

CHAPTER 1 STORAGE TANKS

PART A INTRODUCTION

Section 1. Authority. These standards are promulgated pursuant to the Wyoming Environmental Quality Act Statutes 35-11-101 through 35-11-1803, specifically, but not limited to, Wyoming Statutes 35-11-501 and 35-11-1414 through 35-11-1432.

Section 2. Codes and Standards Referenced in this Chapter.

(a) Wherever a Chapter is referenced, it means Wyoming Solid and Hazardous Waste Division Rules and Regulations, Chapter 1 Storage Tank Program, Storage Tanks, unless otherwise specified. Wherever a Part or Section is referenced, it means that Part or Section in this Chapter 1 unless otherwise specified.

(b) There are a number of places within this Chapter where codes and standards are referenced. There are also references to regulations issued by other agencies. The following apply to all such references in this Chapter:

(i) In all cases, the referenced codes, standards, and regulations are lengthy documents in and of themselves. Inserting the entire text of these documents into this Chapter would be unduly cumbersome and expensive.

(ii) The references to these codes, standards, and regulations in this Chapter fully identify the material by title and date, and any later amendments or editions are specifically not incorporated into this Chapter.

(iii) The department has obtained a complete copy of the code, standard, or regulation referenced in this Chapter and placed them in the Wyoming State Library. These materials can be checked out either directly from the State Library or through interlibrary loan from any Wyoming library, which is part of that system.

(iv) Each code, standard, or regulation referenced in this Chapter is published independently and is available from the publisher. The name, address and contact information for all such publishers are contained in Section 5. Copies may be obtained from the publisher.

(v) Copies of the codes, standards, or regulations referenced in this Chapter are also available at cost by contacting the Storage Tank Program, 307-777-7752.

(c) The full reference for all codes and standards is provided in this Section. The abbreviated reference is provided throughout the Chapter. When an abbreviated reference is encountered, refer to this Section for the full reference.

(i) A4A Airport Fuel Facilities Operations and Maintenance Guidance Manual, 2004.

(ii) American Petroleum Institute (API)

(A) API Recommended Practice 1007, "Loading and Unloading of MC 306/DOT 406 Cargo Tank Motor Vehicles, 2001."

(B) API Recommended Practice 1604, "Closure of Underground Petroleum Storage Tanks, Third Edition, March 1996; Reaffirmed December 2010."

(C) API Recommended Practice 1615, "Installation of Underground Petroleum Storage Systems, Fifth Edition, March 1996; Reaffirmed November 2011."

(D) API Recommended Practice 1626, "Storing and Handling Ethanol and Gasoline-Ethanol Blends at Distribution Terminals and Filling Stations, Second Edition, 2010."

(E) API Recommended Practice 2016, "Guidelines and Procedures for Entering and Cleaning Petroleum Storage Tanks, First Edition, August 2001."

(F) API Recommended Practice 2200, "Repairing Crude Oil, Liquefied Petroleum Gas, and Product Pipelines, Fifth Edition, 2015."

(G) API Specification 12D, "Specification for Field Welded Tanks for Storage of Production Liquids, Eleventh Edition, 2008."

(H) API Standard 620, "Design and Construction of Large, Welded Low-Pressure Storage Tanks, Twelfth Edition, 2013."

(I) API Standard 650, "Welded Steel Tank for Oil Storage, Twelfth Edition, 2013."

(J) API Standard 651, "Cathodic Protection of Aboveground Storage Tanks, Fourth Edition, 2014."

(K) API Standard 653, "Tank Inspection, Repair, Alteration, and Reconstruction, Fifth Edition, 2014."

(L) API Standard 1631, "Interior Lining and Periodic Inspection of Underground Storage Tanks, Fifth Edition, 2001."

(M) API Standard 2000, “Venting Atmospheric and Low-Pressure Storage Tanks, Seventh Edition, 2014.”

(N) API Standard 2015, “Safe Entry and Cleaning of Petroleum Storage Tanks, Planning and Managing Tank Entry From Decommissioning Through Recommissioning, Seventh Edition, 2014.”

(iii) American Society for Testing and Materials (ASTM)

(A) ASTM D6751, “Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels, 2015.”

(B) ASTM G158, “Standard Guide for Three Methods of Assessing Buried Steel Tanks, 2016.”

(iv) Code of Federal Regulations (CFR)

(A) 10 CFR Part 50, as published on January 1, 2016.

(B) 29 CFR Part 1910, as published on July 1, 2016.

(C) 40 CFR Part 112, as published on July 1, 2016.

(D) 40 CFR Part 136, as published on July 1, 2016.

(E) 40 CFR Part 141, as published on July 1, 2016.

(F) 40 CFR Part 261, as published on July 1, 2016.

(G) 40 CFR Part 280, as published on July 1, 2016.

(H) 40 CFR Part 302, as published on July 1, 2016.

(v) Fiberglass Tank and Pipe Institute

(A) Recommended Practice T-95-02, “Remanufacturing of Fiberglass Reinforced Plastic (FRP) Underground Storage Tanks, 1995.”

(B) Recommended Practice 2007-2, “Field Test Protocol for Testing the Annular Space of Installed Underground Fiberglass Double and Triple-Wall Tanks with Dry Annular Space, 2007.”

(vi) International Fire Code (IFC), 5704.2.7.3, 5704.2.3.1, 5704.2.3.2, and 5703.5, 2015.

(vii) National Association of Corrosion Engineers (NACE)

(A) NACE International Standard Practice SP0169-2013, "Control of External Corrosion on Underground or Submerged Metallic Piping Systems, 2013."

(B) NACE International Standard Practice SP0285-2011, "External Corrosion Control of Underground Storage Tank Systems by Cathodic Protection, 2011."

