

455B.474 Duties of commission rules.

The commission shall adopt rules pursuant to chapter 17A relating to:

1. Release detection, prevention, and correction as may be necessary to protect human health and the environment, applicable to all owners and operators of underground storage tanks. The rules shall include, but are not limited to, requirements for:

a. Maintaining a leak detection system, an inventory control system with a tank testing, or a comparable system or method designed to identify releases in a manner consistent with the protection of human health and the environment.

b. Maintaining records of any monitoring or leak detection system, inventory control system, or tank testing or comparable system.

c. Reporting of any releases and corrective action taken in response to a release from an underground storage tank.

d. Establishing criteria for classifying sites according to the release of a regulated substance in connection with an underground storage tank.

(1) The classification system shall consider the actual or potential threat to public health and safety and to the environment posed by the contaminated site and shall take into account relevant factors, including the presence of contamination in soils, groundwaters, and surface waters, and the effect of conduits, barriers, and distances on the contamination found in those areas according to the following factors:

(a) Soils shall be evaluated based upon the depth of the existing contamination and its distance from the ground surface to the contamination zone and the contamination zone to the groundwater; the soil type and permeability, including whether the contamination exists in clay, till or sand and gravel; and the variability of the soils, whether the contamination exists in soils of natural variability or in a disturbed area.

(b) Groundwaters shall be evaluated based upon the depth of the contamination and its distance from the ground surface to the groundwater and from the contamination zone to the groundwater; the flow pattern of the groundwater, the direction of the flow in relation to the contamination zone and the interconnection of the groundwater with the surface or with surface water and with other groundwater sources; the nature of the groundwater, whether it is located in a high yield aquifer, an isolated, low yield aquifer, or in a transient saturation zone; and use of the groundwater, whether it is used as a drinking water source for public or private drinking water supplies, for livestock watering, or for commercial and industrial processing.

(c) Surface water shall be evaluated based upon its location, its distance in relation to the contamination zone, the groundwater system and flow, and its location in relation to surface drainage.

(d) The effect of conduits, barriers, and distances on the contamination found in soils, groundwaters, and surface waters. Consideration should be given to the following: the effect of contamination on conduits such as wells, utility lines, tile lines and drainage systems; the effect of conduits on the transport of the contamination; whether a well is active or abandoned; what function the utility line serves, whether it is a sewer line, a water distribution line, telephone line, or other line; the existence of barriers such as buildings and other structures, pavement, and natural barriers, including rock formations and ravines; and the distance which separates the contamination found in the soils, groundwaters, or surface waters from the conduits and barriers.

(2) A site shall be classified as either high risk, low risk, or no action required.

(a) A site shall be considered high risk when it is determined that contamination from the site presents an unreasonable risk to public health and safety or the environment under any of the following conditions:

(i) Contamination is affecting or likely to affect groundwater which is used as a source water for public or private water supplies, to a level rendering them unsafe for human consumption.

(ii) Contamination is actually affecting or is likely to affect surface water bodies to a level where surface water quality standards, under section 455B.173, will be exceeded.

(iii) Harmful or explosive concentrations of petroleum substances or vapors affecting structures or utility installations exist or are likely to occur.

(b) A site shall be considered low risk under any of the following conditions:

(i) Contamination is present and is affecting groundwater, but high risk conditions do not exist and are not likely to occur.

(ii) Contamination is above action level standards, but high risk conditions do not exist and are not likely to occur.

(c) A site shall be considered no action required if contamination is below action level standards and high or low risk conditions do not exist and are not likely to occur.

(d) For purposes of classifying a site as either low risk or no action required, the department shall rely upon the example tier one risk-based screening level look-up table of ASTM (American society for testing and materials) international's emergency standard, ES38-94, or other look-up table as determined by the department by rule.

