

[First Reprint]

SENATE COMMITTEE SUBSTITUTE FOR
SENATE, No. 647

STATE OF NEW JERSEY
219th LEGISLATURE

ADOPTED JANUARY 27, 2020

Sponsored by:

Senator LINDA R. GREENSTEIN

District 14 (Mercer and Middlesex)

Senator TROY SINGLETON

District 7 (Burlington)

Co-Sponsored by:

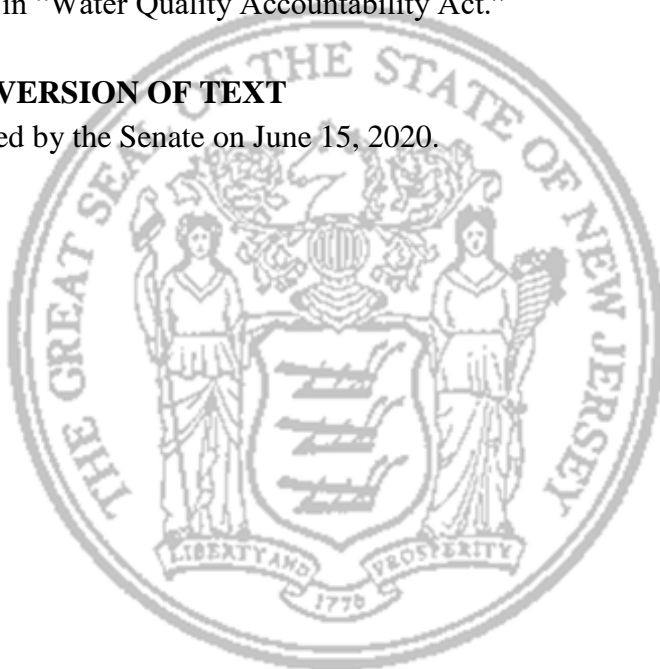
Senator Ruiz

SYNOPSIS

Revises cybersecurity, asset management, and related reporting requirements in “Water Quality Accountability Act.”

CURRENT VERSION OF TEXT

As amended by the Senate on June 15, 2020.



(Sponsorship Updated As Of: 7/6/2020)

1 **AN ACT** concerning cybersecurity and asset management at public
2 water systems and amending and supplementing P.L.2017, c.133.

3

4 **BE IT ENACTED** *by the Senate and General Assembly of the State*
5 *of New Jersey:*

6

7 1. Section 2 of P.L.2017, c.133 (C.58:31-2) is amended to read
8 as follows:

9 2. As used in this act:

10 "Board" means the Board of Public Utilities.

11 "Cybersecurity incident" means an event occurring on or
12 conducted through a computer network that jeopardizes the
13 integrity, confidentiality, or availability of computers, information
14 ¹[or] systems,¹ communications systems ¹[or] ,¹ networks,
15 physical or virtual infrastructure controlled by computers or
16 information systems, or information residing thereon.

17 ¹"Cybersecurity insurance policy" means an insurance policy
18 designed to mitigate losses from cybersecurity incidents, including,
19 but not limited to, data breaches, business interruption, and network
20 damage.¹

21 "Department" means the Department of Environmental
22 Protection.

23 "Industrial control system" means an information system used to
24 control industrial processes such as manufacturing, product
25 handling, production, or distribution. "Industrial control system"
26 includes supervisory control and data acquisition systems used to
27 control geographically dispersed assets, and distributed control
28 systems and smaller control systems using programmable logic
29 controllers to control localized processes.

30 "Information resource" means information and related resources,
31 such as personnel, equipment, funds, and information technology.

32 "Information system" means a discrete set of information
33 resources organized for the collection, processing, maintenance,
34 use, sharing, dissemination, or disposition of information.

35 "Public water system" means the same as the term is defined in
36 section 3 of P.L.1977, c.224 (C.58:12A-3).

37 "Water purveyor" means any person that owns a public water
38 system with more than 500 service connections.

39 (cf: P.L.2017, c.133, s.2)

40

41 2. Section 4 of P.L.2017, c.133 (C.58:31-4) is amended to read
42 as follows:

43 4. a. Within 120 days after the effective date of **[this act]**
44 P.L.2017, c.133 (C.58:31-1 et seq.), each water purveyor shall

EXPLANATION – Matter enclosed in bold-faced brackets **[thus]** in the above bill is
not enacted and is intended to be omitted in the law.