(C) NACE Standard SP0193-2016, "External Cathodic Protection of On-Grade Carbon Steel Storage Tank Bottoms, 2016."

(D) NACE International Test Method TM0101-2012, "Measurement Techniques Related to Criteria for Cathodic Protection of Underground Storage Tank Systems, 2012."

(E) NACE International Test Method TM0497-2012, "Measurement Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic Piping Systems, 2012."

(viii) National Fire Protection Association (NFPA)

(A) NFPA Standard 30, "Flammable and Combustible Liquids Code, 2015 Edition."

(B) NFPA Standard 30A, "Code for Motor Fuel Dispensing Facilities and Repair Garages, 2015 Edition."

(C) NFPA Standard 326, "Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair, 2015 Edition."

(D) NFPA Standard 385, "Standard for Tank Vehicles for Flammable and Combustible Liquids, 2017 Edition."

(ix) National Leak Prevention Association

(A) Standard 631, Chapter A, "Entry, Cleaning, Interior Inspection, Repair, and Lining of Underground Storage Tanks, 2009."

(B) Standard 631, Chapter C, "Internal Inspection of Steel Tanks for Retrofit of Cathodic Protection, 2009."

(x) Petroleum Equipment Institute (PEI)

(A) PEI RP100, “Recommended Practices for Installation of Underground Liquid Storage Systems, 2011.”

(B) PEI RP200, “Recommended Practices for Installation of Aboveground Storage Systems for Motor Vehicle Fueling, 2013.”

(C) PEI RP900, “Recommended Practices for the Inspection and Maintenance of UST Systems, 2008.”

(D) PEI RP1200, “Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities, 2017.”

(xi) Steel Tank Institute (STI)

(A) Association for Composite Tanks ACT-100-U®, Specification F894, “Specification for External Corrosion Protection of FRP Composite Steel Underground Storage Tanks, 2015.”

(B) Association for Composite Tanks ACT-100-U®, Specification F961, “Specification for External Corrosion Protection of Composite Steel Underground Storage Tanks, 2015.”

(C) STI Recommended Practice R012, “Recommended Practice for Interstitial Tightness Testing of Existing Underground Double Wall Steel Tanks, 2007.”

(D) STI Recommended Practice R051, Cathodic Protection Testing Procedures for STI-P3® USTs, 2006.”

(E) STI Recommended Practice R892, “Recommended Practice for Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and Dispensing Systems, 2006.”

(F) STI Recommended Practice R972, “Recommended Practice for the Addition of Supplemental Anodes to STI-P3® Tanks, 2010.”

(G) STI-P3® Specification and Manual for External Corrosion Protection of Underground Steel Storage Tanks, 2015.

(H) STI Specification F922, “Steel Tank Institute Specification for Permatank®, 2014.”

(I) STI Standard F841, “Standard for Dual Wall Underground Steel Storage Tanks, 2006.”

(xii) Underwriters Laboratories, Inc. (UL)

(A) UL Standard 58, “Standard for Safety for Steel Underground Tanks for Flammable and Combustible Liquids, Ninth Edition, 1996.”

(B) UL Standard 142, “Steel Aboveground Tanks for Flammable and Combustible Liquids, Ninth Edition, 2006.”

(C) UL Standard 567, “Standard for Emergency Breakaway Fittings, Swivel Connectors and Pipe-Connection Fittings for Petroleum Products and LP-Gas, Tenth Edition, 2014.”

(D) UL Standard 971, “Standard for Nonmetallic Underground Piping for Flammable Liquids, First Edition, 1995.”

(E) UL Standard 1316, “Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures, Second Edition, 1994.”

(F) UL Standard 1746, “Standard for External Corrosion Protection Systems for Steel Underground Storage Tanks, Third Edition, 2007.”

(G) UL Standard 2085, “Protected Aboveground Tanks for Flammable and Combustible Liquids, Second Edition, 1997.”

(H) UL Subject 971A, “Outline of Investigation for Metallic Underground Fuel Pipe, First Edition, 2006.”

(xiii) Underwriters Laboratories of Canada (UL of Canada)

(A) UL of Canada S603, “Standard for Steel Underground Tanks for Flammable and Combustible Liquids, 2014.”

(B) UL of Canada S603.1, “Standard for External Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids, 2014.”

(C) UL of Canada S615, “Standard for Reinforced Plastic Underground Tanks for Flammable and Combustible Liquids, 2014.”

(D) UL of Canada S631, “Standard for Isolating Bushings for Steel Underground Tanks Protected with External Corrosion Protection Systems, 2005.”

(E) UL of Canada S660, “Standard for Nonmetallic Underground Piping for Flammable and Combustible Liquids, 2008.”

(xiv) U.S. Department of Defense

(A) Directive 4140.25, "DoD Management Policy for Energy Commodities and Related Services, 2015."

(B) Unified Facilities Criteria (UFC) 3-460-01, "Petroleum Fuel Facilities, 2010."

(xv) U.S. Department of Health, Education, and Welfare, Criteria for a Recommended Standard, Working in Confined Spaces, December 1979.

Section 3. Purpose. The purpose of these rules and regulations is to:

(a) Establish a storage tank leak prevention program to prevent releases and to minimize health hazards and environmental damage should a release occur;

(b) Allow Wyoming to assume primacy of the U.S. Environmental Protection Agency's (EPA) underground storage tank (UST) program;

(c) Establish priorities for cleaning up releases from storage tank systems;

(d) Establish a procedure to determine environmental restoration standards;

(e) Provide underground storage tank system owners and/or operators with the option of financial responsibility coverage to help meet the federal requirements; and

(f) Provide aboveground storage tank system owners and/or operators with the option of financial responsibility coverage.