(e) A site cleanup report which classifies a site as either high risk, low risk, or no action required shall be submitted by a groundwater professional to the department with a certification that the report complies with the provisions of this chapter and rules adopted by the department. The report shall be determinative of the appropriate classification of the site. However, if the report is found to be inaccurate or incomplete, and if based upon information in the report the risk classification of the site cannot be reasonably determined by the department based upon industry standards, the department shall work with the groundwater professional to obtain the additional information necessary to appropriately classify the site. A groundwater professional who knowingly or intentionally makes a false statement or misrepresentation which results in a mistaken classification of a site shall be guilty of a serious misdemeanor and shall have the groundwater professional's certification revoked under section 455G.18.

e. The closure of tanks to prevent any future release of a regulated substance into the environment. If consistent with federal environmental protection agency technical standard regulations, state tank closure rules shall include, at the tank owner's election, an option to fill the tank with an inert material. Removal of a tank shall not be required if the tank is filled with an inert material pursuant to department of natural resources rules. A tank closed, or to be closed and which is actually closed, within one year of May 13, 1988, shall be required to complete monitoring or testing as required by the department to ensure that the tank did not leak prior to closure, but shall not be required to have a monitoring system installed.

f. Establishing corrective action response requirements for the release of a regulated substance in connection with an underground storage tank. The corrective action response requirements shall include, but not be limited to, all of the following:

(1) A requirement that the site cleanup report do all of the following:

- (a) Identify the nature and level of contamination resulting from the release.
 - (b) Provide supporting data and a recommendation of the degree of risk posed by the site relative to the site classification system adopted pursuant to paragraph "d".
 - (c) Provide supporting data and a recommendation of the need for corrective action.
 - (d) Identify the corrective action options which shall address the practical feasibility of implementation, costs, expected length of time to implement, and environmental benefits.
- (2) To the fullest extent practicable, allow for the use of generally available hydrological, geological, topographical, and geographical information and minimize site specific testing in preparation of the site cleanup report.
- (3) Require that at a minimum the source of a release be stopped either by repairing, upgrading, or closing the tank and that free product be removed or contained on site.
- (4) High risk sites shall be addressed pursuant to a corrective action design report, as submitted by a groundwater professional and as accepted by the department. The corrective action design report shall determine the most appropriate response to the high risk conditions presented. The appropriate corrective action response shall be based upon industry standards and shall take into account the following:
- (a) The extent of remediation required to reclassify the site as a low risk site.
 - (b) The most appropriate exposure scenarios based upon residential, commercial, or industrial use or other predefined industry accepted scenarios.
 - (c) Exposure pathway characterizations including contaminant sources, transport mechanisms, and exposure pathways.
 - (d) Affected human or environmental receptors and exposure scenarios based on current and projected use scenarios.
 - (e) Risk-based corrective action assessment principles which identify the risks presented to the public health and safety or the environment by each release in a manner that will protect the public health and safety or the environment using a tiered procedure consistent with ASTM (American society for testing and materials) international's emergency standard, ES38-94.
 - (f) Other relevant site specific factors such as the feasibility of available technologies, existing background contaminant levels, current and planned future uses, ecological, aesthetic, and other relevant criteria, and the applicability and availability of engineering and institutional controls, including an environmental covenant as established by chapter 455I.
 - (g) Remediation shall not be required on a site that does not present an increased cancer risk at the point of exposure of one in one million for residential areas or one in ten thousand for nonresidential areas.
- (5) A corrective action design report submitted by a groundwater professional shall be accepted by the department and shall be primarily relied upon by the department to determine the corrective action response requirements of the site. However, if the corrective action design report is found to be inaccurate or incomplete, and if based upon information in the report the appropriate corrective action response cannot be reasonably determined by the department based upon industry standards, the department shall work with the groundwater professional to obtain the additional information necessary to appropriately determine the corrective action response requirements. A groundwater professional who knowingly or intentionally makes a

false statement or misrepresentation which results in an improper or incorrect corrective action response shall be guilty of a serious misdemeanor and shall have the groundwater professional's certification revoked under section 455G.18.

(6) Low risk sites shall be monitored as deemed necessary by the department consistent with industry standards. Monitoring shall not be required on a site which has received a no further action certificate.

(7) An owner or operator may elect to proceed with additional corrective action on the site. However, any action taken in addition to that required pursuant to this paragraph "f" shall be solely at the expense of the owner or operator and shall not be considered corrective action for purposes of section 455G.9.

(8) Notwithstanding other provisions to the contrary and to the extent permitted by federal law, the department shall allow for bioremediation of soils and groundwater. For purposes of this subparagraph, "bioremediation" means the use of biological organisms, including microorganisms or plants, to degrade organic pollutants to common natural products.

(9) Replacement or upgrade of a tank on a site classified as a high or low risk site shall be equipped with a secondary containment system with monitoring of the space between the primary and secondary containment structures or other board approved tank system or methodology.

(10) The commission and the board shall cooperate to ensure that remedial measures required by the corrective action rules adopted pursuant to this paragraph are reasonably cost-effective and shall, to the fullest extent possible, avoid duplicating and conflicting requirements.

