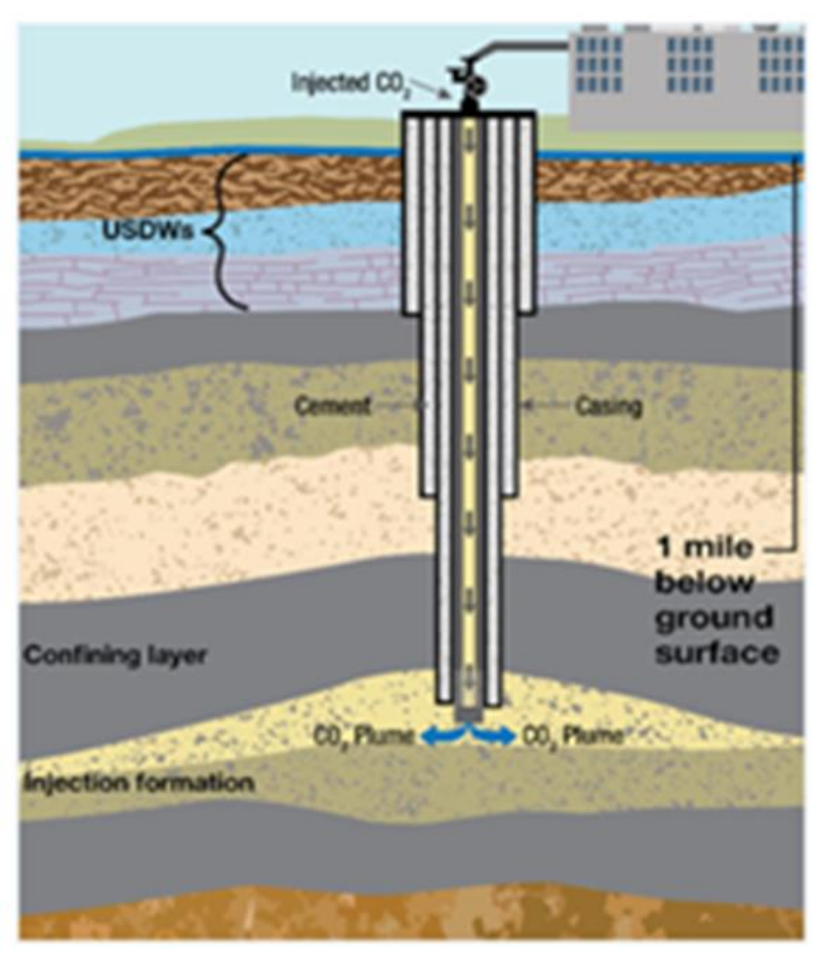
UIC Well Classes

- Class I - inject hazardous and non-hazardous wastes into deep, isolated rock formations.
- Class II - inject fluids associated with oil and natural gas production.
- Class III - inject fluids to dissolve and extract minerals.
- Class IV - inject hazardous or radioactive wastes into or above a geologic formation that contains an underground source of drinking water (USDW).
  - In 1984, EPA banned from general use of Class IV injection wells – now, they may only operate as part of an EPA- or state-authorized ground water clean-up action.
- Class V - inject non-hazardous fluids underground. Most Class V wells are used to dispose of wastes into or above underground sources of drinking water (USDW).
- Class VI – inject CO2 into underground subsurface rock formations for long-term storage (geologic sequestration).
    - https://www.epa.gov/uic/underground-injection-control-well-classes

UIC Well Class In Maryland

- Class V (shallow subsurface disposal systems) are used in Maryland.
  - E.g. septic systems, dry wells, seepage pits, and drainage holes.
- Maryland prohibits Class I hazardous wastewater injection wells.
  - Source: https://test-mde.maryland.gov/programs/water/wwp/Pages/UIC.