Section 4. Applicability. The requirements of this Chapter apply to all owners and/or operators of aboveground storage tank systems as defined in W.S. 35-11-1415(xi). Only aboveground tank systems used by a dealer to dispense gasoline or diesel to the public are regulated by these regulations. The requirements of this Chapter apply to all owners and/or operators of underground storage tank systems as defined in W.S. 35-11-1415 except:

(a) Airport hydrant fuel distribution systems and UST systems with field-constructed tanks shall meet the requirements in Part M.

(b) Parts B, C, D, E, G, L, and M do not apply to:

(i) Wastewater treatment tank systems (not excluded in W.S. 35-11-1415);

(ii) Aboveground storage tanks associated with airport hydrant fuel

distribution systems regulated under Part M or UST systems with field-constructed tanks regulated under Part M;

(iii) Any UST system containing radioactive materials that are regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 and following); and

(iv) Any UST system that is part of an emergency generator system at nuclear power generation facilities licensed by the Nuclear Regulatory Commission and subject to Nuclear Regulatory Commission requirements regarding design and quality criteria, including but not limited to 10 CFR Part 50.

(c) Part N does not apply to state or federal government entities whose debts and liabilities are the debts and liabilities of a state or the United States.

Section 5. Definitions. The following definitions supplement those found in the Environmental Quality Act W.S. 35-11-103 and W.S. 35-11-1415, and federal regulations 40 CFR Part 280.12.

(a) "A4A" means Airlines for America, 1275 Pennsylvania Avenue, NW, Suite 1300, Washington, DC 20004; (202) 626-4000.

(b) "Aboveground release" means any release to the ground surface or to surface water. This includes, but is not limited to, releases from the aboveground portion of any regulated storage tank system and aboveground releases associated with overfills and transfer operations as the regulated substance moves to or from any regulated storage tank system.

(c) "Airport hydrant fuel distribution system" (also called airport hydrant system) means a UST system that fuels aircraft and operates under high pressure with large diameter piping that typically terminates into one or more hydrants (fill stands). The airport hydrant system begins where fuel enters one or more tanks from an external source such as a pipeline, barge, rail car, or other motor fuel carrier.

(d) "ALLD" means an automatic line leak detector. This is a device that either restricts the flow through a line or sounds an audible or visible alarm if there is a leak in the connected piping. ALLDs may include mechanical line leak detectors, electronic line leak detectors, or sump sensors.

(e) "Ancillary equipment" means any devices including, but not limited to, piping, fittings, flanges, valves, and pumps, used to distribute, meter, or control the flow of regulated substances to and from a storage tank.

(f) "API" means the American Petroleum Institute, 1220 L Street NW, Washington, DC 20005; (202) 682-8000.

(g) “AST” means an aboveground storage tank as defined by W.S. 35-11-1415 that is used by a fuel dealer to dispense gasoline or diesel to the public.

(h) “AST system” means an aboveground storage tank and all connected piping.

(i) “ASTM” means the American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959; (610) 832-9500.

(j) “Below ground release” means any release to the subsurface of the land and to groundwater. This includes, but is not limited to, releases from the below ground portions of a storage tank system and below ground releases associated with overfills and transfer operations as the regulated substance moves to or from a storage tank.

(k) “Biodiesel” means a fuel composed of mono-alkyl esters of long fatty chain acids derived from vegetable oils or animal fats, meeting the requirements of ASTM Specification D6751 as referenced in Section 2. “Biodiesel” is interchangeable with diesel for all purposes of this Chapter.

(l) “Biofuel blend” means any regulated substance containing greater than 10 percent ethanol or greater than 20 percent biodiesel.

(m) “CAP” means a “corrective action plan” designed to restore a site contaminated by regulated substances from a storage tank release to a condition that is protective of the public health and safety and consistent with published standards found in this Chapter.

(n) “CERCLA” means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended.

(o) “CFR” means Code of Federal Regulations, as revised and published on the dates provided in Section 2, and not including any later amendments or editions. Copies of the CFR can be purchased at cost from the publisher: the U.S. Government Printing Office, 732 N. Capitol St., NW, Washington, DC 20401, or viewed on the Government Printing Office website.

(p) “Class A Operator” means the individual who has primary responsibility to operate and maintain the tank system in accordance with applicable requirements established by the department. The Class A Operator typically manages resources and personnel, such as establishing work assignments, to achieve and maintain compliance with regulatory requirements. The Class A Operator shall obtain a Class A Operator’s license from the department in accordance with requirements established by the department.

(q) “Class B Operator” means the individual who has day-to-day responsibility for implementing applicable regulatory requirements. The Class B Operator typically implements in-field aspects of operation, maintenance, and associated recordkeeping for the tank system. The Class B Operator shall obtain a Class B Operator’s license from the department in accordance with requirements established by the department.

(r) “Class C Operator” means the individual responsible for initially addressing emergencies presented by a spill or release from a tank system. The Class C Operator typically controls or monitors the dispensing or sale of regulated substances, e.g., gas station attendants. The Class C Operator shall be trained by the Class A or B Operator for the facility in accordance with requirements established by the department.

(s) “Compatible” means the ability of two or more substances to maintain their respective physical and chemical properties upon contact with one another for the design life of the tank system under conditions likely to be encountered in the storage tank system.

(t) “Connected piping” means all piping including valves, elbows, joints, unions, flanges, and flexible connectors attached to a storage tank system through which regulated substances flow and which routinely contains the regulated substance. The piping that joins two storage tank systems shall be allocated equally between them for purposes of determining how much piping is connected to any individual storage tank system.

