

CHAPTER 455E

GROUNDWATER PROTECTION

Referred to in §364.22, 455A.6, 455H.102, 455H.303, 455I.2

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455E.1 Title.

[This chapter](#) shall be known and may be cited as the “*Groundwater Protection Act*”.
[87 Acts, ch 225, §101](#)

455E.2 Definitions.

As used in [this chapter](#), unless the context otherwise requires:

1. “*Active cleanup*” means removal, treatment, or isolation of a contaminant from groundwater through the directed efforts of humans.
2. “*Commission*” means the environmental protection commission created under [section 455A.6](#).
3. “*Contaminant*” means any chemical, ion, radionuclide, synthetic organic compound, microorganism, waste, or other substance which does not occur naturally in groundwater or which naturally occurs at a lower concentration.
4. “*Contamination*” means the direct or indirect introduction into groundwater of any contaminant caused in whole or in part by human activities.
5. “*Department*” means the department of natural resources created under [section 455A.2](#).
6. “*Director*” means the director of the department.
7. “*Groundwater*” means any water of the state, as defined in [section 455B.171](#), which occurs beneath the surface of the earth in a saturated geological formation of rock or soil.
8. “*Passive cleanup*” means the removal or treatment of a contaminant in groundwater through management practices or the construction of barriers, trenches, and other similar facilities for prevention of contamination, as well as the use of natural processes such as groundwater recharge, natural decay, and chemical or biological decomposition.

[87 Acts, ch 225, §102](#)

Referred to in [§455B.190A](#)

455E.3 Findings.

The general assembly finds that:

1. Groundwater is a precious and vulnerable natural resource. The vast majority of persons in the state depend on groundwater as a drinking water source. Agriculture, commerce, and industry also depend heavily on groundwater. Historically, the majority of Iowa’s groundwater has been usable for these purposes without treatment. Protection of groundwater is essential to the health, welfare, and economic prosperity of all citizens of the state.
2. Many activities of humans, including the manufacturing, storing, handling, and application to land of pesticides and fertilizers; the disposal of solid and hazardous wastes; the storing and handling of hazardous substances; and the improper construction and the abandonment of wells and septic systems have resulted in groundwater contamination throughout the state.
3. Knowledge of the health effects of contaminants varies greatly. The long-term detriment to human health from synthetic organic compounds in particular is largely unknown but is of concern.
4. Any detectable quantity of a synthetic organic compound in groundwater is unnatural and undesirable.

5. The movement of groundwater, and the movement of contaminants in groundwater, are often difficult to ascertain or control. Decontamination is difficult and expensive to accomplish. Therefore, preventing contamination of groundwater is of paramount importance.

[87 Acts, ch 225, §103](#)

455E.4 Groundwater protection goal.

The intent of the state is to prevent contamination of groundwater from point and nonpoint sources of contamination to the maximum extent practical, and if necessary to restore the groundwater to a potable state, regardless of present condition, use, or characteristics.

[87 Acts, ch 225, §104](#)

Referred to in [§455B.307](#)

455E.5 Groundwater protection policies.

1. It is the policy of the state to prevent further contamination of groundwater from any source to the maximum extent practical.

2. The discovery of any groundwater contamination shall require appropriate actions to prevent further contamination. These actions may consist of investigation and evaluation or enforcement actions if necessary to stop further contamination as required under [chapter 455B](#).

3. All persons in the state have the right to have their lawful use of groundwater unimpaired by the activities of any person which render the water unsafe or unpotable.

4. All persons in the state have the duty to conduct their activities so as to prevent the release of contaminants into groundwater.

5. Documentation of any contaminant which presents a significant risk to human health, the environment, or the quality of life shall result in either passive or active cleanup. In both cases, the best technology available or best management practices shall be utilized. The department shall adopt rules which specify the general guidelines for determining the cleanup actions necessary to meet the goals of the state and the general procedures for determining the parties responsible by July 1, 1989. Until the rules are adopted, the absence of rules shall not be raised as a defense to an order to clean up a source of contamination.