Matter underlined thus is new matter.

Matter enclosed in superscript numerals has been adopted as follows:

¹Senate floor amendments adopted June 15, 2020.

1 develop a cybersecurity program, in accordance with requirements
2 established by the board, as rules and regulations adopted pursuant
3 to the “Administrative Procedure Act,” P.L.1968, c.410 (C.52:14B-
4 1 et seq.), that defines and implements organization accountabilities
5 and responsibilities for cyber risk management activities, and
6 establishes policies, plans, processes, and procedures for identifying
7 and mitigating cyber risk to its public water system. As part of the
8 ‘cybersecurity’ program, a water purveyor shall ¹: identify the
9 individual chiefly responsible for ensuring that the policies, plans
10 processes, and procedures established pursuant to this section are
11 executed in a timely manner;¹ conduct risk assessments and
12 implement appropriate controls to mitigate identified risks to the
13 public water system ¹‘;’¹ maintain situational awareness of cyber
14 threats and vulnerabilities to the public water system ¹‘;’¹ and
15 create and exercise incident response and recovery plans. No later
16 than ¹‘[120] 180’ days after the effective date of P.L. _____,
17 c. (C. _____) (pending before the Legislature as this bill), a water
18 purveyor shall update its cybersecurity program to conform to the
19 requirements of section 3 of P.L. _____, c. (C. _____) (pending before
20 the Legislature as this bill).

21 A ¹water purveyor shall submit a¹ copy of the ¹‘cybersecurity’
22 program developed pursuant to this subsection ¹‘[shall be
23 provided]’¹ to ¹the board, the department, and¹ the New Jersey
24 Cybersecurity and Communications Integration Cell ¹‘;’¹
25 established pursuant to Executive Order No. 178 (2015) in the New
26 Jersey Office of Homeland Security and Preparedness. ¹A
27 cybersecurity program submitted pursuant to this subsection shall
28 not be considered a government record under P.L.1963, c.73
29 (C.47:1A-1 et seq.), and shall not be made available for public
30 inspection.¹

31 b. Within 60 days after developing the ¹‘cybersecurity’¹ program
32 required pursuant to subsection a. of this section, each water
33 purveyor shall join the New Jersey Cybersecurity and
34 Communications Integration Cell ¹‘;’¹ established pursuant to
35 Executive Order No. 178 (2015), and create a cybersecurity incident
36 reporting process.

37 c. ¹‘[A water purveyor that does not have an internet-connected
38 control system shall be exempt from the requirements of this
39 section.]¹ (Deleted by amendment, P.L. _____, c. _____) (pending before the
40 Legislature as this bill)

41 ¹d. No later than 180 days after the effective date of P.L. _____,
42 c. (C. _____)(pending before the Legislature as this bill), each water
43 purveyor shall obtain a cybersecurity insurance policy that meets
44 any applicable standards adopted by the board.¹

45 (cf: P.L.2017, c.133, s.4)

1 3. (New section) a. In addition to the requirements of section 4
2 of P.L.2017, c.133 (C.58:31-4), and the requirements established by
3 the board pursuant thereto, no later than ¹~~120~~ 180¹ days after the
4 effective date of P.L. , c. (C.) (pending before the
5 Legislature as this bill), each water purveyor shall update its
6 cybersecurity program developed pursuant to section 4 of P.L.2017,
7 c.133 (C.58:31-4) to apply to all of the public water system's
8 industrial control systems, and to reasonably conform to the most
9 recent version of one or more of the following industry-recognized
10 cybersecurity frameworks:

11 (1) the Framework for Improving Critical Infrastructure
12 Cybersecurity developed by the National Institute of Standards and
13 Technology;

14 (2) the Center for Internet Security Critical Security Controls for
15 Effective Cyber Defense; or

16 (3) the International Organization for Standardization and
17 International Electrotechnical Commission 27000 family of
18 standards for an information security management system.

19 b. Whenever a final revision to one or more of the frameworks
20 listed in subsection a. of this section is published, a water purveyor
21 whose cybersecurity program reasonably conformed to that
22 framework shall revise its cybersecurity program to reasonably
23 conform to the revised framework, ¹and submit a copy of the
24 revised cybersecurity program to the board, the department, and the
25 New Jersey Cybersecurity and Communications Integration Cell.¹
26 no later than ¹~~120~~ 180¹ days after publication of the revised
27 framework.