(u) “Containment sump” means a liquid-tight container that protects the environment by containing leaks and spills of regulated substances from piping, dispensers, pumps, and related components in the containment area. Containment sumps may be single-wall or secondarily contained and located at the top of the tank (tank top or submersible turbine pump sump), underneath the dispenser (under-dispenser containment sump), or at other points in the piping run (transition or intermediate sump).

(v) “Contaminated site” means a site where release(s) from storage tank systems have resulted in concentrations of regulated substances in environmental media that exceed criteria for the protection of human health or the environment.

(w) "Corrosion expert" means a person who, by reason of thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person shall be accredited or certified as being qualified by the NACE or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control of buried or submerged metal piping systems and metal tanks.

(x) “Corrosion protection” is a technique to prevent corrosion of a metal surface. Corrosion protection may be provided by sacrificial/galvanic anode cathodic protection systems, impressed current cathodic protection systems, isolation from ground contact, or dielectric materials.

(y) “CP” means cathodic protection, which is a technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell. CP may be provided by sacrificial/galvanic anodes or impressed current.

(z) "CP tester" means a person who can demonstrate an understanding of the principles and measurements of all common types of CP systems as applied to buried or submerged metal piping and tank systems. At a minimum, such persons shall have education and experience in soil resistivity, stray current, structure-to-soil potential, and component electrical isolation measurements of buried metal piping and storage tank systems.

(aa) "Drinking Water Equivalent Level or DWEL" means the maximum concentration of a contaminant established by the Wyoming Department of Environmental Quality, pursuant to this Chapter or Chapter 8, Water Quality Rules and Regulations, Quality Standards for Wyoming Groundwaters, for which no known or anticipated adverse effects on human health will occur.

(bb) "Emergency" means a situation where replacement or retrofit of ancillary equipment to an existing storage tank system because of a sudden release or existing ancillary equipment failure is essential to continued operation of any facility, and the owner and/or operator can easily and quickly replace or retrofit the equipment to remain in operation.

(cc) "Ethanol" means an alcohol derived from the fermentation of sugar, grain, or other biomass and used as fuel for internal combustion engines. Ethanol is usually denatured using gasoline, petroleum condensate, or some other petroleum product prior to being marketed for fuel. For purposes of this Chapter, "ethanol" will be treated interchangeably with "gasoline."

(dd) "Fiberglass Tank and Pipe Institute," 14323 Heatherfield, Houston, TX 77079-7407; (281) 568-4100.

(ee) "Field-constructed tank" means a tank constructed in the field (i.e., constructed at the site of use). For example, a tank constructed of concrete that is poured in the field, or a steel or fiberglass tank primarily fabricated in the field.

(ff) "Financial responsibility" terms are as defined in 40 CFR 280.92.

(gg) "Hazardous substance UST system" means an UST system that contains a hazardous substance defined in section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (but not including any substance regulated as a hazardous waste under Subtitle C of the Resource Conservation and Recovery Act of 1984) or any mixture of such substances and petroleum, and which is not a petroleum UST system.

(hh) "Heating oil" means petroleum that is No. 1, No. 2, No. 4-light, No. 4-heavy, No. 5-light, No. 5-heavy, and No. 6 technical grades of fuel oil; other residual fuel oils (including Navy Special Fuel Oil and Bunker C); and other fuels when used as substitutes for one of these fuel oils. Heating oil is typically used in the operation of heating equipment, boilers, or furnaces.

(ii) "Hydraulic lift tank" means a tank holding hydraulic fluid for a closed loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, or other similar devices.

(jj) “Implementing agency” means Wyoming Department of Environmental Quality’s Storage Tank Program pursuant to the memorandum of agreement with EPA dated August 3, 1989.

(kk) “Licensed operator” means a person, employed by the facility owner and or operator, who is in responsible charge of the storage tanks at one or more locations. “Licensed operator” refers to the holder of any of the licenses referred to in Section 46 of this Chapter.

(ll) “Maintenance” means the normal operational upkeep to prevent a storage tank system from releasing a regulated substance.

(mm) “Maximum Contaminant Level or MCL” means the maximum allowed concentration of a contaminant established by the U.S. Environmental Protection Agency under the Safe Drinking Water Act and published in 40 CFR Part 141.

(nn) “Minimum Site Assessment or MSA” means a limited subsurface investigation performed at a storage tank facility to determine if a regulated substance has been released from a storage tank system(s) and has caused, or is causing, soil and/or groundwater contamination that exceeds applicable standards.

(oo) "NACE" means the National Association of Corrosion Engineers, 15835 Park Ten Place, Houston, TX 77084; (281) 228-6200.

(pp) “National Leak Prevention Association,” 75-4 Main Street, Suite 300, Plymouth, NH 03264; (815) 301-2785.

(qq) “NFPA” means the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269; (800) 344-3555.

(rr) “Operating facility” means a gas station actively selling fuel to the public, a fleet fueling facility used to actively fuel fleet vehicles, or a facility where emergency power generators are being used. “Operating facility” does not include any other type of facility, such as a car wash or other business that does not routinely sell fuel to the public, or is not routinely used for fleet fueling, or is not routinely used for emergency power generation. A facility that has not been used to sell fuel to the public, or fuel fleet vehicles, or power emergency generators for a period of 12 months or more is not considered an “operating facility.”

(ss) “Operational life” means the period beginning when installation of the storage tank system has commenced until the time the storage tank system is properly closed under Part G.

(tt) “Overfill release” means a release that occurs when a storage tank system is filled beyond its capacity resulting in a discharge of the regulated substance to the environment.

(uu) “PEI” means the Petroleum Equipment Institute, P.O. Box 2380, Tulsa, OK 74101; (918) 494-9696.

