



# Environmental Health Code

## Chapter 4

# Underground Storage Tanks

Board of Health Resolution No. 2010 – 4225

Adopted March 3, 2010

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**Section 1: Purpose and Authority**

The Tacoma-Pierce County Board of Health (BOH) finds that the health, safety, and welfare of Pierce County citizens will be promoted by the regulation of underground storage tank (UST) removal and decommissioning, and by regulating the release of hazardous materials into the environment from underground storage tanks.

- A. The purpose of these regulations is to protect the public health by:
1. Ensuring that contamination of soil, sediment, soil gas/vapor, groundwater, surface water, and air from the operation and management of underground storage tanks is properly remediated to meet the requirements of this chapter.
  2. Minimizing the risk to public health and the environment by hazardous materials released from underground storage tanks.
  3. Establishing the process and procedure for the removal and decommissioning of underground storage tanks in Pierce County.
  4. Establishing the process for application and approval for the removal and decommissioning of underground storage tanks in Pierce County.
  5. Establishing the process for the removal and cleanup of hazardous materials released from underground storage tanks.
  6. Establishing fees and penalties for the implementation and enforcement of this chapter.
- B. It is the specific intent of this chapter to place the obligation of complying with its requirements upon the underground storage tank owner and/or the underground storage tank site owner. No provision and no term used in this chapter is intended to impose any duty whatsoever upon the Tacoma-Pierce County Health Department (Health Department) or any of its officers or employees, for whom the implementation or enforcement of this chapter shall be discretionary and not mandatory.
- C. These regulations are adopted in accordance with the general authority granted in RCW 70.05.060 to protect public health. Pursuant to RCW 90.76.110, these regulations are not preempted by the state's underground storage tank regulations, Chapter 173-360 WAC; provided, if state and local regulations conflict, the more stringent shall apply.
- D. The health officer shall administer and enforce these regulations under the authority granted in RCW 70.05.060. The health officer is authorized to promulgate such additional rules, policies, standards or take such other action deemed necessary to carry out the purpose of these regulations.
- E. These rules and regulations apply to all areas under the jurisdiction of the Health Department.
- F. Pursuant to the authority granted by RCW 70.05.060, the Health Department may charge a fee and/or hourly rate to recover any costs incurred in administering this chapter.

- G. The standards and requirements of this chapter represent the minimum standards and requirements established to be protective of public health. At the determination of the health officer more protective measures may be required than those contained in this chapter.

## **Section 2: Definitions**

All words used in this chapter shall have their common definition, as used in context, unless a specific definition is set forth herein or in WAC 173-360-120. The definitions set forth in WAC 173-360-120 are incorporated herein by reference. The definitions set forth in this chapter shall control, followed by the definitions in WAC 173-360-120, and finally, the common definition. The definitions used in this chapter are intended to be used specific to this chapter and should not be used for defining words, terms, or phrases in any other chapter or section of the Environmental Health Code, unless specifically indicated otherwise in the text. Additional definitions of general application may be found in Chapter 1 of the Environmental Health Code.

**Abandoned Underground Storage Tank:** An underground storage tank that exhibits one or a combination of the following conditions: is not in use for more than three (3) months; or does not have a current Washington State Department of Ecology tank permit; or has been temporarily closed, in accordance with Washington Department of Ecology (Ecology) UST guidelines, for more than three (3) months.

**Clean Fill:** A fill material that contains no contaminants beyond what would normally be expected for that material and meets federal, state, and local fill guidelines, if applicable. Clean fill does not include materials that would be considered a solid waste or hazardous material as defined by state or local regulation.

**Contaminated or Contamination:** Any hazardous material that does not occur naturally or occurs at greater than natural background levels.

**Decommission:** To permanently take an UST out of service in accordance with the requirements of Section 4.B by:

- removing all material from the UST; and
- removing all vent pipes, fill pipes, and dispensers; and
- disconnecting and removing all ancillary lines; and
- capping of all remaining underground pipes if those components are allowed to be left in-situ by the health officer; and
- removing the underground storage tank from the tank basin.