28 c. No later than one year after the effective date of P.L. ,
29 c. (C.) (pending before the Legislature as this bill), and each
30 year thereafter, each water purveyor shall submit to the ¹board, the¹
31 department ¹,¹ and ¹~~to~~¹ the New Jersey Cybersecurity and
32 Communications Integration Cell ¹~~to~~¹ established pursuant to
33 Executive Order No. 178 (2015), a certification demonstrating that
34 the water purveyor is in compliance with the requirements of this
35 section. The certification shall be made in the form and manner as
36 determined by the department, in consultation with the New Jersey
37 Cybersecurity and Communications Integration Cell. ¹The
38 certification shall be signed by the responsible corporate officer of
39 the public water system, if privately held, executive director, if an
40 authority, or mayor or chief executive officer of the municipality, if
41 municipally owned, as applicable.¹

42 d. ¹The New Jersey Cybersecurity and Communications
43 Integration Cell shall audit, or cause to be audited, for compliance
44 with the requirements of section 4 of P.L.2017, c.133 (C.58:31-4)
45 and this section, any public water system that fails to submit a
46 cybersecurity program as required pursuant to subsection a. of
47 section 4 of P.L.2017, c.133 (C.58:31-4), a revision pursuant to

1 subsection b. of this section, or a certification pursuant to this
2 section.

3 e.¹ A water purveyor shall, upon the request of the 'board, the'
4 department '.'¹ or the New Jersey Cybersecurity and
5 Communications Integration Cell, provide proof of compliance with
6 the requirements of this section, in a form and manner as
7 determined by the department or by the New Jersey Cybersecurity
8 and Communications Integration Cell.

9 '[e.] f.'¹ The board shall update any requirements it has
10 established for cybersecurity programs pursuant to subsection a. of
11 section 4 of P.L.2017, c.133 (C.58:31-4) to conform to the
12 requirements of this section.

13

14 4. (New section) 'a.'¹ Beginning 90 days after the effective date
15 of P.L. , c. (C.) (pending before the Legislature as this
16 bill), '[each] a'¹ water purveyor shall '[immediately]'¹ report to the
17 'board, the department, and the'¹ New Jersey Cybersecurity and
18 Communications Integration Cell, 'immediately after an employee
19 is made aware of a cybersecurity incident,'¹ and in accordance with
20 all applicable laws, rules '.'¹ and regulations:

21 '[a.] (1)'¹ any cybersecurity incident that results in the
22 compromise of the confidentiality, integrity, availability, or privacy
23 of the water purveyor's utility billing, communications, data
24 management, or business information systems, or the information
25 thereon; and

26 '[b.] (2)'¹ any cybersecurity incident against the water
27 purveyor's industrial control system, including monitoring,
28 operations, and centralized control systems, that adversely impact,
29 disable, or manipulate infrastructure, resulting in loss of service,
30 contamination of finished water, or damage to infrastructure.

31 'b. No later than 30 days after receiving a report of a
32 cybersecurity incident from a water purveyor pursuant to subsection
33 a. of this section, the New Jersey Cybersecurity and
34 Communications Integration Cell shall audit, or cause to be audited,
35 the water purveyor's cybersecurity program and any actions the
36 water purveyor took in response to the cybersecurity incident. The
37 audit shall identify cyber threats and vulnerabilities to the public
38 water system, weaknesses in the public water system's
39 cybersecurity program, and strategies to address those weaknesses
40 so as to protect the public water system from the threat of future
41 cybersecurity incidents.'¹

42

43 5. Section 6 of P.L.2017, c.133 (C.58:31-6) is amended to read
44 as follows:

45 6. 'a.'¹ In addition to any other certifications required pursuant
46 to law, rule, or regulation, the responsible corporate officer of the
47 public water system, if privately held, executive director, if an

1 authority, or mayor or chief executive officer of the municipality, if
 2 municipally owned, as applicable, shall be required to certify in
 3 writing each year to the **Department of Environmental Protection**
 4 department and, if applicable, the ¹**Board of Public Utilities**
 5 board, in a form and manner as determined by the department.¹ that
 6 the water purveyor complies with: all federal and State drinking
 7 water regulations, including water quality sampling, testing, and
 8 reporting requirements; the hydrant and valve requirements set forth
 9 in section 3 of **this act** P.L.2017, c.133 (C.58:31-3); the notice of
 10 violation mitigation plan requirements set forth in section 5 of **this**
 11 **act** P.L.2017, c.133 (C.58:31-5), if applicable; and the
 12 infrastructure improvement investment required pursuant to section
 13 7 of **this act** P.L.2017, c.133 (C.58:31-7). A water purveyor shall
 14 post the annual certification required pursuant to this section on its
 15 Internet website, if applicable.

