

# SENATE BILL 531

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SB 820/20 – EHE

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By: **Senator Klausmeier**

Introduced and read first time: February 3, 2023

Assigned to: Education, Energy, and the Environment

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## A BILL ENTITLED

1 AN ACT concerning

2 **Public Water Systems – Supplier Requirements**  
3 **(Water Safety and Cybersecurity Act of 2023)**

4 FOR the purpose of requiring a supplier of water to inspect certain valves in a public water  
5 system in a certain manner, repair or replace certain valves, inspect certain fire  
6 hydrants, formulate and implement a certain plan, identify the locations of certain  
7 valves, and record certain characteristics and identifiers of certain valves;  
8 establishing certain cybersecurity requirements for suppliers of water; requiring a  
9 supplier of water to submit a certain mitigation plan to the Department of the  
10 Environment, under certain circumstances, and within a certain number of days  
11 after receiving a certain notice of violation; establishing certain asset management  
12 requirements for suppliers of water; requiring a supplier of water to annually certify  
13 to the Department that the supplier complies with certain regulations and  
14 requirements; requiring a supplier of water to inform certain customers of  
15 compliance with certain provisions of law on or before a certain date each year;  
16 requiring a supplier of water to comply with certain provisions of law in a certain  
17 amount of time after acquiring a public water system; prohibiting a supplier of water  
18 from receiving certain public funding under certain circumstances; and generally  
19 relating to public water systems and suppliers of water.

20 BY repealing and reenacting, without amendments,  
21 Article – Environment  
22 Section 9–401  
23 Annotated Code of Maryland  
24 (2014 Replacement Volume and 2022 Supplement)

25 BY adding to  
26 Article – Environment  
27 Section 9–429 through 9–438 to be under the new part “Part III. Water Quality  
28 Accountability Act”  
29 Annotated Code of Maryland

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EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.



(2014 Replacement Volume and 2022 Supplement)

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND,  
That the Laws of Maryland read as follows:

**Article – Environment**

9–401.

(a) In this subtitle the following words have the meanings indicated.

(b) “Administrator” means the Administrator of the United States Environmental Protection Agency.

(c) “Community water system” means a public water system that:

(1) Serves at least 15 service connections used by year-round residents of the area served by the system; or

(2) Regularly serves at least 25 year-round residents.

(d) “Contaminant” means any chemical, biological, or radioactive substance that is harmful to health if in the water.

(e) “Federal Act” means the federal Safe Drinking Water Act.

(f) “Federal agency” means any department, agency, or instrumentality of the United States.

(g) “National primary drinking water regulations” means the primary drinking water rules or regulations that the Administrator adopts under the federal Act.

(h) “Noncommunity water system” means a public water system that is not a community water system.

(i) “Nontransient noncommunity water system” means a public water system that is not a community system and that regularly serves at least 25 of the same individuals over 6 months per year.

(j) “Person” includes:

(1) The Washington Suburban Sanitary Commission;

(2) Any State, county, municipal corporation, or federal agency;

(3) Any special taxing area or district that operates a public water system;

and

1 (4) Any officer, agent, or employee of any of these.

2 (k) "Primary drinking water regulation" means a rule or regulation that:

3 (1) Applies to public water systems;

4 (2) Specifies contaminants that, in the judgment of the Secretary, would  
5 have an adverse effect on the health of human beings;

6 (3) Specifies for each contaminant either:

7 (i) A maximum contaminant level if, in the judgment of the  
8 Secretary, it is economically and technologically feasible to determine the level of the  
9 contaminant in water in public water systems; or

10 (ii) If, in the judgment of the Secretary, it is not economically or  
11 technologically feasible to determine the level of the contaminant, each treatment  
12 technique known to the Secretary that leads to a reduction in the level of the contaminant  
13 sufficient to satisfy the requirements of this subtitle; and

14 (4) Contains standards and procedures:

15 (i) To ensure a supply of drinking water that dependably complies  
16 with the maximum contaminant levels, including quality control and testing procedures for  
17 compliance with those levels;

18 (ii) To ensure proper operation and maintenance of the system; and

19 (iii) To establish requirements as to:

20 1. The minimum quality of water that may be taken into the  
21 system; and

22 2. Siting for new facilities for public water systems.