**Facility:** All structures, contiguous land, appurtenances, and other improvements on the land used for recycling, reusing, reclaiming, transferring, storing, treating, disposing of, or otherwise handling hazardous material. Use of the term "facility" as described herein included underground tanks, including facilities which otherwise handle, use, dispose of, or store hazardous materials in containers or bulk. For purposes of this chapter, an existing facility means a facility that has been constructed prior to the effective date of this chapter.

**Groundwater:** Water in a saturated zone or stratum beneath the surface of land or below a surface water body.

**Hazardous Material:** Any substance or gas that is defined in Section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended (but not including any substance regulated as a hazardous waste under Subtitle C of the Federal Solid Waste Disposal Act, or a mixture of such hazardous waste and any other regulated substances); and petroleum, including crude oil or any fraction thereof, and petroleum-based substances such as but not limited to motor fuels, jet fuels, residual fuel oils, lubricants, petroleum solvents, and used oils, including substance such as propane and asphalt or any other petroleum product that is not liquid at standard conditions of temperature and pressure, and/or any liquid, solid, gas, or sludge which, when accidentally or deliberately released or when improperly used, stored, or disposed of, creates a condition which present a potential risk to human health or the environment.

**Heating Oil Tank:** An underground storage tank with a volume of 1,100 gallons or less used for the sole purpose of storing heating or fuel oil used in heating equipment, furnaces, and/or boilers located at the UST site.

**Inert:** The flammable, explosive, and human health threats have been eliminated by the removal of the underground storage tank contents; including but not limited to tank products, sands, concrete, foam, sludges, wastes, and hazardous volatile vapors.

**Operator:** Any person in control of or responsible for the facility.

**Person:** Any individual, trust, corporation, company, association, society, firm, partnership, joint stock company, municipality, or any state or federal public entity.

**Release:** Any spilling, leaking, emitting, discharging, escaping, leaching, or disposing from an underground storage tank into or onto soil, sediment, air, water, groundwater, or man-made structures or materials.

**Remediation:** Any action to identify, minimize, remove or treat a release or threatened release of hazardous materials to meet the requirements of Chapters 173-360 or 173-340 WAC, or this chapter, whichever is more protective of public health and the environment.

**Single Family Residence:** A structure designed and used solely for the purpose of a domicile by a single person or family.

**Site Closure:** The underground storage tank owner or the underground storage tank site owner has completed the underground storage tank decommissioning process in compliance with Section 4 and any associated contamination has been remediated to meet state and local cleanup standards.

**Tank:** A stationary device designed to contain an accumulation of hazardous material that is constructed of non-earthen materials (steel, plastic, concrete, etc.) that provide structural support.

**Tank Basin:** The hole, excavation, or trench where the underground storage tank was either wholly or partially buried.

**Underground Storage Tank or UST:** Any one or a combination of tanks, including underground pipes, fill ports, and dispensers connected thereto, that is used to contain an accumulation of hazardous materials, the volume of which, including the volume of underground pipes connected thereto, is ten percent or more beneath the surface of the ground. However, the following are exempt from the requirements of this chapter:

- Any tank that forms an integral part of an industrial or commercial process (flow-through process tank) through which there is a steady or uninterrupted flow of materials during the operation of the process, and subject to proper spill and management practices;
- Any on-site sewage disposal system or holding tank that serves as a method of storage, conveyance, treatment, or disposal of human or animal wastes;
- Any surface impoundment, pit, pond, or lagoon; and
- Heating oil tanks as defined in this chapter.

**Underground Storage Tank Owner:** Is the person who owns the underground storage tank. The underground storage tank owner and underground storage tank site owner may be the same person. When underground storage tank ownership is not clearly identified, the person responsible for meeting the requirements of this chapter shall be the underground storage tank site owner.

**Underground Storage Tank Site Owner:** Is the person who owns the parcel(s) of property where the underground storage tank is located. Where the underground storage tank is not clearly located on a defined parcel of land, the underground storage tank site owner shall be determined to be the property owner of the adjacent parcel originally served by the underground storage tank, or if an adjacent parcel was not served by the underground storage tank then the person having controlling interest in the property where the underground storage tank is located shall be determined to be the owner.