(11) The director may order an owner or operator to immediately take all corrective actions deemed reasonable and necessary by the director if the corrective action is consistent with the prioritization rules adopted under this paragraph. Any order taken by the director pursuant to this subparagraph shall be reviewed at the next meeting of the environmental protection commission.

g. Specifying an adequate monitoring system to detect the presence of a leaking underground storage tank and to provide for protection of the groundwater resources for regulated tanks installed prior to January 14, 1987. The effective date of the rules adopted shall be January 14, 1989. In the event that federal regulations are adopted by the United States environmental protection agency after the commission has adopted state standards pursuant to this subsection, the commission shall immediately proceed to adopt rules consistent with those federal regulations adopted. Unless the federal environmental protection agency adopts final rules to the contrary, rules adopted pursuant to this section shall not apply to hydraulic lift reservoirs, such as for automobile hoists and elevators, containing hydraulic oil.

h. Issuing a no further action certificate or a monitoring certificate to the owner or operator of an underground storage tank site.

(1) A no further action certificate shall be issued by the department for a site which has been classified as a no further action site or which has been reclassified pursuant to completion of a corrective action plan or monitoring plan to be a no further action site.

(2) A monitoring certificate shall be issued by the department for a site which does not require remediation, but does require monitoring of the site.

(3) A certificate may be recorded with the county recorder. The owner or operator of a site who has been issued a certificate under this paragraph "h" or a subsequent purchaser of the site shall not be required to perform further corrective action solely because action standards are changed at a later date. A certificate shall not prevent the department from ordering corrective action of a new release.

In adopting the rules under this subsection, the commission may distinguish between types, classes, and ages of underground storage tanks. In making the distinctions, the commission may take into consideration factors including, but not limited to, location of the tanks, compatibility of a tank material with the soil and climate conditions, uses of the tanks, history of maintenance, age of the tanks, current industry recommended practices, national consensus codes, hydrogeology, water table, size of the tanks, quantity of regulated substances periodically deposited in or dispensed from the tank, the degree of risk presented by the regulated substance, the technical and managerial capability of the owners and operators, and the compatibility of the regulated substance and the materials of which the underground storage tank is fabricated.

The department may issue a variance, which includes an enforceable compliance schedule, from the mandatory monitoring requirement for an owner or operator who demonstrates plans for tank removal, replacement, or filling with an inert material pursuant to a department approved variance. A variance may be renewed for just cause.

2. The maintenance of evidence of financial responsibility as the director determines to be feasible and necessary for taking corrective action and for compensating third parties for bodily injury and property damage caused by release of a regulated substance from an underground storage tank.

a. Financial responsibility required by this subsection may be established in accordance with rules adopted by the commission by any one, or any combination, of the following methods: insurance, guarantee, surety bond, letter of credit, or qualification as a self-insurer. In adopting requirements under this subsection, the commission may specify policy or other contractual terms, conditions, or defenses which are necessary or are unacceptable in establishing the evidence of financial responsibility.

A person who establishes financial responsibility by self-insurance shall not require or shall not enforce an indemnification agreement with an operator or owner of the tank covered by the self-insurance obligation, unless the owner or operator has committed a substantial breach of a contract between the self-insurer and the owner or operator, and that substantial breach relates directly to the operation of the tank in an environmentally sound manner. This paragraph applies to all contracts between a self-insurer and an owner or operator entered into on or after May 5, 1989.

b. If the owner or operator is in bankruptcy, reorganization, or arrangement pursuant to the federal bankruptcy law or if jurisdiction in any state court or federal court cannot be obtained over an owner or operator likely to be solvent at the time of judgment, any claim arising from conduct for which evidence of financial responsibility must be provided under this subsection may be asserted directly against the guarantor providing the evidence of financial responsibility. In the case of action pursuant to this paragraph, the guarantor is entitled to invoke all rights and defenses which would have been available to the owner or operator if an action had been brought against the owner or operator by the claimant and which would have been available to the guarantor if an action had been brought against the guarantor by the owner or operator.

c. The total liability of a guarantor shall be limited to the aggregate amount which the guarantor has provided as evidence of financial responsibility to the owner or operator under this subsection. This subsection does not limit any other state or federal statutory, contractual, or common law liability of a guarantor to its owner or operator including, but not limited to, the liability of the guarantor for bad faith in negotiating or in failing to negotiate the settlement of any claim. This subsection does not diminish the liability of any person under section 107 or 111 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 or other applicable law.