6. Adopting health-related groundwater standards may be of benefit in the overall groundwater protection or other regulatory efforts of the state. However, the existence of such standards, or lack of them, shall not be construed or utilized in derogation of the groundwater protection goal and protection policies of the state.

7. The department shall take actions necessary to promote and assure public confidence and public awareness. In pursuing this goal, the department shall make public the results of groundwater investigations.

8. Education of the people of the state is necessary to preserve and restore groundwater quality. The content of this groundwater protection education must assign obligations, call for sacrifice, and change some current values. Educational efforts should strive to establish a conservation ethic among Iowans and should encourage each Iowan to go beyond enlightened self-interest in the protection of groundwater quality.

[87 Acts, ch 225, §105](#)

455E.6 Legal effects — liability.

1. [This chapter](#) supplements other legal authority and shall not enlarge, restrict, or abrogate any remedy which any person or class of persons may have under other statutory or common law and which serves the purpose of groundwater protection. An activity that does not violate [chapter 455B](#) or [chapter 459, subchapters II and III](#), does not violate [this chapter](#). In the event of a conflict between [this section](#) and another provision of [this chapter](#), it is the intent of the general assembly that [this section](#) prevails.

2. Liability shall not be imposed upon an agricultural producer for the costs of active cleanup, or for any damages associated with or resulting from the detection in the groundwater of any quantity of nitrates provided that application has been in compliance with soil test results and that the applicator has properly complied with label instructions

for application of the fertilizer. Compliance with the above provisions may be raised as an affirmative defense by an agricultural producer.

3. Liability shall not be imposed upon an agricultural producer for costs of active cleanup, or for any damages associated with or resulting from the detection in the groundwater of pesticide provided that the applicator has properly complied with label instructions for application of the pesticide and that the applicator has a valid appropriate applicator's license. Compliance with the above provisions may be raised as an affirmative defense by an agricultural producer.

[87 Acts, ch 225, §106](#); [2018 Acts, ch 1041, §127](#)

455E.7 Primary administrative agency.

The department is designated as the agency to coordinate and administer groundwater protection programs for the state.

[87 Acts, ch 225, §107](#)

455E.8 Powers and duties of the director.

In addition to other groundwater protection duties, the director, in cooperation with soil and water conservation district commissioners and with other state and local agencies, shall:

1. Develop and administer a comprehensive groundwater monitoring network, including point of use, point of contamination, and problem assessment monitoring sites across the state, and the assessment of ambient groundwater quality.

2. Complete groundwater hazard mapping of the state and make the results available to state and local planning organizations by July 1, 1991.

3. Establish a system or systems within the department for collecting, evaluating, and disseminating groundwater quality data and information.

4. Develop and maintain a natural resource geographic information system and comprehensive water resource data system. The system shall be accessible to the public.

5. Develop and adopt by administrative rule, criteria for evaluating groundwater protection programs by July 1, 1988.

6. Take any action authorized by law, including the investigatory and enforcement actions authorized by [chapters 455B](#) and [459, subchapters I, II, III, IV, and VI](#), to implement the provisions of [this chapter](#) and the rules adopted pursuant to [this chapter](#).

7. Disseminate data and information, relative to [this chapter](#), to the public to the greatest extent practical.

8. Develop a program, in consultation with the department of education and the department of environmental education of the university of northern Iowa, regarding water quality issues which shall be included in the minimum program required in grades seven and eight pursuant to rules adopted by the state board of education under [section 256.11, subsection 4](#).

[87 Acts, ch 225, §108](#); [88 Acts, ch 1262, §8](#); [2013 Acts, ch 12, §25](#)

Referred to in [§455E.11](#)

455E.9 Powers and duties of the commission.

1. The commission shall adopt rules to implement [this chapter](#).

2. When groundwater standards are proposed by the commission, all available information to develop the standards shall be considered, including federal regulations and all relevant information gathered from other sources. A public hearing shall be held in each congressional district prior to the submittal of a report on standards to the general assembly. This report on how groundwater standards may be a part of a groundwater protection program shall be submitted by the department to the general assembly for its consideration by January 1, 1989.

