

SENATE BILL 820

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CF 0lr2625

By: **Senator Klausmeier**

Introduced and read first time: February 3, 2020

Assigned to: Education, Health, and Environmental Affairs

A BILL ENTITLED

1 AN ACT concerning

2 **Public Water Systems – Supplier Requirements**
3 **(Water Quality Accountability Act of 2020)**

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; requiring
8 a supplier of water to develop a certain cybersecurity program on or before a certain
9 date; requiring a supplier of water to conduct certain risk assessments and
10 implement certain controls as part of a certain cybersecurity program; requiring a
11 supplier of water to submit a certain report to the Department of the Environment
12 within a certain number of days after developing a certain cybersecurity program;
13 requiring the Department of the Environment, in consultation with the Department
14 of Housing and Community Development, to establish a certain electronic portal;
15 requiring a supplier of water to submit a certain mitigation plan to the Department
16 of the Environment under certain circumstances and within a certain number of days
17 after receiving a certain notice of violation; requiring a mitigation plan to include
18 certain information; requiring a supplier of water to develop and submit to the
19 Department of the Environment a certain asset management plan on or before a
20 certain date; requiring an asset management plan to include certain information;
21 requiring a supplier of water to dedicate certain funds each year for certain projects;
22 requiring a supplier of water or a certain engineer to certify a certain asset
23 management plan; requiring a supplier of water to submit a certain report to the
24 Department of the Environment and the Department of Housing and Community
25 Development on or before a certain date each year; requiring the Department of the
26 Environment to make a certain report available for public inspection under certain
27 circumstances; requiring a supplier of water to annually certify to the Department
28 of the Environment that the supplier complies with certain regulations and
29 requirements; authorizing a supplier of water to include a certain certification with
30 a certain report; requiring a supplier of water to make a certain certification
31 available for public inspection under certain circumstances; requiring a supplier of

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.



1 water to inform certain customers of compliance with certain provisions of law on or
2 before a certain date each year; requiring a supplier of water to comply with certain
3 provisions of law in a certain amount of time after acquiring a public water system;
4 prohibiting a supplier of water from receiving certain public funding under certain
5 circumstances; requiring the Department of the Environment to adopt certain
6 regulations; defining certain terms; and generally relating to public water systems
7 and suppliers of water.

8 BY repealing and reenacting, without amendments,
9 Article – Environment
10 Section 9–401
11 Annotated Code of Maryland
12 (2014 Replacement Volume and 2019 Supplement)

13 BY adding to
14 Article – Environment
15 Section 9–429 through 9–437 to under the new part “Part III. Water Quality
16 Accountability Act”
17 Annotated Code of Maryland
18 (2014 Replacement Volume and 2019 Supplement)

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

21 **Article – Environment**

22 9–401.

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

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

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

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

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

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

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

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

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

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

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

8 (j) “Person” includes:

9 (1) The Washington Suburban Sanitary Commission;

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

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

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

14 (k) “Primary drinking water regulation” means a rule or regulation that:

15 (1) Applies to public water systems;

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

18 (3) Specifies for each contaminant either:

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

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

26 (4) Contains standards and procedures:

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

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

- 1 (iii) To establish requirements as to:
- 2 1. The minimum quality of water that may be taken into the
3 system; and
- 4 2. Siting for new facilities for public water systems.
- 5 (l) (1) “Public water system” means a system that:
- 6 (i) Provides to the public water for human consumption through
7 pipes or other constructed conveyances; and
- 8 (ii) 1. Has at least 15 service connections; or
9 2. Regularly serves at least 25 individuals.
- 10 (2) “Public water system” includes:
- 11 (i) Any collection, treatment, storage, or distribution facility that is
12 under the control of the operator of the system and is used primarily in connection with the
13 system; and
- 14 (ii) Any collection or pretreatment storage facility that is not under
15 the control of the operator of the system and is used primarily in connection with the
16 system.
- 17 (m) “Supplier of water” means any person who owns or operates a public water
18 system.
- 19 (n) “Tamper” means to:
- 20 (1) Introduce a contaminant into a public water system with the intention
21 of harming a person; or
- 22 (2) Otherwise interfere with the operation of a public water system with
23 the intention of harming a person.
- 24 (o) “Transient noncommunity water system” means a noncommunity water
25 system that does not regularly serve at least 25 of the same individuals over 6 months per
26 year.

27 **9-427. RESERVED.**

28 **9-428. RESERVED.**

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

1 **9-429.**

2 (A) IN THIS PART THE FOLLOWING WORDS HAVE THE MEANINGS
3 INDICATED.