UIC Well Example – Class VI



- Deep injection of CO2.
- EPA has primacy over Class VI wells.
  - Source: https://www.epa.gov/uic/class-vi-wells-used-geologic-sequestration-carbon-dioxide#ClassVIWell

Permit Program/Types

- Stormwater Management
  - To maintain after development, pre-development runoff characteristics. The program achieves this through Environmental Site Design (ESD) requirements…
- Water Well Construction
  - Permitting well construction is delegated to local county health officers or other county environmental officials.
    - Source: Maryland Department of the Environment, Groundwater Protection Program, Report to the Maryland General Assembly (December 2021).

Enforcement

- MD Code, Environment, § 9-339 Injunctive relief
  - (a) The Department may bring an action for an injunction against any person who violates any provision of this subtitle or any rule, regulation, order, or permit adopted or issued by the Department under this subtitle.
- MD Code, Environment, § 9-342 Civil penalties
- Civil action
  - (a) In addition to being subject to an injunctive action [], a person who violates any provision of this subtitle or of any rule, regulation, order, or permit adopted or issued under this subtitle is liable to a civil penalty not exceeding $10,000… Each day a violation occurs is a separate violation under this subsection.

Enforcement

- MD Code, Environment, § 9-342 Civil penalties
- Administrative action
  - (b)(1) In addition to any other remedies available at law or in equity [] the Department may impose a penalty for violation of any provision of this subtitle or any rule, regulation, order, or permit adopted or issued under this subtitle.
  - (2) The penalty imposed on a person under this subsection shall be:
    - (i) Up to $10,000 for each violation, but not exceeding $100,000 total;
  - (3) Each day a violation occurs is a separate violation under this subsection.

Enforcement

- MD Code, Environment, § 9-343 Criminal penalties
- Violating subtitle, rules, regulations, orders, or permits
- (a)(1) A person who violates any provision of or fails to perform any duty imposed by this subtitle, or who violates any provision of or fails to perform any duty imposed by a rule, regulation, order, or permit adopted or issued under this subtitle, is guilty of a misdemeanor and on conviction is subject to:
  - (i) For a first offense, a fine not exceeding $25,000 or imprisonment not exceeding 1 year or both; or
  - (ii) If the conviction is for a violation committed after a first conviction of the person under this subsection, a fine not exceeding $50,000 for each day of violation or imprisonment not exceeding 2 years or both.
- (2) In addition to any criminal penalties imposed on a person convicted under this subsection, the person may be enjoined from continuing the violation.
- (3) Each day on which a violation occurs is a separate violation under this subsection.

Enforcement

- MD Code, Environment, § 9-343 Criminal penalties
- False statements in required documents
  - (b) A person is guilty of a misdemeanor and on conviction is subject to a fine not exceeding $50,000 or imprisonment not exceeding 2 years or both if the person:
    - (1) Knowingly makes any false statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this subtitle or any rule, regulation, order, or permit adopted or issued under this subtitle; or
    - (2) Falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this subtitle or any rule, regulation, order, or permit adopted or issued under this subtitle.

Common Law

- Generally, Maryland follows the "reasonable use doctrine" to determine a person's right to appropriate or use surface or ground water.
  - Landowners may be liable for groundwater contamination under tort theories including negligence, nuisance, and trespass. Evidence of causation and damages can be a challenge.
- "Under Maryland law, 'the occupier of land owes a duty to occupants of neighboring land to use care when conducting activities on the land so as to avoid causing harm to the neighboring land.'
  - … negligence cases involving neighboring properties have discussed whether 'a dangerous condition" was created, that term is only fairly construed as referring to an activity or condition that can cause some harm to the neighboring property that results in damages, which is itself an element of a negligence claim.'" internal citations omitted
  - *Ozier v. Lidl U.S. Operations, LLC*, Civil Action TDC-22-2396, at *11-12 (D. Md. Sep. 8, 2023)
- Distinguishing *Exxon Mobil Corp. v. Albright*, 433 Md. 303 (Md. 2013), … where "the purported nuisance was groundwater allegedly contaminated by a gasoline leak, but there was insufficient evidence of a substantial interference with the use and enjoyment of the property because the evidence did not show actual contamination of the water supply, and the actions taken by residents were found to be primarily the result of subjective fear of contamination." …to have an objectively reasonable fear of developing cancer, the contamination must meet or exceed relevant levels.
  - *Ozier v. Lidl U.S. Operations, LLC*, Civil Action TDC-22-2396, at *9 (D. Md. Sep. 8, 2023) Construction of a new grocery store caused excessive noise and shook Ozier's home (also cracked driveway). Ozier sued for trespass and nuisance. For trespass Ozier showed that improperly handled material (trash) foreseeably migrated onto the property of Ozier. For private nuisance Ozier had to prove that Lidl caused an unreasonable and substantial interference with Ozier's reasonable use and enjoyment of his property.