[87 Acts, ch 225, §109](#)

455E.10 Joint duties — local authority.

1. All state agencies shall consider groundwater protection policies in the administration of their programs. Local agencies shall consider groundwater protection policies in their

programs. All agencies shall cooperate with the department in disseminating public information and education materials concerning the use and protection of groundwater, in collecting groundwater management data, and in conducting research on technologies to prevent or remedy contamination of groundwater.

2. Political subdivisions are authorized and encouraged to implement groundwater protection policies within their respective jurisdictions, provided that implementation is at least as stringent but consistent with the rules of the department.

[87 Acts, ch 225, §110](#)

455E.11 Groundwater protection fund established — appropriations.

1. a. A groundwater protection fund is created in the state treasury. Moneys received from sources designated for purposes related to groundwater monitoring and groundwater quality standards shall be deposited in the fund. Notwithstanding [section 8.33](#), any unexpended balances in the groundwater protection fund and in any of the accounts within the groundwater protection fund at the end of each fiscal year shall be retained in the fund and the respective accounts within the fund. Notwithstanding [section 12C.7, subsection 2](#), interest or earnings on investments or time deposits of the moneys in the groundwater protection fund or in any of the accounts within the groundwater protection fund shall be credited to the groundwater protection fund or the respective accounts within the groundwater protection fund. The fund may be used for the purposes established for each account within the fund.

b. The director shall include in the departmental budget prepared pursuant to [section 455A.4, subsection 1](#), paragraph “c”, a proposal for the use of groundwater protection fund moneys, and a report of the uses of the groundwater protection fund moneys appropriated in the previous fiscal year.

c. The secretary of agriculture shall submit the report on a biennial basis to the governor in the same manner as provided in [section 7A.3](#). The report shall include a proposal for the use of groundwater protection fund moneys, and uses of the groundwater protection fund moneys appropriated in the two previous fiscal years.

2. The following accounts are created within the groundwater protection fund:

a. A solid waste account. Moneys received from the tonnage fee imposed under [section 455B.310](#) and from other sources designated for environmental protection purposes in relation to sanitary disposal projects shall be deposited in the solid waste account. Moneys shall be allocated as follows:

(1) After the one dollar and fifty-five cents is allocated pursuant to subparagraph (2), the remaining moneys from the tonnage fee shall be used for funding alternatives to landfills and shall be allocated as follows:

(a) Fifty thousand dollars to the department to implement the special waste authorization program.

(b) One hundred sixty-five thousand dollars to the department to be used for the by-products and waste search service at the university of northern Iowa.

(c) Up to thirty percent of the fees remitted shall be used for grants to environmental management systems as provided in [section 455J.7](#).

(d) Not more than four hundred thousand dollars to the department for purposes of providing funding assistance to eligible communities to address abandoned buildings by promoting waste abatement, diversion, selective dismantlement of building components, and recycling. Eligible communities include a city with a population of five thousand or fewer. Eligible costs for program assistance include but are not limited to asbestos and other hazardous material abatement and removal, the recovery processing of recyclable or reusable material through the selective dismantlement of abandoned buildings, and reimbursement for purchased recycled content materials used in the renovation of buildings.

(e) The balance of the remaining funds shall be used by the department to develop and implement demonstration projects for landfill alternatives to solid waste disposal including recycling programs. These funds may also be used to assist planning areas which have not been designated as environmental management systems in meeting the designation requirements of [section 455J.3](#).