4 (B) "ASSET MANAGEMENT PLAN" MEANS A PLAN DEVELOPED BY A WATER
5 SUPPLIER AND SUBMITTED TO THE DEPARTMENT IN ACCORDANCE WITH § 9-435 OF
6 THIS PART.

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

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

10 (I) 16 INCHES OR MORE IN DIAMETER;

11 (II) LOCATED AT:

12 1. A HOSPITAL;

13 2. A DIALYSIS CENTER;

14 3. A NURSING HOME;

15 4. A WATER TREATMENT PLANT;

16 5. AN EMERGENCY INTERCONNECTION WITH A
17 SUPPLIER OF WATER; OR

18 (III) A REGULATOR OR RELIEF CONTROL VALVE.

19 **9-430.**

20 (A) A SUPPLIER OF WATER SHALL:

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

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

26 (II) THE OPERATING CONDITION OF THE VALVE;

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

3 **(3) INSPECT EACH CRITICAL VALVE AT A FREQUENCY DETERMINED**
4 **BY THE SUPPLIER OF WATER AND AGREED TO BY THE DEPARTMENT;**

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

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

11 **(6) TO THE EXTENT POSSIBLE, IDENTIFY THE GEOGRAPHIC**
12 **LOCATION OF EACH CRITICAL VALVE AND FIRE HYDRANT IN THE PUBLIC WATER**
13 **SYSTEM; AND**

14 **(7) RECORD THE CHARACTERISTICS AND DISTINGUISHING**
15 **IDENTIFIERS OF EACH HYDRANT IN THE PUBLIC WATER SYSTEM IN A DATABASE**
16 **AVAILABLE ON THE SUPPLIER'S WEBSITE.**

17 **(B) IN CONDUCTING A CRITICAL VALVE INSPECTION UNDER THIS SECTION,**
18 **A SUPPLIER OF WATER SHALL:**

19 **(1) CLEAR THE AREA AROUND THE VALVE TO ENSURE FULL ACCESS**
20 **TO THE VALVE FOR OPERATING PURPOSES;**

21 **(2) CLEAN OUT THE VALVE BOX;**

22 **(3) CONDUCT DYNAMIC TESTING OF THE VALVE BY OPENING AND**
23 **THEN CLOSING THE VALVE FOR:**

24 **(I) THE NUMBER OF TURNS RECOMMENDED BY THE VALVE**
25 **MANUFACTURER TO CONSTITUTE A CREDIBLE TEST; OR**

26 **(II) THE NUMBER OF TURNS THAT CONSTITUTES 15% OF THE**
27 **TOTAL NUMBER OF TURNS NECESSARY TO COMPLETELY OPEN OR COMPLETELY**
28 **CLOSE THE VALVE; AND**

29 **(4) COMPLY WITH ANY OTHER REQUIREMENTS ESTABLISHED BY THE**
30 **DEPARTMENT.**

1 **9-431.**

2 (A) ON OR BEFORE FEBRUARY 1, 2021, A SUPPLIER OF WATER SHALL
3 DEVELOP A CYBERSECURITY PROGRAM THAT:

4 (1) DEFINES AND IMPLEMENTS ORGANIZATION ACCOUNTABILITIES
5 AND RESPONSIBILITIES FOR CYBER RISK MANAGEMENT ACTIVITIES; AND

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

8 (B) IN ACCORDANCE WITH THE PROGRAM DEVELOPED IN SUBSECTION (A)
9 OF THIS SECTION, A SUPPLIER OF WATER SHALL:

10 (1) CONDUCT RISK ASSESSMENTS AND IMPLEMENT APPROPRIATE
11 CONTROLS TO MITIGATE IDENTIFIED RISKS TO THE PUBLIC WATER SYSTEM;

12 (2) REMAIN AWARE OF POTENTIAL CYBER THREATS TO AND
13 VULNERABILITIES OF THE PUBLIC WATER SYSTEM; AND

14 (3) CREATE AND EXERCISE INCIDENT RESPONSE AND RECOVERY
15 PLANS.

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

19 **9-432.**

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

23 (1) THE THIRD OF THREE NOTICES REGARDING ANY VIOLATION OF
24 LAWS OR REGULATIONS OF THE DEPARTMENT; OR

25 (2) THE SECOND OF TWO NOTICES REGARDING A VIOLATION OF A
26 PRIMARY DRINKING WATER REGULATION ESTABLISHING MAXIMUM CONTAMINANT
27 LEVELS FOR PUBLIC WATER SYSTEMS.