Groundwater Threats

- Point sources, e.g.:
  - landfills, underground storage tanks, spills, improper discharge of wastes containing solvents (such as dry-cleaning fluids), and the improper storage of salt, fertilizer, or other materials on bare ground.
    - Military installations often present unique risks such as contamination from per- and polyfluoroalkyl substances (PFAS), etc.
- Nonpoint sources, e.g.:
  - livestock waste, on-site sewage disposal, application of fertilizers and pesticides, infiltration of urban runoff, and road salt application.
    - Nonpoint sources usually do not cause excessive contamination at specific well locations, but often represent the largest loadings of pollutants to groundwater over large areas.
      - Source: Maryland Department of the Environment, Groundwater Protection Program, Report to the Maryland General Assembly (December 2021).

Contaminants

- Organic Chemicals
  - Volatile Organic Compounds (VOCs)
    - Solvents (PCE, TCE)
    - Fuels (Gasoline, Diesel)
  - Semi-Volatile Organic Compounds (SVOCs)
    - PAHs (naphthalene, phenanthrene)
  - Pesticides, Herbicides, PCBs
  - Emerging Contaminants
    - 1,4-dioxane (solvent stabilizer, mobile and persistent)
    - PFAS (fire suppression, coatings, mobile and persistent)
- Inorganic Constituents
  - Metals (heavy metals)

PFAS

- Per- and polyfluoroalkyl substances (PFAS)
  - a group of man-made chemicals that include PFOA, PFOS, GenX, and many other chemicals.
- PFAS have been manufactured and used in a variety of industries worldwide since the 1940s.
- "Forever Chemicals"
  - These chemicals are persistent in the environment and the human body, meaning they do not break down easily and can accumulate over time.
    - Source: https://mde.maryland.gov/programs/Water/water_supply/Pages/PFAS_Home.aspx

PFAS

- PFAS are found in a range of products, including
  - stain- and water-resistant fabrics and carpeting,
  - cleaning products,
  - paints,
  - cookware,
  - food packaging and
  - fire-fighting foams.
    - Source: https://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx

PFAS

- There is evidence that exposure to certain PFAS may lead to adverse health effects in humans.
- In 2016 the EPA issued a Health Advisory Level (HAL) of 70 parts per trillion (ppt) for the sum of PFOA and PFOS concentrations in drinking water.
  - But MCLs were recently established for some PFAS compounds.
    - Source: https://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx

PFAS MCLs

On April 10, 2024, EPA set drinking water limits for PFAS (PFOA, PFOS, PFNA, PFHxS, and HFPO-DA).

Chemical	Max Contaminant Level Goal (MCLG)	Maximum Contaminant Level (MCL)
PFOA	**0**	**4 ppt**
PFOS	**0**	**4 ppt**
PFNA	**10 ppt**	**10 ppt**
PFHxS	**10 ppt**	**10 ppt**
HFPO-DA (GenX chemicals)	**10 ppt**	**10 ppt**
Mixture of two or more: PFNA, PFHxS, HFPO-DA, and PFBS	**Hazard Index of 1**	**Hazard Index of 1**

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety and are non-enforceable public health goals.
Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology and taking cost into consideration. MCLs are enforceable standards.
ppt: parts per trillion
Hazard Index (HI): The Hazard Index is a long-established approach that EPA regularly uses to understand health risk from a chemical mixture (i.e., exposure to multiple chemicals). The HI is made up of a sum of fractions. Each fraction compares the level of each PFAS measured in the water to the health-based water concentration.