- (2) One dollar and fifty-five cents shall be used as follows:
- (a) Forty-eight percent to the department to be used for the following purposes:
 - (i) Eight thousand dollars shall be transferred to the department of health and human services for departmental duties required under [sections 135.11](#) and [139A.21](#).
 - (ii) The administration and enforcement of a groundwater monitoring program and other required programs relating to solid waste management.
 - (iii) The development of guidelines for groundwater monitoring at sanitary disposal projects as defined in [section 455B.301](#).
 - (iv) The waste management assistance program of the department.
 - (b) Sixteen percent to the university of northern Iowa to develop and maintain the Iowa waste reduction center for the safe and economic management of solid waste and hazardous substances.
 - (c) Six and one-half percent for the department to establish a program to provide competitive grants to regional coordinating councils for projects in regional economic development centers related to a by-products and waste exchange system. Grantees under this program shall coordinate activities with other available state or multistate waste exchanges, including but not limited to the by-products and waste search service at the university of northern Iowa. The department shall consult with the economic development authority and the waste reduction center at the university of northern Iowa in establishing criteria for and the awarding of grants under this program. The department shall expend not more than thirty thousand dollars of the moneys appropriated under this subparagraph division to contract with the by-products and waste search service at the university of northern Iowa to provide training and other technical services to grantees under the program. If regional economic development centers cease to exist, the department shall transfer existing contracts to one or more community colleges or councils of governments and shall revise the criteria and rules for this program to allow community colleges or councils of governments to be applicants for competitive grants.
 - (d) Three percent to the department to establish permanent household hazardous materials collection sites so that both urban and rural populations are served and so that collection services are available to the public on a regular basis. Beginning July 1, 2008, any moneys collected pursuant to this subparagraph division that remain unexpended at the end of a fiscal year for establishment of permanent household hazardous materials collection sites shall be used for purposes of subparagraph division (e).
 - (e) Nine and one-half percent to the department for payment of collection and disposal costs related to household hazardous materials collection programs.
 - (f) Eight and one-half percent to the department to support special events for household hazardous materials collection or other efforts of the department to support the household hazardous materials program, permanent household hazardous material collection systems, and for the natural resource geographic information system required under [section 455E.8, subsection 4](#).
 - (g) Three percent for the economic development authority to establish, in cooperation with the department of natural resources, a marketing initiative to assist Iowa businesses producing recycling or reclamation equipment or services, recyclable products, or products from recycled materials to expand into national markets. Efforts shall include the reuse and recycling of sawdust.
 - (h) Five and one-half percent to the department for the provision of assistance to public and private entities in developing and implementing waste reduction and minimization programs for Iowa industries.
 - b. An agriculture management account. Moneys collected from the groundwater protection fee levied pursuant to [section 200.8, subsection 3](#), the portion of the fees collected pursuant to [section 206.8, subsection 2](#), and [section 206.12, subsection 3](#), and other moneys designated for the purpose of agriculture management shall be deposited in the agriculture management account. The agriculture management account shall be used for the following purposes:
 - (1) Nine thousand dollars of the account is appropriated to the department of health and human services for carrying out the departmental duties under [sections 135.11](#) and [139A.21](#).

(2) Of the remaining moneys in the account:

(a) Thirty-five percent is appropriated annually to the Iowa nutrient research fund created in [section 466B.46](#). Of the moneys appropriated pursuant to this subparagraph division, five hundred thousand dollars or one-third of the moneys appropriated, whichever is higher, shall be deposited in the water quality initiative fund created in [section 466B.45](#) for purposes of supporting the water quality initiative administered by the division of soil conservation and water quality as provided in [section 466B.42](#).

(b) Two percent is appropriated annually to the department and, except for administrative expenses, is transferred to the department of health and human services for the purpose of administering grants to counties and conducting oversight of county-based programs for the testing of private rural water supply wells, private rural water supply well sealing, and the proper closure of private rural abandoned wells and cisterns. Not more than thirty-five percent of the moneys is appropriated annually for grants to counties for the purpose of conducting programs of private rural water supply testing, private rural water supply well sealing, the proper closure of private rural abandoned wells and cisterns, or any combination thereof. An amount agreed to by the department of natural resources and the department of health and human services shall be retained by the department of natural resources for administrative expenses.