(vv) “Regulated substance” means any substance defined in Section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 (but not including any substance regulated as a hazardous waste under Subtitle C). Further, petroleum, including crude oil or any fraction thereof that is liquid at standard conditions of temperature and pressure (60 degrees F and 14.7 psi absolute) is a regulated substance. The term “regulated substance” includes, but is not limited to, petroleum and petroleum-based substances comprised of a complex blend of hydrocarbons, such as motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.

(ww) “RCRA” means the Resource Conservation and Recovery Act of 1984, as amended.

(xx) “Repair” means to restore to proper operating condition a tank, pipe, spill prevention equipment, overfill prevention equipment, corrosion protection equipment, release detection equipment, or other storage tank system component that has caused a release of a regulated substance from the storage tank system or has failed to function properly.

(yy) “Replaced” means:

(A) Tank replacement: to remove a tank and install another tank.

(B) Piping replacement: For tanks with multiple piping runs, this definition applies independently to each piping run. Piping replacement means to remove 50 percent or more of piping and install other piping, excluding connectors, connected to a single tank except: 1) piping connected to field-constructed underground storage tank systems with a capacity exceeding 50,000 gallons or piping that is used for an airport hydrant system, or 2) if existing single-wall underground piping connected to a storage tank system fails due to corrosion or fails and has been recalled by the manufacturer, the entire run of single-wall piping shall be replaced with double-wall piping with interstitial monitoring regardless of the length of piping requiring repair.

(zz) “Statistical Inventory Reconciliation” or “SIR” means a method using statistics and simple inventory reconciliation to determine if a tank system is leaking. SIR providers shall use a method that has been approved in writing for use in the UST program by the U.S. Environmental Protection Agency.

(aaa) “STI” means the Steel Tank Institute, 944 Donata Court, Lake Zurich, IL 60047; (847) 438-8265.

(bbb) “Storage tank” means either a regulated aboveground storage tank or an underground storage tank.

(ccc) “Substantial modification” means the addition or retrofit of any fundamental portion of a storage tank system to improve or upgrade the system that would affect the daily operation of the system. Fundamental portions of the system include, but are not limited to, CP, internal or external piping system(s), liners, leak detection equipment, manholes, etc. Substantial modifications also include the addition of canopies, new electrical conduits, and other items that may not be directly related to the storage tank system, but where the construction could adversely affect the storage tank system. Changing an existing tank system for biofuel blend or any other regulated product storage is a substantial modification. All substantial modifications require inspection and approval by the department prior to operation.

(ddd) “Training program” means the licensing program established by the department to test and/or evaluate the knowledge of a Class A, Class B, or Class C Operator regarding requirements for tank systems as established in Part L of this Chapter.

(eee) “Upgrade” means the addition or retrofit of a portion of a tank system (such as CP, lining, spill and overflow controls, secondary containment, etc.) to improve the ability of a storage tank system to prevent the release of a regulated substance.

(fff) “UL” means the Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, IL 60062; (631) 271-6200.

(ggg) “UL of Canada” means Underwriters Laboratories of Canada, 7 Underwriters Road, Toronto, ON M1R 3A9, Canada; (866) 937-3852.

(hhh) “U.S. Department of Defense,” 1000 Defense Pentagon, Washington, D.C. 20301-1000.

(iii) “UST” means underground storage tank.

(jjj) “UST system” means an underground storage tank, connected underground piping, underground ancillary equipment, and a containment system, if any. A UST system includes multiple tanks connected with common piping (e.g., manifold systems or siphon systems).

(kkk) “Wastewater treatment tank” means a tank that is designed to receive and treat an influent wastewater through physical, chemical, or biological methods.

PART B
TECHNICAL SPECIFICATIONS

Section 6. Design and Construction Standards for UST Systems. In order to prevent releases due to structural failure, corrosion, or spills and overfills for as long as the UST system is used to store regulated substances, all owners and/or operators of UST systems shall meet the requirements in this Section. In addition, all tanks and piping installed or replaced after December 1, 2005, shall be secondarily contained and use interstitial monitoring in accordance with Part D Section 16(f). Secondary containment shall be able to contain regulated substances leaked from the primary containment until they are detected and removed and prevent the release of regulated substances to the environment at any time during the operational life of the tank system. Where the piping is considered to be replaced, the entire piping run shall be secondarily contained.

(a) *Tanks.* Tanks shall be properly designed, constructed, and installed. Underground components that routinely contain regulated substances shall be protected from corrosion in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory as specified below:

(i) Fiberglass-reinforced plastic tanks shall be manufactured and installed in accordance with UL Standard 1316 or UL of Canada S615, both as referenced in Section 2.

(ii) Steel USTs shall be cathodically protected or isolated from ground contact and manufactured and installed to meet the following requirements:

(A) The outside surface of all steel tanks installed after the date of these regulations shall be coated with a suitable dielectric material;

(B) Field-installed CP systems shall be designed by a corrosion expert;

(C) Impressed current CP systems shall be designed to allow determination of current operating status as required in Section 11, including a voltage meter, an amperage meter, and an hour meter showing the hours that the rectifier actually operated; and

(D) CP systems shall be operated and maintained in accordance with Section 11. Once installed, CP systems shall not be removed as long as the steel UST system exists.

(E) In addition to the above requirements, all cathodically protected steel USTs shall be manufactured and installed in accordance with one or more of the following industry standards or practices:

(I) STI-P3® Specification and Manual for External Corrosion Protection of Underground Steel Storage Tanks, as referenced in Section 2; or

(II) UL Standard 1746, as referenced in Section 2; or
(III) UL of Canada S603, S603.1, and S631, all three as
referenced in Section 2; or

(IV) NACE Standard SP0285 and UL Standard 58, both as
referenced in Section 2; or

(V) STI Standard F841, as referenced in Section 2.