- Source: https://www.epa.gov/system/files/documents/2024-04/pfas-npdwr_fact-sheet_general_4.9.24v1.pdf

Dealing With Threats

- MDE's Land Restoration Program (LRP) administers a "Superfund" program to assesses hazardous waste sites and to control and remove environmental and public health threats through remedial actions.
  - Source: https://mde.maryland.gov/programs/land/MarylandBrownfieldVCP/Pages/CHSEnforcementDivision.aspx and Maryland Department of the Environment, Groundwater Protection Program, Report to the Maryland General Assembly (December 2021).
- The CHS Enforcement Division oversees assessment and cleanup of hazardous waste sites by "responsible persons."
  - MD. Code, Environment, § 7-222 and COMAR 26.14.01.00 et seq and see https://mde.maryland.gov/programs/LAND/MarylandBrownfieldVCP/Pages/CHSEnforcementDivision.aspx

Dealing With Threats

- "Responsible person" means any person who:
  - (i) Is the owner or operator of a vehicle or a site containing a hazardous substance;
  - (ii) At the time of disposal of any hazardous substance, was the owner or operator of any site at which the hazardous substance was disposed;
  - (iii) By contract, agreement, or otherwise, arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of a hazardous substance owned or possessed by such person, by any other party or entity, at any site owned or operated by another party or entity and containing such hazardous substances; or
  - (iv) Accepts or accepted any hazardous substance for transport to a disposal or treatment facility or any sites selected by the person.
    - MD Code, Environment, § 7-201. Definitions

Dealing With Threats

- "Responsible person" does not include:
  - (i) A person who can establish by a preponderance of the evidence that at the time the person acquired an interest in a site containing a hazardous substance the person did not know and had no reason to know that any hazardous substance [] on, in, or at the site;
    - All Appropriate Inquiries
  - (ii) A person who acquired a property containing a hazardous substance by inheritance or bequest at the death of the transferor;
  - (iii) A person who, without participating in the day-to-day management of a site [] holds indicia of ownership in the site or in property located on the site primarily to protect a valid and enforceable lien unless that person directly causes the discharge of a hazardous substance on or from the site;
  - (iv)… fiduciaries…; and
  - (v)… mortgage holders.
    - MD Code, Environment, § 7-201. Definitions

Dealing With Threats

- Voluntary Cleanup Program (VCP) MD Code, Environment, § 7-503.
  - Designed to encourage the investigation of properties with known or perceived contamination, protect public health and the environment, and accelerate the cleanup of eligible properties.
  - The applicant (inculpable person) and the site must meet eligibility criteria pursuant to MD Code, Environment, § 7-501.
- COMAR 26.14.02.06 provides the procedures for remedial response activities, e.g. selection of a remedy, design, and implementation of the remedy, and management of remediation.

Dealing With Threats

- MDE's Oil Control Program (OCP), implements the underground storage tank (UST), leaking underground storage tank (LUST), and aboveground storage tank (AST) regulations.
  - Oil-related facilities, oil-related activities and oil pollution in and on the land and waters of the State. MDE can impose product delivery bans and direct owners and operators to perform corrective actions, among other things.
    - Source: Maryland Department of the Environment, Groundwater Protection Program, Report to the Maryland General Assembly (December 2021)
- Facilities in high risk groundwater use areas (HRGUAs) and in well head protection areas (WHPAs) have additional requirements (e.g. enhanced monitoring and testing) to mitigate potential harms. COMAR 26.10.07
  - "HRGUA" is an area in Baltimore, Carroll, Cecil, Frederick, or Harford County with a new or existing gasoline UST system facility [where] an individual water supply system serves as the water supply for the facility, an adjoining property of the facility, or both;
  - "WHPA" is an area surrounding one or more wells serving a community water system or public water system in Baltimore, Carroll, Cecil, Frederick, or Harford County that has been identified and regulated by local government.
    - Source: https://mde.maryland.gov/programs/land/OilControl/Documents/HRGUA-WHPA_Fact_Sheet_9-25-23_4pgs.pdf

If you have questions, please contact

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Thank You!