(i) A county applying for grants under this subparagraph division shall submit only one application. To be eligible for a grant, a county must have adopted standards for private water supply and private disposal facilities at least as stringent as the standards adopted by the commission. During each fiscal year, the amount granted each eligible applicant shall be the total funds available divided by the number of eligible counties applying. Upon receipt of the grant, the county may apply the funds to any one or more of the county-based programs for the testing of private rural water supply wells, private rural water supply well sealing, and the proper closure of private rural abandoned wells and cisterns.

(ii) Not more than six percent of the moneys is appropriated annually to the state hygienic laboratory to assist in well testing.

(iii) For purposes of this subparagraph division, “*cistern*” means an artificial reservoir constructed underground for the purpose of storing rainwater.

(c) The department shall allocate a sum not to exceed seventy-nine thousand dollars of the moneys appropriated for the fiscal year beginning July 1, 1987, and ending June 30, 1988, for the preparation of a detailed report and plan for the establishment on July 1, 1988, of the center for health effects of environmental contamination. The plan for establishing the center shall be presented to the general assembly on or before January 15, 1988. The report shall include the assemblage of all existing data relating to Iowa drinking water supplies, including characteristics of source, treatment, presence of contaminants, precise location, and usage patterns to facilitate data retrieval and use in research; and detailed organizational plans, research objectives, and budget projections for the anticipated functions of the center in subsequent years. The department may allocate annually a sum not to exceed nine percent of the moneys of the account to the center, beginning July 1, 1988.

(d) (i) Thirteen percent of the moneys is appropriated annually to the department of agriculture and land stewardship for financial incentive programs related to agricultural drainage wells and sinkholes, for studies and administrative costs relating to sinkholes and agricultural drainage wells programs. Of the moneys allocated for financial incentive programs, the department may reimburse landowners for engineering costs associated with voluntarily closing agricultural drainage wells. The financial incentives allocated for voluntary closing of agricultural drainage wells shall be provided on a cost-share basis which shall not exceed fifty percent of the estimated cost or fifty percent of the actual cost, whichever is less. Engineering costs do not include construction costs, including costs associated with earth moving.

(ii) Notwithstanding subparagraph subdivision (i), the department of agriculture and land stewardship may use all or a portion of the moneys appropriated in that subparagraph subdivision to support programs, projects, and activities related to improving the quality of surface water as well as groundwater.

c. A household hazardous waste account.

(1) The moneys collected pursuant to [section 455F.7](#) and moneys collected pursuant to [section 29C.8A](#) which are designated for deposit shall be deposited in the household hazardous waste account. Two thousand dollars is appropriated annually to the department of health and human services to carry out departmental duties under [sections 135.11](#) and [139A.21](#). The remainder of the account shall be used to fund the efforts of the department to support a collection system for household hazardous materials, including public education programs, training, and consultation of local governments in the establishment and operation of permanent collection systems, and the management of collection sites, education programs, and other activities pursuant to [chapter 455F](#), including the administration of the household hazardous materials retailer permit program by the department of revenue.

(2) The department shall submit to the general assembly, annually on or before January 1, an itemized report which includes but is not limited to the total amount of moneys collected and the sources of the moneys collected, the amount of moneys expended for administration of the programs funded within the account, results of the efforts of the department to support a collection system for household hazardous materials pursuant to [chapter 455F](#), and an itemization of any other expenditures made within the previous fiscal year.

d. A storage tank management account. The account shall consist of moneys appropriated to, transferred to, or deposited in the account, including fees collected pursuant to [section 455B.473](#), [subsection 5](#), [section 455B.477](#), [subsection 7](#), and [section 455B.479](#). Moneys in the account shall be expended for all of the following purposes:

(1) One thousand dollars is appropriated annually to the department of health and human services to carry out departmental duties under [sections 135.11](#) and [139A.21](#).

(2) Moneys transferred under [2024 Iowa Acts, ch. 1054](#), to the account are appropriated for the following purposes until such moneys are fully expended:

(a) For reimbursement to tank owners or operators for all or part of the costs of a corrective action for a petroleum release.