**Underground Storage Tank Site:** The location at which underground storage tanks are located and the area impacted by a release. An underground storage tank site encompasses all of the property within a contiguous ownership that is associated with the use of the USTs and, when a release has occurred, may include property that extends beyond a parcel where an UST is physically located.

### **Section 3: General Requirements**

- A. All activity related to the installation, use, and decommissioning underground storage tanks located within the jurisdiction of the Health Department shall be subject to the following general requirements.
1. The decommissioning of underground storage tanks shall meet the requirements defined in Section 4 of this chapter or Chapter 173- 360 WAC, whichever is more protective of public health and the environment.
  2. While in use, all USTs shall meet the performance standards set forth in this chapter or Chapters 173-340 and 173-360 WAC, whichever is more protective of public health and the environment. USTs in use that do not meet these standards shall;
    - a. Meet the remediation, management of waste stream, and reporting requirements of this chapter or Chapters 173-340 and 173-360 WAC, whichever is more protective of public health and the environment; or
    - b. Achieve site closure in compliance with the requirements of this chapter.
  3. All costs incurred by the Health Department in the application, implementation and enforcement of these regulations are the responsibility of the UST site owner.

4. All facilities and/or UST sites engaging in the decommissioning of an underground storage tank are required to achieve site closure in compliance with the requirements of this chapter.
5. It is unlawful for any person to remove or cause an underground storage tank to be removed or decommissioned in violation of this chapter.
6. It is unlawful for any person to engage in the decommissioning of an underground storage tank or the remediation of an UST site without first obtaining the required certification and/or licensing as required by the State of Washington and/or Health Department.

#### **Section 4: Requirements for Decommissioning USTs**

##### A. Decommissioning Permits.

1. A permit application to decommission an UST shall be made in writing on forms provided by the Health Department, and shall be accompanied by a fee in accordance with the fee schedule adopted by the BOH.
2. The permit application shall contain, but not be limited to, the following information;
  - a. The address and parcel number of the facility where the UST(s) is located;
  - b. The name, address, and telephone number of the UST owner and operator;
  - c. The name, address, and telephone number of the UST site owner;
  - d. The name, address, and telephone number of the person performing the tank decommissioning and the person performing the site assessment, and the company which that person(s) represent(s);
  - e. The actual or estimated age, dimensions, and number of gallons (capacity as designed) of the tank and a description of the tank's contents;
  - f. A description of the past and present use of the facility;
  - g. A site plan with the general facility layout;
  - h. The approximate date of tank removal or decommissioning.
  - i. The Health Department may, at the discretion of the health officer, request additional information that is necessary for the Health Department to make a site evaluation.
3. UST decommissioning permits shall be valid for 180 days from the date of issuance. A new permit shall be required if the UST(s) has not been decommissioned within 180 days.

4. The Health Department may revoke, at any time, an UST decommissioning permit if the Health Department determines that the original application and/or supplemental documentation is fraudulent in any manner or contains significant errors.
5. Underground storage tank sites will not receive Site Closure if an UST Decommissioning Permit has not been issued by the Health Department.

B. Underground Storage Tank Decommissioning.

1. An UST decommissioning schedule shall be provided to and approved by the Health Department at least seven (7) calendar days prior to any UST decommissioning activity.
2. Prior to UST removal from the tank basin, the tank and piping must be inert and receive fire marshal approval. Evidence of fire marshal approval shall be submitted to the Health Department.
3. The applicant must have all appropriate state or local permits prior to proceeding with tank decommissioning. The person conducting the tank decommissioning must be certified as required by the State of Washington in the area of tank decommissioning.
4. The UST is required to be removed from the ground and meet the handling requirements of Section 4.E (Management of Waste Stream), of this chapter. Material used to backfill the tank basin must be "clean fill" material as defined in this chapter.