23 (l) (1) "Public water system" means a system that:

24 (i) Provides to the public water for human consumption through  
25 pipes or other constructed conveyances; and

26 (ii) 1. Has at least 15 service connections; or

27 2. Regularly serves at least 25 individuals.

28 (2) "Public water system" includes:

1 (i) Any collection, treatment, storage, or distribution facility that is  
2 under the control of the operator of the system and is used primarily in connection with the  
3 system; and

4 (ii) Any collection or pretreatment storage facility that is not under  
5 the control of the operator of the system and is used primarily in connection with the  
6 system.

7 (m) "Supplier of water" means any person who owns or operates a public water  
8 system.

9 (n) "Tamper" means to:

10 (1) Introduce a contaminant into a public water system with the intention  
11 of harming a person; or

12 (2) Otherwise interfere with the operation of a public water system with  
13 the intention of harming a person.

14 (o) "Transient noncommunity water system" means a noncommunity water  
15 system that does not regularly serve at least 25 of the same individuals over 6 months per  
16 year.

17 **9-427. RESERVED.**

18 **9-428. RESERVED.**

19 **PART III. WATER QUALITY ACCOUNTABILITY ACT.**

20 **9-429.**

21 (A) IN THIS PART THE FOLLOWING WORDS HAVE THE MEANINGS  
22 INDICATED.

23 (B) "ASSET MANAGEMENT PLAN" MEANS A PLAN DEVELOPED BY A WATER  
24 SUPPLIER AND SUBMITTED TO THE DEPARTMENT IN ACCORDANCE WITH § 9-434 OF  
25 THIS SUBTITLE.

26 (C) (1) "CRITICAL VALVE" MEANS A VALVE WITHIN A PUBLIC WATER  
27 SYSTEM THAT A SUPPLIER OF WATER DEEMS CRITICAL.

28 (2) "CRITICAL VALVE" INCLUDES A VALVE THAT IS:

29 (I) 16 INCHES OR MORE IN DIAMETER;

**(II) LOCATED AT:**

1. A HOSPITAL;
2. A DIALYSIS CENTER;
3. A NURSING HOME;
4. A WATER TREATMENT PLANT; OR
5. AN EMERGENCY INTERCONNECTION WITH A SUPPLIER OF WATER; AND

**(III) A REGULATOR OR RELIEF CONTROL VALVE.**

**9-430.**

**THIS PART DOES NOT APPLY TO:**

- (1) BALTIMORE CITY;
- (2) THE WASHINGTON SUBURBAN SANITARY COMMISSION; AND
- (3) A WATER SYSTEM WITH FEWER THAN 500 CONNECTIONS TO CUSTOMERS.

**9-431.**

**(A) A SUPPLIER OF WATER SHALL:**

**(1) INSPECT EACH CRITICAL VALVE IN THE PUBLIC WATER SYSTEM OWNED OR OPERATED BY THE SUPPLIER IN ACCORDANCE WITH THE PROVISIONS OF SUBSECTION (B) OF THIS SECTION IN ORDER TO DETERMINE:**

**(I) ACCESSIBILITY OF THE VALVE FOR OPERATIONAL PURPOSES; AND**

**(II) THE OPERATING CONDITION OF THE VALVE;**

**(2) REPAIR OR REPLACE ANY CRITICAL VALVE FOUND TO BE BROKEN OR NOT OPERATIONAL;**

**(3) INSPECT EACH CRITICAL VALVE AT A FREQUENCY DETERMINED**

1 BY THE SUPPLIER OF WATER AND AGREED TO BY THE DEPARTMENT;

2 (4) ANNUALLY INSPECT THE FIRE HYDRANTS IN THE PUBLIC WATER  
3 SYSTEM TO ENSURE OPERABILITY UNLESS MORE FREQUENT INSPECTIONS ARE  
4 REQUIRED BY LOCAL ORDINANCE;

5 (5) FORMULATE AND IMPLEMENT A PLAN FOR FLUSHING FIRE  
6 HYDRANTS AND DEAD ENDS, AS NEEDED, IN ORDER TO MAINTAIN ADEQUATE WATER  
7 QUALITY LEVELS;

8 (6) TO THE EXTENT POSSIBLE, IDENTIFY THE GEOGRAPHIC  
9 LOCATION OF EACH CRITICAL VALVE AND FIRE HYDRANT IN THE PUBLIC WATER  
10 SYSTEM; AND

11 (7) RECORD THE CHARACTERISTICS AND DISTINGUISHING  
12 IDENTIFIERS OF EACH HYDRANT IN THE PUBLIC WATER SYSTEM IN A DATABASE  
13 AVAILABLE ON THE SUPPLIER'S WEBSITE.