(iii) Tanks constructed of steel and clad or jacketed with a non-corrodible material shall be manufactured and installed in accordance with one or more of the following industry standards or practices:

(A) UL Standard 1746, as referenced in Section 2; or

(B) STI ACT-100-U® Specification F894, as referenced in Section 2;
or

(C) STI ACT-100-U® Specification F961, as referenced in Section 2;
or

(D) STI Specification F922, as referenced in Section 2.

(iv) Owners and/or operators may continue to operate tanks upgraded with an internal lining as long as CP is in place that meets all requirements of this Chapter.

(v) New steel tanks shall not be installed with a liner without the addition of CP. No existing steel tank with a liner and added CP shall be modified to remove the CP.

(vi) After the effective date of these regulations, no UST may be installed for any purpose regulated under this Chapter with any penetration into the UST except in the top.

(vii) All USTs installed after the effective date of these regulations shall be anchored using deadmen to prevent flotation. No tank shall be installed without providing for the maximum possible buoyancy force assuming that the tank is completely under the local groundwater table. No tank shall be installed using a concrete slab above the tank as the primary method of resisting buoyancy forces.

(b) *Piping.* Piping that routinely contains regulated substances and is in contact with the ground shall be properly designed, constructed, installed, and protected from corrosion in accordance with the following applicable industry standards or practices:

(i) Piping constructed of a non-corrodible material shall be manufactured and installed in accordance with UL Standard 971 or UL of Canada S660, both as referenced in Section 2.

- (ii) Steel piping shall be cathodically protected in the following manner:
 - (A) The piping shall be coated with a suitable dielectric material;
 - (B) Field-installed CP systems shall be designed by a corrosion expert;
 - (C) Impressed current CP systems shall be designed to allow determination of current operating status as required in Section 11; and

(D) CP systems shall be operated and maintained in accordance with Section 11.

(E) In addition to the above, cathodically protected steel pipe shall be manufactured and installed in accordance with one or more of the following industry standards or practices:

- (I) UL Subject 971A, as referenced in Section 2;
- (II) STI Recommended Practice R892, as referenced in Section 2;
- (III) NACE International Standard Practice SP0169, as referenced in Section 2; or
- (IV) NACE International Standard Practice SP0285, as referenced in Section 2.

(iii) Other piping systems will be allowed if they are determined by the department, pursuant to Section 33, to be designed to prevent the release of any regulated substance in a manner that is no less protective than the requirements in Section 6(b).

(c) *Spill and Overfill Prevention Equipment.*

(i) Except as provided in Sections 6(c)(ii) and 6(c)(iii), to prevent spilling and overfilling associated with regulated substance transfer to the UST system, owners and/or operators shall use the following spill and overfill prevention equipment:

(A) Spill prevention equipment that will prevent release of regulated substances to the environment when the transfer hose is detached from the fill pipe; and

(B) Overfill prevention equipment that will:

(I) Automatically shut off flow into the tank when the tank is no more than 95% full; or

(II) Alert the transfer operator when the tank is no more than 90% full by restricting the flow into the tank or triggering a high-level alarm. The high-level alarm shall be audible and visible to the transfer operator; or

(III) Restrict flow 30 minutes prior to overfilling, alert the transfer operator with a high-level alarm (audible and visible to the transfer operator) 1 minute before overfilling, or automatically shut off flow into the tank so that none of the fittings located on top of the tank are exposed to product due to overfilling.

(ii) Owners and/or operators are not required to use the spill and overfill prevention equipment specified in Section 6(c)(i) if the UST system is filled by transfers of no more than 25 gallons at one time.

(iii) Flow restrictors (ball valves) used in vent lines may not be used to comply with Section 6(c)(i)(B) when overfill prevention is installed or replaced after April 11, 2016. Flow restrictors may continue to be used for reasons other than meeting the overfill prevention requirement so long as the flow restrictor does not interfere with the operation of the overfill prevention equipment being used.

(iv) Spill and overfill prevention equipment shall be periodically tested or inspected in accordance with Section 10(d).

(d) *Installation.* The tank system shall be properly installed in accordance with one of the following industry standards or practices (as long as the standard or practice does not conflict with the manufacturer's instructions and recommendations) and in accordance with the manufacturer's instructions and recommendations:

(i) API Publication 1615, as referenced in Section 2; or

(ii) PEI RP100, as referenced in Section 2; or

(iii) NFPA Standard 30 and Standard 30A, both as referenced in Section 2.

(e) *Installation Certification.* No storage tank system shall be operated until the department determines the installation or substantial modification meets the applicable standards of this Part. The department shall not issue any such determination until all construction on the site of the storage tank system is complete. Owners and/or operators shall:

(i) Notify the department by telephone or in writing at least 30 days prior to the installation, repair or substantial modification of any storage tank system. Installations, repairs, or substantial modifications shall be scheduled at mutually acceptable times so the department can ensure a representative is on site at various phases of installation or substantial modification. Inspections shall be completed within 10 days of the date the department is notified that the installation, repair or substantial modification is complete; and

(ii) Pay the department a fee for each storage tank system or multiple storage tank systems installed, repaired or substantially modified at the same time and at the same site pursuant to W.S. 35-11-1420(c). The department will invoice the owner and/or operator upon completion of the final installation, repair or substantial modification inspection. The owner and/or operator shall remit payment to the department within 30 days of receipt of the department's invoice; and

(iii) Ensure that the installation, repair, or substantial modification of all USTs meets the performance standards of this Chapter; and

(iv) Obtain a certification from the licensed installer certifying that the tank system was installed or modified to meet the requirements of this Chapter. Such certification shall be provided on the UST notification form required under Section 9; and

(v) In the case of an emergency where the owner and/or operator cannot comply with the notification requirement of Section 6(e)(i), notify the department by telephone as soon as the emergency is found. Before proceeding with any substantial modification or installation:

(A) The department shall determine if an inspection can be made within the owner and/or operator's work schedule; or

(B) If the department cannot make the inspection, the owner and/or operator shall provide by mail, the specifications of materials and industry standards or practices used to accomplish the installation or substantial modification and documentation of any tests required within 5 days of completion.