16 ¹b. The department shall audit, or cause to be audited, for
 17 compliance with the requirements of P.L.2017, c.133 (C.58:31-7),
 18 any public water system that fails to submit the certification
 19 required pursuant to subsection a. of this section in a timely
 20 manner. If the department finds that a water purveyor has made a
 21 false or misleading statement in a certification submitted pursuant
 22 to subsection a. of this section, the department shall forward the
 23 matter to the Attorney General for further investigation and, if
 24 necessary, criminal prosecution or other appropriate relief, pursuant
 25 to any applicable State or federal law, rule, or regulation.

26 c. The department shall annually audit for compliance with the
 27 requirements P.L.2017, c.133 (C.58:31-7) a random selection of at
 28 least 10 percent of all public water systems in the State.¹

29 (cf: P.L.2017, c.133, s.6)

30

31 6. Section 7 of P.L.2017, c.133 (C.58:31-7) is amended to read
 32 as follows:

33 7. a. Beginning no later than 18 months after the effective date
 34 of **this act** P.L.2017, c.133 (C.58:31-1 et seq.), every water
 35 purveyor shall implement an asset management plan designed to
 36 inspect, maintain, repair, and renew its infrastructure consistent
 37 with standards established by the American Water Works
 38 Association. The asset management plan shall include:

39 (1) a water main renewal program designed to achieve a 150-
 40 year replacement cycle, or other **appropriate** shorter replacement
 41 cycle as determined by a detailed engineering analysis of the asset
 42 condition and estimated service lives of the water mains serving the
 43 public water system , or by the department;

44 (2) a water supply and treatment program designed to inspect,
 45 maintain, repair, renew, and upgrade wells, intakes, pumps, and
 46 treatment facilities in accordance with all federal and State
 47 regulations, standards established by the American Water Works

1 Association, and any mitigation plan required pursuant to section 5
2 of **【this act】** P.L.2017, c.133 (C.58:31-5); and

3 (3) any other programs, plans, or provisions as may be required
4 by the department pursuant to rules and regulations adopted
5 pursuant to the "Administrative Procedure Act," P.L.1968, c.410
6 (C.52:14B-1 et seq.).

7 Each water purveyor shall dedicate funds on an annual basis to
8 address and remediate the highest priority projects as determined by
9 its asset management plan.

10 All asset management plans and system condition reports shall
11 be certified to by the licensed operator or professional engineer of
12 the public water system and the responsible corporate officer of the
13 public water system, if privately held, executive director, if an
14 authority, or mayor or chief executive officer of the municipality, if
15 municipally owned, as applicable. The replacement cycle shall be
16 determined by dividing the miles of water main located in the
17 public water system by 150 or other appropriate demonstration set
18 forth in the certified asset management plan prepared pursuant to
19 this section.

20 b. **【At least once every three years】** No later than one year
21 after the effective date of P.L. , c. (C.) (pending before
22 the Legislature as this bill), and every three years thereafter, each
23 water purveyor shall provide to the department and the board, if
24 applicable, a report based on its asset management plan prepared
25 pursuant to subsection a. of this section identifying 【the
26 infrastructure improvements to be undertaken in the coming year
27 and the cost of those improvements, as well as identifying the
28 infrastructure improvements completed in the past year and the cost
29 of those improvements】 : (1) the infrastructure improvements
30 completed in the past three years and the cost of those
31 improvements, including improvements funded by emergency and
32 routine capital spending; (2) the infrastructure improvements
33 planned to be undertaken in the next three years and the estimated
34 cost of those improvements; and (3) the infrastructure
35 improvements that will be required over the next 10 years and the
36 estimated cost of those improvements. A municipal water
37 department or municipal water authority shall also submit the report
38 required pursuant to this subsection to the Division of Local
39 Government Services in the Department of Community Affairs. A
40 water purveyor shall, upon request, provide a copy of its asset
41 management plan to the department, the board, or the Division of
42 Local Government Services in the Department of Community
43 Affairs.