14 (B) IN CONDUCTING A CRITICAL VALVE INSPECTION UNDER THIS SECTION,  
15 A SUPPLIER OF WATER SHALL:

16 (1) CLEAR THE AREA AROUND THE VALVE TO ENSURE FULL ACCESS  
17 TO THE VALVE FOR OPERATING PURPOSES;

18 (2) CLEAN OUT THE VALVE BOX;

19 (3) CONDUCT DYNAMIC TESTING OF THE VALVE BY OPENING AND  
20 THEN CLOSING THE VALVE FOR:

21 (I) THE NUMBER OF TURNS RECOMMENDED BY THE VALVE  
22 MANUFACTURER TO CONSTITUTE A CREDIBLE TEST; OR

23 (II) THE NUMBER OF TURNS THAT CONSTITUTES 15% OF THE  
24 TOTAL NUMBER OF TURNS NECESSARY TO COMPLETELY OPEN OR COMPLETELY  
25 CLOSE THE VALVE; AND

26 (4) COMPLY WITH ANY OTHER REQUIREMENTS ESTABLISHED BY THE  
27 DEPARTMENT.

28 9-432.

29 (A) ON OR BEFORE FEBRUARY 1, 2024, A SUPPLIER OF WATER SHALL  
30 DEVELOP A CYBERSECURITY PROGRAM THAT:

1           **(1) DEFINES AND IMPLEMENTS ORGANIZATION ACCOUNTABILITIES**  
2 **AND RESPONSIBILITIES FOR CYBER RISK MANAGEMENT ACTIVITIES; AND**

3           **(2) ESTABLISHES POLICIES, PLANS, PROCESSES, AND PROCEDURES**  
4 **FOR IDENTIFYING AND MITIGATING CYBER RISKS TO THE PUBLIC WATER SYSTEM.**

5           **(B) IN ACCORDANCE WITH THE PROGRAM DEVELOPED IN SUBSECTION (A)**  
6 **OF THIS SECTION, A SUPPLIER OF WATER SHALL:**

7           **(1) CONDUCT RISK ASSESSMENTS AND IMPLEMENT APPROPRIATE**  
8 **CONTROLS TO MITIGATE IDENTIFIED RISKS TO THE PUBLIC WATER SYSTEM;**

9           **(2) REMAIN AWARE OF POTENTIAL CYBER THREATS TO AND**  
10 **VULNERABILITIES OF THE PUBLIC WATER SYSTEM; AND**

11           **(3) CREATE AND EXERCISE INCIDENT RESPONSE AND RECOVERY**  
12 **PLANS.**

13           **(C) NOT LATER THAN 30 DAYS AFTER DEVELOPING A CYBERSECURITY**  
14 **PROGRAM IN ACCORDANCE WITH THIS SECTION, A SUPPLIER OF WATER SHALL**  
15 **SUBMIT A REPORT SUMMARIZING THE PROGRAM TO THE DEPARTMENT.**

16 **9-433.**

17           **(A) A SUPPLIER OF WATER SHALL SUBMIT TO THE DEPARTMENT A**  
18 **MITIGATION PLAN IN ACCORDANCE WITH THIS SECTION NOT LATER THAN 60 DAYS**  
19 **AFTER RECEIVING, WITHIN A 1-YEAR PERIOD:**

20           **(1) THE THIRD OF THREE NOTICES REGARDING ANY VIOLATION OF**  
21 **LAWS OR REGULATIONS OF THE DEPARTMENT; OR**

22           **(2) THE SECOND OF TWO NOTICES REGARDING A VIOLATION OF A**  
23 **PRIMARY DRINKING WATER REGULATION ESTABLISHING MAXIMUM CONTAMINANT**  
24 **LEVELS FOR PUBLIC WATER SYSTEMS.**

