SENATE, No. 635



STATE OF NEW JERSEY

219th LEGISLATURE



PRE-FILED FOR INTRODUCTION IN THE 2020 SESSION

Sponsored by:

Senator LINDA R. GREENSTEIN

District 14 (Mercer and Middlesex)

Senator BRIAN P. STACK

District 33 (Hudson)

Co-Sponsored by:

Senator Singleton

SYNOPSIS

Requires water purveyors to conduct water loss audits.

CURRENT VERSION OF TEXT

Introduced Pending Technical Review by Legislative Counsel.



An Act concerning water supplies, amending R.S.48:2-23, and amending and supplementing P.L.1981, c.262.

Be It Enacted by the Senate and General Assembly of the State of New Jersey:

1. R.S.48:2-23 is amended to read as follows:

48:2-23. a. The board may, after public hearing, upon notice, by order in writing, require any public utility to furnish safe, adequate and proper service, including furnishing and performance of service in a manner that tends to conserve and preserve the quality of the environment and prevent the pollution of the waters, land and air of this State, and including furnishing and performance of service in a manner which preserves and protects the water quality of a public water **[**supply**]** system, and to maintain its property and equipment in such condition as to enable it to do so.

The board may, pending any such proceeding, require any public utility to continue to furnish service and to maintain its property and equipment in such condition as to enable it to do so.

The board, in requiring any public water utility to furnish safe, adequate and proper service, may require the public water utility to retain in its rate base any property which the board determines is necessary to protect the water quality of a public water **[**supply**]** system.

b. Each public water utility shall provide the board with a completed and validated water loss audit report pursuant to section 7 of P.L. , c. (C. ) (pending before the Legislature as this bill).

(cf: P.L.1988, c.163, s.5)

2. Section 3 of P.L.1981, c.262 (C.58:1A-3) is amended to read as follows:

3. As used in the provisions of P.L.1981, c.262 (C.58:1A-1 et **[**seq.**]** al.), P.L.1993, c.202 (C.58:1A-7.3 et al.) and P.L.2003, c.251 (C.58:1A-13.1 et al.):

"Aquaculture" means the propagation, rearing and subsequent harvesting of aquatic organisms in controlled or selected environments, and the subsequent processing, packaging and marketing, and shall include, but need not be limited to, activities to intervene in the rearing process to increase production such as stocking, feeding, transplanting, and providing for protection from predators. "Aquaculture" shall not include the construction of facilities and appurtenant structures that might otherwise be regulated pursuant to any State or federal law or regulation.

"Aquatic organism" means and includes, but need not be limited to, finfish, mollusks, crustaceans, and aquatic plants which are the property of a person engaged in aquaculture.

**[**a.**]** "Commissioner" means the Commissioner of **[**the Department of**]** Environmental Protection or the commissioner's designated representative **[**;**]** .

**[**b.**]** "Consumptive use" means any use of water diverted from surface or ground waters other than a nonconsumptive use as defined in this section **[**;**]** .

“Data validity score” means the assessment of the quality of data used in a water loss audit report in accordance with the data validity scoring system of the American Water Works Association.

**[**c.**]** "Department" means the Department of Environmental Protection **[**;**]** .

**[**d.**]** "Diversion" means the taking or impoundment of water from a river, stream, lake, pond, aquifer, well, other underground source, or other water body, whether or not the water is returned thereto, consumed, made to flow into another stream or basin, or discharged elsewhere**[**;**]** .

“Level one validation” means the process whereby a water purveyor interacts with a technical expert to review and confirm the basis of all data entries in the water purveyor’s water loss audit report and to appropriately characterize the data validity score of the reported data.

**[**e.**]** "Nonconsumptive use" means the use of water diverted from surface or ground waters in such a manner that it is returned to the surface or ground water at or near the point from which it was taken without substantial diminution in quantity or substantial impairment of quality **[**;**]** .

**[**f.**]** "Person" means any individual, corporation, company, partnership, firm, association, owner or operator of a **[**water supply facility**]** public water system, political subdivision of the State and any state, or interstate agency or Federal agency **[**;**]** .