(f) *Compatibility.* In accordance with Section 12, owners and/or operators shall demonstrate that all components of a new UST system are compatible with the substance to be stored in the UST system.

(g) *Dispenser Systems.* Any new dispenser system installed after April 11, 2016, shall be equipped with under-dispenser containment.

(i) A dispenser system is considered new when both the dispenser and the equipment needed to connect the dispenser to the storage tank system are installed. The equipment necessary to connect the dispenser to the tank system includes check valves, shear valves, unburied risers or flexible connectors, or other transitional components that are underneath the dispenser and connect the dispenser to the underground piping. Sensors are not required for monitoring under-dispenser containment. However, sensors may need to be added to meet the periodic monitoring requirement for sumps that cannot be visually inspected or to meet the piping interstitial monitoring requirement.

(ii) Under-dispenser containment shall be liquid-tight on its sides, bottom, and at all penetrations. Under-dispenser containment shall allow for visual inspection and access to

the components in the containment system or be periodically monitored for leaks from the dispenser system.

(h) Owners and/or operators shall install a UST system listed in Section 4(b)(i), (iii), or (iv) storing regulated substances (whether single- or double-wall construction) that meets the following:

(i) Will prevent releases due to corrosion or structural failure for the operational life of the UST system;

(ii) Is cathodically protected against corrosion, constructed of non-corrodible material, steel clad with a non-corrodible material, or designed in a manner to prevent the release or threatened release of any stored substance; and

(iii) Is constructed or lined with material that is compatible with the stored substance.

Section 7. Substandard USTs. UST systems that do not meet the standards of Section 6 shall not be placed back into service if they have been temporarily closed for more than 1 year. Substandard USTs shall be permanently closed or removed from the ground in accordance with Part G. A tank that has been permanently closed or that has gone through a change in service shall not be brought back into service unless the tank meets the requirements in Section 6 and the double-wall requirements in Section 14(h). This Section does not apply to previously deferred UST systems described in Part M.

Section 8. Repairs Allowed.

(a) Owners and/or operators of storage tank systems shall ensure that repairs will prevent releases due to structural failure or corrosion as long as the storage tank system is used to store regulated substances. The repairs shall meet the following requirements:

(i) Repairs to UST systems shall be properly conducted in accordance with one or more of the following industry standards or practices:

(A) NFPA Standard 30, as referenced in Section 2;

(B) API Recommended Practice 2200, as referenced in Section 2;

(C) API Standard 1631, as referenced in Section 2;

(D) NFPA Standard 326, as referenced in Section 2;

(E) National Leak Prevention Association Standard 631, as referenced

in Section 2;

(F) STI Recommended Practice R972, as referenced in Section 2;

(G) NACE International Standard Practice SP0285, as referenced in Section 2; or

(H) Fiberglass Tank and Pipe Institute Recommended Practice T-95-02, as referenced in Section 2.

(ii) Repairs to aboveground storage tank systems shall be properly conducted in accordance with one or more of the following industry standards or practices:

(A) NFPA Standard 30, as referenced in Section 2;

(B) API Standard 620, as referenced in Section 2;

(C) API Standard 650, as referenced in Section 2;

(D) API Standard 653, as referenced in Section 2; or

(E) PEI RP200, as referenced in Section 2.

(iii) Repairs to fiberglass-reinforced plastic USTs may be made by the manufacturer's authorized representatives or in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory.

(iv) Metal pipe sections and fittings that have released regulated substances as a result of corrosion or other damage shall be replaced. Non-corrodible pipes and fittings may be repaired in accordance with the manufacturer's specifications.

(v) Repairs to secondary containment areas of tanks and piping used for interstitial monitoring and to containment sumps used for interstitial monitoring of piping shall have the secondary containment tested for tightness according to the manufacturer's instructions or a code of practice developed by a nationally recognized association or independent testing laboratory within 30 days following the date of completion of the repair. All other repairs to storage tank systems shall be tightness tested in accordance with Sections 14(g) and 16(b) within 30 days following the date of the completion of the repair unless:

(A) The repaired storage tank system is internally inspected in accordance with a code of practice listed in this Section; or

(B) The repaired portion of any UST system is monitored monthly for releases in accordance with a method specified in Section 16(c) through (j); or

(C) Another test method is used that is determined by the department, pursuant to Section 33, to be no less protective of human health and the environment than those listed above.

(D) The following codes of practice may be used to comply with paragraph (a)(v) of this Section:

(I) STI Recommended Practice R012, as referenced in Section 2; or

(II) Fiberglass Tank and Pipe Institute Recommended Practice 2007-2, as referenced in Section 2.

(III) PEI RP1200, as referenced in Section 2.

(vi) Storage tank system owners and/or operators shall maintain records of each repair until the UST system is permanently closed or undergoes a change-in-service pursuant to Part G of this Chapter.

(b) All owners and/or operators of repaired UST systems shall ensure the modifications meet the performance standards for design and repair as set forth in Section 6.