C. Investigation and Characterization.

1. A Health Department representative may be present at the facility during any or all of the UST decommissioning and contamination removal process.
2. The UST site owner and/or UST owner, operator and/or the state certified UST decommissioner shall provide safe access in accordance with Washington State Department of Labor and Industry standards to all areas of the UST site and/or facility necessary for the Health Department representative to conduct an inspection of the tank's removal, and to collect air, water, soil, sediment, soil gas/vapor, or other media samples if necessary to determine the level and extent of contamination present.
3. A certified site assessor, as required by the State of Washington, shall conduct a site assessment for the purpose of determining if a release has occurred. The site assessment shall be performed consistent with Ecology's Guidance for Site Checks and Site Assessments for Underground Storage Tanks and/or the requirements of the Health Department.
4. If media contamination is found above limits established in Chapters 173-340 and/or 173-360 WAC, the UST owner and/or UST site owner shall investigate, characterize, and define the extent of contamination and meet the requirements of Section 4.D (Remediation), below. Unless the Health Department determines otherwise in writing, prior to commencing remediation the UST owner and/or UST site owner shall submit to the Health Department for review and approval a work plan detailing proposed investigation and remediation efforts, along with the accompanying review fee.

5. If groundwater contamination is suspected or confirmed, the Health Department will require a groundwater investigation consisting of a minimum of three groundwater-monitoring wells to determine the extent of groundwater contamination and to assess the efficacy of remedial actions. A groundwater investigation work plan along with the accompanying review fee shall be submitted to the Health Department for review and approval prior to well installation. The groundwater investigation work plan may be incorporated into the general site investigation/remediation work plan described above or it may be submitted as a singular document. The work plan shall, at a minimum, justify the proposed number, spatial placement, depth, construction, and monitoring frequency of the wells with respect to the contaminant release and hydrogeological features of the site. Quarterly monitoring shall be performed until a minimum of four consecutive quarters of data showing contaminant concentrations below respective cleanup standards have been achieved. All wells constructed for the purpose of investigating, treating, or withdrawing groundwater at an UST site shall meet the well registration, construction and decommissioning requirements for resource protection wells in Chapter 173-160 WAC. Collection, interpretation, and reporting of groundwater data must comply with applicable local, state, and federal regulations.

D. Remediation.

1. Remediation of UST-related contamination shall be completed under the direction of state certified personnel.
2. All soil, sediment, soil gas/vapor, groundwater, and/or surface water found to have contamination above the cleanup levels allowed by Chapter 173-340 WAC or this chapter, whichever is more protective of public health and the environment, shall be removed and disposed of, or treated to meet the substantive requirements of Chapter 173-340 WAC or this chapter, whichever is more protective of public health and the environment.
3. Remediation methods shall be described in a remediation work plan and approved by the Health Department at least 7 calendar days prior to any remediation activity, unless a previously arranged schedule for review and approval has been accepted by the Health Department. A work plan review fee will be required upon submission.
4. The minimum performance standard for on-site treatment of excavated soils shall be a 20% decrease in the contamination level present at each six (6) month measurement period, as measured against the initial contamination level.

For example: A 200 mg/kg decrease shall be required every measurement period for a contaminant initially present at a level of 1,000 mg/kg.

5. The maximum time allowed for on-site treatment of contaminated soils shall be no more than three (3) years from the date on-site treatment commences.
6. Contaminated soil not meeting the performance standard shall be removed from the site and disposed of in a manner that meets the waste stream management requirements of this chapter.