"Public water system" means a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. "Public water system" includes: (1) any collection, treatment, storage and distribution facilities under control of the operator of such system and used primarily in connection with such system; and (2) any collection or pre‑treatment storage facilities not under such control which are used primarily in connection with such system.

**[**g. "Waters" or "waters of the State" means all surface waters and ground waters in the State;

h.**]** "Safe or dependable yield" or "safe yield" means that maintainable yield of water from a surface or ground water source or sources which is available continuously during projected future conditions, including a repetition of the most severe drought of record, without creating undesirable effects, as determined by the department **[**;**]** .

**[**i. "Aquaculture" means the propagation, rearing and subsequent harvesting of aquatic species in controlled or selected environments, and the subsequent processing, packaging and marketing, and shall include, but need not be limited to, activities to intervene in the rearing process to increase production such as stocking, feeding, transplanting, and providing for protection from predators. "Aquaculture" shall not include the construction of facilities and appurtenant structures that might otherwise be regulated pursuant to any State or federal law or regulation;

j. "Aquatic organism" means and includes, but need not be limited to, finfish, mollusks, crustaceans, and aquatic plants which are the property of a person engaged in aquaculture;

k.**]** "Six Mile Run Reservoir Site" means the land acquired by the State for development of the Six Mile Run Reservoir in Franklin Township, Somerset County, as identified by the Eastern Raritan Feasibility Study and the New Jersey Statewide Water Supply Plan prepared and adopted by the department pursuant to section 13 of P.L.1981, c.262 (C.58:1A-13).

“Water loss” means the difference between the annual volume of water entering a water distribution system and the annual volume of metered and unmetered water taken by registered customers, the water purveyor, and others who are implicitly or explicitly authorized to do so pursuant to a permit issued by the department, and includes the annual volume lost through breaks, leaks, and overflows on mains, service reservoirs, and service connections, up to the point of customer metering, in addition to unauthorized consumption, metering inaccuracies, and systemic data handling errors.

"Water purveyor" means any person that owns or operates a public water system.

"Waters" or "waters of the State" means all surface waters and ground waters in the State.

(cf: P.L.2003, c.251, s.1)

3. Section 9 of P.L.1981, c.262 (C.58:1A-9) is amended to read as follows:

9. The Board of **[**Regulatory Commissioners**]** Public Utilities shall fix just and reasonable rates for any public water **[**supply**]** system subject to its jurisdiction, as may be necessary for that system to comply with an order issued by the department or the terms and conditions of a permit issued pursuant to P.L.1981, c.262 (C.58:1A-1 et al.) or P.L.1993, c.202 (C.58:1A-7.3 et al.).

(cf: P.L.1993, c.202, s.8)

4. Section 14 of P.L.1981, c.262 (C.58:1A-14) is amended to read as follows:

14. a. **[**When**]** Whenever the department determines that the developed water supply available to a water purveyor is inadequate to service its users with an adequate supply of water under a variety of conditions, the department may order the water purveyor to develop or acquire, within a reasonable period of time, additional water supplies sufficient to provide that service.

b. The Division of Local Government Services in the Department of Community Affairs shall, when reviewing the annual budget of any municipality, county, or agency thereof which operates a public water **[**supply**]** system, certify that an amount sufficient to cover the cost of any order issued to the **[**municipality, county or agency thereof**]** water purveyor pursuant to subsection a. of this section is included in that annual budget.

(cf: P.L.1981, c.262, s.14)

5. Section 15 of P.L.1981, c.262 (C.58:1A-15) is amended to read as follows:

15. The department may:

a. Perform any and all acts and issue such orders as are necessary to carry out the purposes and requirements of P.L.1981, c.262 (C.58:1A-1 et al.) or P.L.1993, c.202 (C.58:1A-7.3 et al.);

b. Administer and enforce the provisions of P.L.1981, c.262 (C.58:1A-1 et al.) or P.L.1993, c.202 (C.58:1A-7.3 et al.) and rules, regulations and orders adopted, issued or effective thereunder;

c. Present proper identification and then enter upon any land or water for the purpose of making any investigation, examination or survey contemplated by P.L.1981, c.262 (C.58:1A-1 et al.) or P.L.1993, c.202 (C.58:1A-7.3 et al.);