d. For the purpose of this subsection, the term "*guarantor*" means any person, other than the owner or operator, who provides evidence of financial responsibility for an owner or operator under this subsection.

e. If an owner or operator is required to uncover or remove an underground storage tank based upon a determination of the department that the underground storage tank presents a hazard to the public health,

safety, or the environment, and if upon inspection of the tank the determination is unfounded, the state may reimburse reasonable costs incurred in the inspection of the tank. Claims for reimbursement shall be filed on forms provided by the commission. The commission shall adopt rules pursuant to chapter 17A relating to determinations of reasonableness in approval or rejection of claims in cases of dispute. Claims shall be paid from the general fund of the state. When any one of the tanks or the related pumps and piping at a multiple tank facility are found to be leaking, the state shall not reimburse costs for uncovering or removing any of the other tanks, piping, or pumps that are not found to be leaking.

3. Standards of performance for new underground storage tanks which shall include, but are not limited to, design, construction, installation, release detection, and compatibility standards. Until the effective date of the standards adopted by the commission and after January 1, 1986, a person shall not install an underground storage tank for the purpose of storing regulated substances unless the tank (whether of single or double wall construction) meets all the following conditions:

a. The tank will prevent release due to corrosion or structural failure for the operational life of the tank.

b. The tank is cathodically protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material, or designed in a manner to prevent the release or threatened release of any stored substance.

c. The material used in the construction or lining of the tank is compatible with the substance to be stored. If soil tests conducted in accordance with ASTM (American society for testing and materials) international's standard G 57-78 or another standard approved by the commission show that soil resistivity in an installation location is twelve thousand ohm/cm or more (unless a more stringent soil resistivity standard is adopted by rule of the commission), a storage tank without corrosion protection may be installed in that location until the effective date of the standards adopted by the commission and after January 1, 1986.

d. Rules adopted by the commission shall specify adequate monitoring systems to detect the presence of a leaking underground storage tank and to provide for protection of the groundwater resources from regulated tanks installed after January 14, 1987. In the event that federal regulations are adopted by the United States environmental protection agency after the commission has adopted state standards pursuant to this subsection, the commission shall immediately proceed to adopt rules consistent with those federal regulations adopted. Tanks installed on or after January 14, 1987, shall continue to be considered new tanks for purposes of this chapter and are subject to state monitoring requirements unless federal requirements are more restrictive.

4. The form and content of the written notices required by section 455B.473.

5. The duties of owners or operators of underground storage tanks to locate and abate the source of release of regulated substances, when in the judgment of the director, the local hydrology, geology and other relevant factors reasonably include a tank as a potential source.

6. Reporting requirements necessary to enable the department to maintain an accurate inventory of underground storage tanks.

7. Designation of regulated substances subject to this part, consistent with section 455B.471, subsection 8. The rules shall be at least as stringent as the regulations of the federal government pursuant to section 311, subsection b, paragraph 2, subparagraph A of the federal Water Pollution Control Act, 33 U.S.C. §1321(b)(2)(A), pursuant to section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §9602, pursuant to section 307, subsection a of the federal Water Pollution Control Act, 33 U.S.C. §1317(a), pursuant to section 112 of the Clean Air Act, 42 U.S.C. §7412, or pursuant to section 7 of the Toxic Substances Control Act, 15 U.S.C. §2606.

The rules adopted by the commission under this section shall be consistent with and shall not exceed the requirements of federal regulations relating to the regulation of underground storage tanks except as provided in subsection 1, paragraph "f" and subsection 3, paragraph "d". It is the intent of the general assembly that state rules adopted pursuant to subsection 1, paragraph "f" and subsection 3, paragraph "d" be consistent with and not more restrictive than federal regulations adopted by the United States environmental protection agency when those rules are adopted.

85 Acts, ch 162, § 4; 86 Acts, ch 1245, § 1899A; 87 Acts, ch 225, § 606; 88 Acts, ch 1244, § 47, 9; 89 Acts, ch 131, § 36, 37; 91 Acts, ch 252, § 5, 6; 92 Acts, ch 1163, § 95; 95 Acts, ch 215, §510; 2000 Acts, ch 1058, §44, 45; 2004 Acts, ch 1086, §106; 2005 Acts, ch 102, §2