28 (B) THE MITIGATION PLAN SHALL INCLUDE:

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

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

4 **(II) A CAPITAL EXPENDITURE;**

5 **(2) AN IMPLEMENTATION SCHEDULE FOR THE MITIGATION PLAN;**
6 **AND**

7 **(3) A REPORT PREPARED FOR THE SUPPLIER OF WATER SYSTEM BY A**
8 **LICENSED ENGINEER THAT INCLUDES:**

9 **(I) A TECHNICAL ANALYSIS OF THE NOTICES OF VIOLATION;**
10 **AND**

11 **(II) AN EXPLANATION OF HOW THE MITIGATION PLAN**
12 **SUBMITTED IN ACCORDANCE WITH THIS SECTION WILL PREVENT THE**
13 **REOCCURRENCE OF THE ORIGINAL VIOLATION.**

14 **9-433.**

15 **(A) (1) ON OR BEFORE APRIL 1, 2022, A SUPPLIER OF WATER SHALL**
16 **DEVELOP AND SUBMIT TO THE DEPARTMENT AN ASSET MANAGEMENT PLAN IN**
17 **ACCORDANCE WITH THIS SUBSECTION.**

18 **(2) AN ASSET MANAGEMENT PLAN SHALL INCLUDE:**

19 **(I) A WATER MAIN RENEWAL PROGRAM DESIGNED TO ACHIEVE**
20 **A 150-YEAR REPLACEMENT CYCLE; OR**

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

25 **(3) A WATER SUPPLY AND TREATMENT PROGRAM DESIGNED TO**
26 **INSPECT, MAINTAIN, REPAIR, RENEW, AND UPGRADE WELLS, INTAKES, PUMPS, AND**
27 **TREATMENT FACILITIES IN ACCORDANCE WITH ALL FEDERAL AND STATE**
28 **REGULATIONS, STANDARDS ESTABLISHED BY THE AMERICAN WATER WORKS**
29 **ASSOCIATION, AND ANY MITIGATION PLAN SUBMITTED UNDER § 9-432 OF THIS**
30 **PART;**

1 **(4) CAPITAL EXPENDITURES REQUIRED UNDER A MITIGATION PLAN**
2 **SUBMITTED UNDER § 9-432 OF THIS PART; AND**

3 **(5) ANY OTHER PROGRAMS, PLANS, OR PROVISIONS REQUIRED BY**
4 **THE DEPARTMENT IN REGULATION.**

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

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

10 **(D) (1) ON OR BEFORE DECEMBER 31, 2022, AND EACH DECEMBER 31**
11 **THEREAFTER, A SUPPLIER OF WATER SHALL SUBMIT TO THE DEPARTMENT AND THE**
12 **DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT A REPORT ON THE**
13 **IMPLEMENTATION OF THE SUPPLIER'S ASSET MANAGEMENT PLAN.**

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

15 **(I) THE INFRASTRUCTURE IMPROVEMENTS UNDERTAKEN IN**
16 **ACCORDANCE WITH THE PLAN DURING THE IMMEDIATELY PRECEDING CALENDAR**
17 **YEAR, AND THE COSTS ASSOCIATED WITH THE IMPROVEMENTS; AND**

18 **(II) THE INFRASTRUCTURE IMPROVEMENTS PLANNED FOR THE**
19 **IMMEDIATELY FOLLOWING CALENDAR YEAR, AND THE PROJECTED COSTS OF THE**
20 **IMPROVEMENTS.**

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

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

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

31 **9-434.**

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

3 **(I) ALL FEDERAL AND STATE PRIMARY DRINKING WATER**
4 **REGULATIONS, INCLUDING WATER QUALITY SAMPLING, TESTING, AND REPORTING**
5 **REQUIREMENTS;**

6 **(II) THE VALVE INSPECTION REQUIREMENTS SET FORTH IN §**
7 **9-430 OF THIS PART;**

8 **(III) IF APPLICABLE, THE TERMS OF A MITIGATION PLAN**
9 **SUBMITTED TO THE DEPARTMENT UNDER § 9-432 OF THIS PART; AND**

10 **(IV) THE ASSET MANAGEMENT PLAN REQUIREMENTS SET**
11 **FORTH IN § 9-433 OF THIS PART.**

12 **(2) A SUPPLIER OF WATER MAY INCLUDE THE CERTIFICATION**
13 **REQUIRED UNDER THIS SUBSECTION WITH REQUIRED CONSUMER CONFIDENCE**
14 **REPORTS.**

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

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

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

20 **9-435.**

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

24 **9-436.**

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

29 **9-437.**

1 **THE DEPARTMENT SHALL ADOPT REGULATIONS TO CARRY OUT THE**
2 **PROVISIONS OF THIS PART.**

3 SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect
4 October 1, 2020.