d. **[**Subpena**]** Subpoena and require the attendance of witnesses and the production by them of books and papers pertinent to the investigations and inquiries the department is authorized to make under P.L.1981, c.262 (C.58:1A-1 et al.) or P.L.1993, c.202 (C.58:1A-7.3 et al.), and examine them and those public records as shall be required in relation thereto;

e. Order the interconnection of public water **[**supply**]** systems, whether in public or private ownership, whenever the department determines that the public interest requires that this interconnection be made, and require the furnishing of water by means of that public water system to another public water system, but no order shall be issued before comments have been solicited at a public hearing, notice of which has been published at least 30 days before the hearing, in one newspaper circulating generally in the area served by each involved public water **[**supply**]** system, called for the purpose of soliciting comments on the proposed action.

f. Order any person diverting water to improve or repair its water supply facilities so that water loss is eliminated so far as practicable, safe yield is maintained and the drinking water quality standards adopted pursuant to the "Safe Drinking Water Act," P.L.1977, c.224 (C.58:12A-1 et al.) are met;

g. Enter into agreements, contracts, or cooperative arrangements under such terms and conditions as the department deems appropriate with other states, other State agencies, federal agencies, municipalities, counties, educational institutions, **[**investor-owned water companies, municipal utilities authorities,**]** water purveyors , or other organizations or persons;

h. Receive financial and technical assistance from the federal government and other public or private agencies;

i. Participate in related programs of the federal government, other states, interstate agencies, or other public or private agencies or organizations;

j. Establish adequate fiscal controls and accounting procedures to assure proper disbursement of and accounting for funds appropriated or otherwise provided for the purpose of carrying out the provisions of P.L.1981, c.262 (C.58:1A-1 et al.) or P.L.1993, c.202 (C.58:1A-7.3 et al.);

k. Delegate those responsibilities and duties to personnel of the department as deemed appropriate for the purpose of administering the requirements of P.L.1981, c.262 (C.58:1A-1 et al.) or P.L.1993, c.202 (C.58:1A-7.3 et al.);

l. Combine permits issued pursuant to P.L.1981, c.262 (C.58:1A-1 et al.) or P.L.1993, c.202 (C.58:1A-7.3 et al.) with permits issued pursuant to any other act whatsoever whenever that action would improve the administration of those acts;

m. Evaluate and determine the adequacy of ground and surface water supplies and develop methods to protect aquifer recharge areas.

(cf: P.L.1993, c.202, s.9)

6. (New section) a. No later than 18 months after the date of enactment of P.L. , c. (C. ) (pending before the Legislature as this bill), the department shalladopt, pursuant to the “Administrative Procedure Act,” P.L.1968, c.410 (C.52:14B-1 et seq.), rules and regulations concerning water loss audits. The rules and regulations shall be based on the most current edition of the American Water Works Association’s “Water Audits and Loss Control Programs, Manual M36” and its associated Free Water Audit Software. The rules and regulations shall include, but need not be limited to:

(1) the conduct of annual standardized water loss audits by water purveyors;

(2) the process for level one validation of a water loss audit report prior to its submittal to the department;

(3) the technical qualifications required of a person to engage in level one validation;

(4) the certification requirements for a person selected by a water purveyor to provide level one validation of its own water loss audit report;

(5) the method and process for submittal of a water loss audit report to the department; and

(6) procedures for the voluntary submittal of a water loss audit report by a water purveyor who regularly serves fewer than 3,300 individuals.

b. The department shall update the rules and regulations adopted pursuant to subsection a. of this section no later than one year after the release of any subsequent editions of the American Water Works Association’s “Water Audits and Loss Control Programs, Manual M36.”

7. (New section) a. (1) No later than 24 months after the date of enactment of P.L. , c. (C. ) (pending before the Legislature as this bill), each water purveyor who regularly serves 3,300 or more individuals shall submit to the department a completed and validated water loss audit report for the previous calendar year as prescribed by the department pursuant to the rules and regulations adopted pursuant to section 6 of P.L. , c.    (C.        ) (pending before the Legislature as this bill).