(b) For the annual appropriation to the department of agriculture and land stewardship in the amount of two hundred fifty thousand dollars for the purpose of inspecting fuel quality at pipeline terminals and renewable fuel production facilities, including associated salaries, support, maintenance, and miscellaneous purposes.

(c) For permanent closure of an underground storage tank system under a remedial program pursuant to [chapter 455B, subchapter IV, part 8](#), for additional assessment and corrective action arising out of releases at sites for which a certificate of no further action has been issued, and for tank operator training. At least three million dollars of the total moneys expended pursuant to this subparagraph shall be expended for the purposes described in this subparagraph division, but not more than fifty thousand dollars shall be utilized for operator training each fiscal year.

(3) The moneys remaining in the account after the appropriations in subparagraphs (1) and (2) are appropriated to the department of natural resources for the administration of a state storage tank program pursuant to [chapter 455B, subchapter IV, part 8](#), and for programs that reduce the potential for harm to the environment and the public health from storage tanks.

[87 Acts, ch 225, §111](#); [88 Acts, ch 1169, §9 – 13](#); [88 Acts, ch 1188, §2, 3](#); [88 Acts, ch 1190, §3](#); [89 Acts, ch 131, §41](#); [89 Acts, ch 272, §38](#); [89 Acts, ch 311, §28](#); [90 Acts, ch 1255, §30, 31](#); [90 Acts, ch 1260, §27, 28](#); [91 Acts, ch 257, §6](#); [91 Acts, ch 268, §237](#); [92 Acts, ch 1215, §18](#); [92 Acts, ch 1239, §21](#); [93 Acts, ch 176, §46](#); [94 Acts, ch 1023, §112](#); [94 Acts, ch 1173, §36](#); [94 Acts, ch 1177, §5](#); [95 Acts, ch 80, §3](#); [95 Acts, ch 97, §1](#); [95 Acts, ch 216, §35](#); [98 Acts, ch 1220, §22](#); [2000 Acts, ch 1066, §46 – 49](#); [2000 Acts, ch 1086, §1](#); [2001 Acts, ch 7, §13, 14](#); [2001 Acts, ch 24, §54](#); [2001 Acts, ch 124, §3 – 6](#); [2001 Acts, ch 129, §6](#); [2002 Acts, ch 1119, §176](#); [2002 Acts, ch 1162, §60 – 62](#); [2003 Acts, ch 145, §286](#); [2004 Acts, ch 1082, §5](#); [2004 Acts, ch 1101, §64](#); [2005 Acts, ch 33, §2, 3](#); [2006 Acts, ch 1178, §28](#); [2008 Acts, ch 1109, §3](#); [2008 Acts, ch 1126, §17, 33](#); [2009 Acts, ch 41, §136, 263](#); [2010 Acts, ch 1191, §24](#); [2010 Acts, ch 1193, §176](#); [2011 Acts, ch 25, §53, 110, 143](#); [2011 Acts, ch 118, §85, 89](#); [2011 Acts, ch 128, §23, 24, 60](#); [2014 Acts, ch 1026, §100, 143](#); [2015 Acts, ch 30, §137](#); [2016 Acts, ch 1010, §1, 2](#); [2017 Acts, ch 45, §1, 2](#); [2017 Acts, ch 168, §31](#); [2019 Acts, ch 128, §9](#); [2020 Acts, ch 1063, §244](#); [2021 Acts, ch](#)

76, §150; 2023 Acts, ch 19, §1162 – 1166; 2023 Acts, ch 109, §8; 2024 Acts, ch 1054, §10 – 12, 18; 2025 Acts, ch 134, §25

Referred to in §135.11, 206.8, 206.12, 323.1, 455B.310, 455B.311, 455B.471, 455B.472A, 455B.473, 455B.477, 455B.479, 455D.3, 455F.7, 455F.8A, 455J.7, 456B.11, 460.302, 460.305, 466B.46

See Iowa Acts for special provisions relating to appropriations in a given year
Subsection 2, paragraph b, unnumbered paragraph 1 amended