25           **(B) THE MITIGATION PLAN SHALL INCLUDE:**

26           **(1) AN EXPLANATION OF WHETHER THE NOTICE OF VIOLATION WILL**  
27 **BE ADDRESSED THROUGH:**

28           **(I) OPERATIONAL CHANGES; OR**

1 (II) A CAPITAL EXPENDITURE;

2 (2) AN IMPLEMENTATION SCHEDULE FOR THE MITIGATION PLAN;  
3 AND

4 (3) A REPORT PREPARED FOR THE SUPPLIER OF THE WATER SYSTEM  
5 BY A LICENSED ENGINEER THAT INCLUDES:

6 (I) A TECHNICAL ANALYSIS OF THE NOTICES OF VIOLATION;  
7 AND

8 (II) AN EXPLANATION OF HOW THE MITIGATION PLAN  
9 SUBMITTED IN ACCORDANCE WITH THIS SECTION WILL PREVENT THE  
10 REOCCURRENCE OF THE ORIGINAL VIOLATION.

11 9-434.

12 (A) (1) ON OR BEFORE APRIL 1, 2025, A SUPPLIER OF WATER SHALL  
13 DEVELOP AND SUBMIT TO THE DEPARTMENT AN ASSET MANAGEMENT PLAN IN  
14 ACCORDANCE WITH THIS SUBSECTION.

15 (2) AN ASSET MANAGEMENT PLAN SHALL INCLUDE:

16 (I) A WATER MAIN RENEWAL PROGRAM DESIGNED TO ACHIEVE  
17 A 150-YEAR REPLACEMENT CYCLE; OR

18 (II) ANY OTHER APPROPRIATE REPLACEMENT CYCLE AS  
19 DETERMINED BY A DETAILED ENGINEERING ANALYSIS OF THE CONDITION OF THE  
20 WATER MAIN AND THE ESTIMATED SERVICE LIFE OF THE WATER MAIN SERVING THE  
21 PUBLIC WATER SYSTEM;

22 (3) A WATER SUPPLY AND TREATMENT PROGRAM DESIGNED TO  
23 INSPECT, MAINTAIN, REPAIR, RENEW, AND UPGRADE WELLS, INTAKES, PUMPS, AND  
24 TREATMENT FACILITIES IN ACCORDANCE WITH ALL FEDERAL AND STATE  
25 REGULATIONS, STANDARDS ESTABLISHED BY THE AMERICAN WATER WORKS  
26 ASSOCIATION, AND ANY MITIGATION PLAN SUBMITTED UNDER § 9-433 OF THIS  
27 SUBTITLE;

28 (4) CAPITAL EXPENDITURES REQUIRED UNDER A MITIGATION PLAN  
29 SUBMITTED UNDER § 9-433 OF THIS SUBTITLE; AND

30 (5) ANY OTHER PROGRAMS, PLANS, OR PROVISIONS REQUIRED BY  
31 THE DEPARTMENT IN REGULATION.



1           **(B) A SUPPLIER OF WATER SHALL DEDICATE FUNDS ANNUALLY TO**  
2 **ADDRESS THE HIGHEST PRIORITY PROJECTS IDENTIFIED IN THE ASSET**  
3 **MANAGEMENT PLAN.**

4           **(C) THE SUPPLIER OF WATER OR AN ENGINEER SHALL CERTIFY AN ASSET**  
5 **MANAGEMENT PLAN DEVELOPED UNDER THIS SECTION.**

6           **(D) (1) ON OR BEFORE DECEMBER 31, 2025, AND EACH DECEMBER 31**  
7 **THEREAFTER, A SUPPLIER OF WATER SHALL SUBMIT TO THE DEPARTMENT AND THE**  
8 **DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT A REPORT ON THE**  
9 **IMPLEMENTATION OF THE SUPPLIER'S ASSET MANAGEMENT PLAN.**

10           **(2) THE REPORT SHALL IDENTIFY:**

11                   **(I) THE INFRASTRUCTURE IMPROVEMENTS UNDERTAKEN IN**  
12 **ACCORDANCE WITH THE PLAN DURING THE IMMEDIATELY PRECEDING CALENDAR**  
13 **YEAR AND THE COSTS ASSOCIATED WITH THE IMPROVEMENTS; AND**