(2) Annually thereafter, each water purveyor required to submit a water loss audit report pursuant to paragraph (1) of this subsection shall submit a completed and validated water loss audit report covering the previous calendar year on or before July 1, or such earlier date as may be established by the department.

b. Each water loss audit report submitted to the department shall:

(1) include the name and technical qualifications of the person who conducted the level one validation;

(2) be attested to by the chief financial officer, chief engineer, or general manager of the water purveyor; and

(3) be accompanied by information, in a form specified by the department, identifying the steps taken by the water purveyor in the preceding year to reduce the volume of apparent and real water losses.

c. The department shall deem incomplete and return to a water purveyor any water loss audit report found by the department to be incomplete, not validated, unattested, or incongruent with known characteristics of water system operations. A water purveyor shall resubmit to the department a revised water loss audit report within 90 days after an audit has been returned by the department pursuant to this subsection.

d. The department shall post all validated water loss audit reports on its internet website in a manner that allows for comparisons across water purveyors. The department shall make the validated water loss audit reports available for public viewing in a timely manner after their receipt.

8. (New section) No sooner than 36 months and no later than 48 months after the date of enactment of P.L. , c. (C. ) (pending before the Legislature as this bill), the department, taking into consideration the level one validated water loss audit reports received by the department,shall adopt, pursuant to the “Administrative Procedure Act,” P.L.1968, c.410 (C.52:14B-1 et seq.), rules and regulations*:*

a. specifying a minimum data validity score or a specific level of yearly improvement in the data validity score of future annual water loss audit reports; and

b. setting forth performance standards to be met by a water purveyor concerning the volume of water losses.

9. (New section) The department shall provide technical assistance to instruct water purveyors concerning:

a. the American Water Works Association’s “Water Audits and Loss Control Programs, Manual M36” methodology, data tracking, and use of the associated Free Water Audit Software; and

b. available water loss reduction programs, including, but not limited to, metering techniques including testing, repair, and replacement, pressure management techniques, condition-based assessment techniques for transmission and distribution pipelines, and active leak detection.

10. This act shall take effect immediately.

STATEMENT

This bill would amend and supplement the “Water Supply Management Act” to require the State’s water purveyors (i.e., public and private water providers) who regularly serve at least 3,300 individuals to conduct annual water loss audits.

All water systems experience some amount of water loss; it may be from leakage in old infrastructure or metering errors. Validated water losses are a key step towards achieving cost-effective reductions in water loss. “Water Loss,” as defined in the bill, refers to the difference between the annual volume of water entering a water distribution system and the annual volume of metered and unmetered water taken by registered customers, the water purveyor, and others who are implicitly or explicitly authorized to do so pursuant to a permit, and includes the annual volume lost through breaks, leaks, and overflows on mains, service reservoirs, and service connections, up to the point of customer metering, in addition to unauthorized consumption, metering inaccuracies, and systemic data handling errors. A water loss audit helps to identify water loss control measures that can conserve water and save money.

Specifically, beginning no later than 24 months after the bill is enacted into law, every water purveyor serving at least 3,300 individuals would be required to annually submit a water loss audit to the Department of Environmental Protection (DEP). The bill directs the DEP, within 18 months after the bill is enacted into law, to adopt regulations concerning the conduct and validation of water loss audits based on the most current edition of the American Water Works Association’s “Water Audits and Loss Control Programs, Manual M36” and its associated Free Water Audit Software. In addition, public water utilities regulated by the Board of Public Utilities would be required to provide the board with a completed and validated water loss audit.

The bill also requires the DEP to adopt, no sooner than 36 months and no later than 48 months after the date of enactment of the bill into law, regulations: (1) specifying a minimum data validity score or a specific level of yearly improvement in the data validity score of future annual water loss audit reports; and (2) setting forth performance standards to be met by a water purveyor concerning the volume of water losses.

The bill also requires the DEP to provide technical assistance to water purveyors concerning: (1) the American Water Works Association’s “Water Audits and Loss Control Programs, Manual M36” methodology, data tracking, and use of the associated Free Water Audit Software; and (2) available water loss reduction programs, including, but not limited to, metering techniques including testing, repair, and replacement, pressure management techniques, condition-based assessment techniques for transmission and distribution pipelines, and active leak detection.

Lastly, the bill updates the definition section and makes other technical amendments to the “Water Supply Management Act.”