E. Management of Waste Stream.

1. Disposal of the underground storage tank, piping, dispensing components, contaminated soil, sediment, and groundwater shall be done at facilities permitted to accept these waste streams. These materials may not be transported to facilities that are not licensed or that are unable or unwilling to demonstrate lawful handling and management of these materials. Transport of soils with contamination above cleanup levels shall be disposed of at appropriately certified/licensed waste handling facilities.
2. On site management of the underground storage tank(s), piping, dispensing components, contaminated soil and groundwater shall be done in a manner that minimizes the potential of contaminating additional soils, sediment, soil gas/vapor, groundwater, surface water, air or any other media. Sites shall be managed in a manner that minimizes the threat of injury to on site personnel and restricts access to unauthorized personnel. Contaminated soils shall not be stored and/or treated on site without the prior approval of the Health Department. Management of contaminated soils on site shall include, but not be limited to:
  - a. An impervious barrier that is not subject to breakdown or deterioration by the contaminant must be put in place between the soil and ground surface; minimum barrier material thickness shall be 10 millimeters;
  - b. The storage/treatment area shall be surrounded by straw bales covered with plastic lining placed such that fluids shall not escape containment from the treatment area;
  - c. Measures, such as a temporary fencing, shall be constructed to prevent public access;
  - d. The soil pile shall be securely covered at all times with plastic sheeting to withstand windstorms. The plastic may be removed to enhance natural and assisted biodegradation (tilling, fertilization, etc.) when there is no precipitation;
  - e. The soil within the storage/treatment area shall be performance tested every six (6) months to monitor contaminant levels. A written report of the performance test shall be submitted to the Health Department within 30 days of the performance test;
  - f. If groundwater is present at a depth of less than 50 feet below ground surface at the point of contaminated soil storage/treatment, or if a drinking water well is within 200 feet of the storage/treatment area, a groundwater monitoring well(s) shall be placed within the UST site to monitor groundwater quality. Location of a groundwater monitoring well(s) shall be placed through mutual agreement between the UST site Owner or site manager and the Health Department; and
  - g. A plan for the final disposition of the soil shall be submitted and approved by the Health Department prior to the beginning of contaminated soil storage/treatment.
3. Materials or media (such as sand, concrete, foam) placed inside a closed or abandoned UST must be sampled and tested prior to removal to determine disposal options.

F. Reporting.

1. All UST sites under the jurisdiction of the Health Department must meet the following reporting standards.
  - a. Ongoing reporting, either in written, verbal or electronic form as allowed by the Health Department, must be provided to the Health Department at the time of significant phases of site activity, including but not limited to:
    - 1) Initial site assessment and characterization of UST excavation;
    - 2) Results of site characterization and the determination of contaminant boundaries;
    - 3) Results of soil, sediment, soil gas/vapor, and ground water investigations;
    - 4) Installation of site monitoring or remediation equipment;
    - 5) Waste stream management; and
    - 6) Any data generated from investigations at an UST site by either the UST Owner, Owners agent or an independent third party.
2. A final report must be provided to the Health Department within 90 days of the completion of tank decommissioning and any associated site remediation, unless an alternative reporting schedule has been authorized by the Health Department. The report must include results detailing the site assessment and remediation effort, site diagrams, all sample locations with test results, and other documentation as may be required by the Health Department in order to fully evaluate the site. Soil, sediment, soil gas/vapor, groundwater, surface water, and air sample test results provided to the Health Department must be accompanied by laboratory and chain-of-custody form documentation.

**Section 5: Site Closure**

- A. Site Closure constitutes full compliance with the requirements of this chapter.
- B. All Health Department reports, fees, and costs associated with the decommissioning of an UST shall be submitted to the Health Department prior to Site Closure.

**Section 6: Abandoned Tanks and Leaking Underground Storage Tanks**

- A. Upon discovery of an abandoned tank(s), the UST site owner shall decommission the UST(s) and perform any remediation necessary to meet the requirements of this chapter.
- B. If an UST that is in use is found to have released hazardous materials to the environment, then the UST shall be repaired or decommissioned and the UST site shall be remediated to meet the requirements of this chapter.

**Section 7: Waivers and Variances**

All waivers and variances of the UST regulations shall meet the requirements of Chapter 1 (Waivers and Variances), of the Environmental Health Code.

**Section 8: Enforcement**

- A. A notice of violation and/or certificate of non-compliance will be recorded on all properties in violation of, or failing to comply with, any of the provisions of this chapter.
- B. Anyone in violation or failing to comply with any of the provisions of this chapter or lawful order of the Health Department shall be subject to the enforcement provisions of Chapter 1.

**Section 9: Appeals**

Any person aggrieved by any decision or final order of the health officer shall have right to appeal such a decision or order. Such appeals shall follow the procedure outlined in Chapter 1 of the Environmental Health Code.

**Section 10: Severability**

The provisions of this section are hereby declared to be separate and severable, and the invalidity of any clause, sentence, paragraph, subdivision, section, or portion of this chapter or the invalidity of the application thereto to any person or circumstance shall not affect the validity of its application to other persons and circumstances.