14                   **(II) THE INFRASTRUCTURE IMPROVEMENTS PLANNED FOR THE**  
15 **IMMEDIATELY FOLLOWING CALENDAR YEAR AND THE PROJECTED COSTS OF THE**  
16 **IMPROVEMENTS.**

17           **(E) (1) THE DEPARTMENT, IN CONSULTATION WITH THE DEPARTMENT**  
18 **OF HOUSING AND COMMUNITY DEVELOPMENT, SHALL ESTABLISH AN ELECTRONIC**  
19 **PORTAL ON THE DEPARTMENT'S WEBSITE FOR THE SUBMISSION OF REPORTS**  
20 **REQUIRED UNDER SUBSECTION (D) OF THIS SECTION.**

21           **(2) A SUPPLIER OF WATER SHALL SUBMIT THE REPORT REQUIRED**  
22 **UNDER SUBSECTION (D) OF THIS SECTION REGARDLESS OF WHETHER THE**  
23 **DEPARTMENT HAS ESTABLISHED AN ELECTRONIC PORTAL.**

24           **(F) THE DEPARTMENT SHALL MAKE A REPORT SUBMITTED UNDER**  
25 **SUBSECTION (D) OF THIS SECTION AVAILABLE FOR PUBLIC INSPECTION ON**  
26 **REQUEST.**

27 **9-435.**

28           **(A) (1) A SUPPLIER OF WATER SHALL ANNUALLY CERTIFY IN WRITING TO**  
29 **THE DEPARTMENT THAT THE SUPPLIER OF WATER COMPLIES WITH:**

30                   **(I) ALL FEDERAL AND STATE PRIMARY DRINKING WATER**  
31 **REGULATIONS, INCLUDING WATER QUALITY SAMPLING, TESTING, AND REPORTING**

1 **REQUIREMENTS;**

2 **(II) THE VALVE INSPECTION REQUIREMENTS SET FORTH IN §**  
3 **9-431 OF THIS SUBTITLE;**

4 **(III) IF APPLICABLE, THE TERMS OF A MITIGATION PLAN**  
5 **SUBMITTED TO THE DEPARTMENT UNDER § 9-433 OF THIS SUBTITLE; AND**

6 **(IV) THE ASSET MANAGEMENT PLAN REQUIREMENTS SET**  
7 **FORTH IN § 9-434 OF THIS SUBTITLE.**

8 **(2) A SUPPLIER OF WATER MAY INCLUDE THE CERTIFICATION**  
9 **REQUIRED UNDER THIS SUBSECTION WITH REQUIRED CONSUMER CONFIDENCE**  
10 **REPORTS.**

11 **(B) A SUPPLIER OF WATER SHALL:**

12 **(1) MAKE THE CERTIFICATION UNDER SUBSECTION (A) OF THIS**  
13 **SECTION AVAILABLE FOR PUBLIC INSPECTION ON REQUEST; AND**

14 **(2) ON OR BEFORE DECEMBER 31 EACH YEAR, INFORM CUSTOMERS**  
15 **SERVED BY THE PUBLIC WATER SYSTEM OF COMPLIANCE WITH THIS PART.**

16 **9-436.**

17 **A SUPPLIER OF WATER THAT ACQUIRES A NEW PUBLIC WATER SYSTEM SHALL**  
18 **COMPLY WITH THE REQUIREMENTS OF THIS PART NOT LATER THAN 3 YEARS AFTER**  
19 **THE DATE OF ACQUISITION.**

20 **9-437.**

21 **A SUPPLIER OF WATER MAY NOT RECEIVE PUBLIC FUNDING FROM ANY**  
22 **SOURCE UNLESS THE SUPPLIER CAN DEMONSTRATE THAT THE SUPPLIER HAS**  
23 **DEVELOPED OR IS IN THE PROCESS OF DEVELOPING AN ASSET MANAGEMENT PLAN**  
24 **AND A CYBERSECURITY PROGRAM IN ACCORDANCE WITH THIS PART.**

25 **9-438.**

26 **THE DEPARTMENT SHALL ADOPT REGULATIONS TO CARRY OUT THE**  
27 **PROVISIONS OF THIS PART.**

28 **SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect**  
29 **October 1, 2023.**