44 c. The department, the board, and the Department of
45 Community Affairs shall create a centralized portal allowing for
46 electronic submittal of the report required pursuant to subsection b.
47 of this section. The lack of a centralized portal pursuant to this

1 subsection shall not negate the requirement for a water purveyor to
2 submit a report pursuant to subsection b. of this section.
3 (cf: P.L.2017, c.133, s.7)

4
5 7. (New section) a. In addition to the requirements of section
6 7 of P.L.2017, c.133 (C.58:31-7), no later than 18 months after the
7 effective date of P.L. , c. (C.) (pending before the
8 Legislature as this bill), each water purveyor shall revise its asset
9 management plan developed pursuant to section 7 of P.L.2017,
10 c.133 (C.58:31-7) to include:

11 (1) a comprehensive inventory, mapping, and condition
12 assessment of the public water system's assets, including its pipes,
13 lead service lines, valves, tanks, pumps, wells, treatment facilities,
14 hydrants, and other components, and an assessment of the
15 remaining useful life of each identified asset;

16 (2) level of service goals for the public water system, which
17 may include, but need not be limited to, goals related to customer
18 service and accountability, energy and water efficiency and
19 conservation, water main breaks and service interruptions, and
20 social and environmental considerations;

21 (3) a priority order in which the public water system's assets,
22 identified in the comprehensive inventory prepared pursuant to
23 paragraph (1) of this subsection, will be repaired or replaced as part
24 of the water purveyor's asset management plan, based on each
25 assets' importance to the proper function of the public water
26 system, or business risk exposure;

27 (4) the life cycle costs of the public water system's assets,
28 including a schedule for the maintenance, repair, or replacement of
29 the assets, and for capital improvements to the public water system,
30 informed by the priority order developed pursuant to paragraph (3)
31 of this subsection; and

32 (5) a long-term funding strategy to implement the water
33 purveyor's asset management plan, including funding sources and
34 estimated annual expenditures to address prioritized repairs,
35 upgrades, and treatment.

36 b. The department shall, pursuant to the "Administrative
37 Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.), adopt rules
38 and regulations to implement the requirements of this section.

39
40 8. (New section) Any person who violates the provisions of
41 P.L.2017, c.133 (C.58:31-1 et seq.), or any rule or regulation
42 adopted pursuant thereto, shall be subject to the penalties and other
43 remedies set forth in section 10 of P.L.1977, c.224 (C.58:12A-10).
44 No later than 180 days after the effective date of P.L. ,
45 c. (C.)(pending before the Legislature as this bill), the
46 department shall adopt, pursuant to the "Administrative Procedure
47 Act," P.L.1968, c.410 (C.52:14B-1 et seq.), a schedule of civil

1 administrative penalties to be applied pursuant to this section for
2 specific violations of P.L.2017, c.133 (C.58:31-1 et seq.).

3
4 9. (New section) No later than one year after the effective date
5 of P.L. , c. (C.) (pending before the Legislature as this
6 bill), and annually thereafter, the department shall develop and
7 publish on its Internet website a report card for each water purveyor
8 in the State, indicating the water purveyor's compliance with
9 federal and State drinking water quality standards, its compliance
10 with the requirements of P.L.2017, c.133 (C.58:31-1 et seq.), and
11 any other factors the department deems appropriate. The report
12 card shall be designed to inform the public about the overall
13 condition of a public water system, and the quality of water coming
14 from the public water system.

15
16 10. (New section) No later than 18 months after the effective
17 date of P.L. , c. (C.) (pending before the Legislature as
18 this bill), and every three years thereafter, the department shall
19 prepare and submit a report to the Governor and, pursuant to section
20 2 of P.L.1991, c.164 (C.52:14-19.1), the Legislature assessing:

21 a. the data submitted by public water systems pursuant to
22 subsections b. and c. of section 7 of P.L.2017, c.133 (C.58:31-7).
23 The assessment shall include, but need not be limited to, an analysis
24 of the total estimated cost of infrastructure improvements to public
25 water systems, Statewide, required over the next 10 years; and
26 b. the compliance of public water systems with the
27 requirements of P.L.2017, c.133 (C.58:31-1 et seq.) and the rules
28 and regulations adopted pursuant thereto.

29
30 11. (New section) The department and the board shall adopt,
31 pursuant to the "Administrative Procedure Act," P.L.1968, c.410
32 (C.52:14B-1 et seq.), rules and regulations as are necessary to carry
33 out the provisions of P.L.2017, c.133 (C.58:31-1 et seq.).

34
35 12. This act shall take effect immediately.