(c) Costs associated with remediation of any release from a storage tank system during tank installation or repair work by a tank installer, tester, owner and/or operator, etc., are not eligible for the state's corrective action account funds.

(d) Any time steel connected piping is repaired or modified by replacing the pipe with a non-corrodible pipe, all of the connected piping on that run shall be replaced. Any time steel piping that is not cathodically protected is repaired or replaced, the entire run of pipe shall be replaced with a non-corrodible pipe.

(e) Whenever the integrity of the primary or secondary wall of a double-wall tank has been compromised, repairs shall be made immediately in accordance with the tank manufacturer's recommendations. If the tank cannot be repaired, it shall be permanently closed in accordance with Section 31.

(f) Within 30 days following any repair to spill or overflow prevention equipment, the repaired spill or overflow prevention equipment shall be tested or inspected, as appropriate, in accordance with Section 10(d) to ensure it is operating properly.

(g) Testing required under this Section shall be conducted by a licensed installer as defined in Section 45 or a licensed tester as defined in Section 48.

PART C
GENERAL OPERATING REQUIREMENTS

Section 9. Notification Requirements.

(a) *New Tank Systems.* Any owner and/or operator who brings a storage tank system regulated under this Chapter into use shall, within 30 days of bringing such tank into use, submit a notice of the existence of such tank system to the department. The notice shall be submitted on the form prescribed by the department.

(b) *Existing Storage Tank Systems.* Owners and/or operators of an UST that has been used to store regulated substances since January 1, 1974, and that was in the ground as of May 8, 1986, shall immediately submit to the department, on the form prescribed by the department, a notice of the existence of such tank(s). Owners and/or operators of any AST that has been used to sell fuel to the public since July 1, 1994, shall immediately submit to the department, on the form prescribed by the department, a notice of the existence of such tank(s). All storage tanks located at the same facility shall be registered under the same facility identification number.

(c) *Fees.* Owners and/or operators of storage tank systems shall pay the annual fees specified by W.S. 35-11-1425 no later than January 1 of each year or 30 days after the first invoice, whichever is the later date. Fees are not prorated; the fee is assessed based on a calendar year. Fees begin on the date when the tank is first filled with a regulated substance and end on the date when the tank is placed permanently out of service or converted to a non-regulated use under these regulations.

(d) *UST Certification.* All owners and/or operators of new UST systems shall certify on the notification form conformance with the following requirements:

- (i) Installation of tanks and piping under Section 6(d);
- (ii) CP of steel tanks and piping under Section 6(a) and (b);
- (iii) Financial responsibility under Part N;
- (iv) Release detection under Sections 14 through 17; and

(v) Overfill and spill prevention under Section 6(c).

(e) *AST Certification.* All owners and/or operators of new AST systems shall certify on the notification form conformance with the requirements in Part I.

(f) *Installer Certification.* All owners and/or operators of new UST systems shall ensure that the installer certifies on the notification form that the methods used to install the tanks and piping comply with the requirements in Section 6(d).

(g) *Requirements for Sellers.* Any person who sells a tank intended to be used as a regulated storage tank or any person who transfers an existing storage tank system shall notify the purchaser of such tank of the owner's notification obligations in accordance with this Section. Any person who sells a contaminated site shall notify the purchaser that the site is a contaminated site subject to requirements of this Chapter.

(h) *Transfer of Control.* Prior to the transfer of control of a storage tank system to a different owner and/or operator, notification of the transfer shall be provided to the department pursuant to W.S. 35-11-1420(a). Upon selling a contaminated site subject to requirements of this Chapter, the seller shall notify the department of such sale. Such notifications shall be provided on a form developed and provided by the department. Notification shall be made within 30 days of the date the transfer becomes effective.

Section 10. Spill and Overfill Control.

(a) Owners and/or operators of storage tank systems shall ensure that releases due to spilling or overfilling do not occur. The owner and/or operator shall ensure that the volume available in the tank is greater than the volume of regulated substance to be transferred to the tank before the transfer is made. The owner and/or operator shall also ensure that the transfer operation is monitored constantly to prevent overfilling and spilling. The transfer procedures described in NFPA Standard 385 or API Recommended Practice 1007, both as defined in Section 2, may be used to comply with this paragraph.

(b) Owners and/or operators shall report, investigate, and clean up any spills and overfills in accordance with Section 22.

(c) Surface spills that occur at a storage tank facility during the transfer of a regulated substance to the tank are required to be reported and cleaned up by any person owning or having controlled the regulated substance pursuant to Section 22(a) and Chapter 4, Water Quality Rules and Regulations.

(d) *Periodic Testing of Spill Prevention Equipment and Containment Sumps Used for Interstitial Monitoring of Piping and Periodic Inspection of Overfill Prevention Equipment.*

(i) Owners and/or operators of tank systems with spill and overfill prevention equipment and containment sumps used for interstitial monitoring of piping shall meet the

following requirements to ensure the equipment is operating properly and will prevent releases to the environment:

(A) Spill prevention equipment (such as spill buckets or other spill containment device) and containment sumps used for interstitial monitoring of piping shall prevent releases by meeting one of the following:

(I) The equipment is double-wall and the integrity of both walls is periodically monitored at a frequency not less than the frequency of the walkthrough inspections described in Section 13(d). Owners and/or operators shall begin meeting Section 10(i)(A)(II) and conduct a test within 30 days of discontinuing periodic monitoring of this equipment; or

(II) The spill prevention equipment and containment sumps used for interstitial monitoring of piping are tested at least once every 3 years to ensure the equipment is liquid tight. If water is used, it may be reused for testing at other sites. However, when testing is complete, the water becomes a waste and must be evaluated to determine if it is a hazardous waste prior to proper disposal. Test water will be a hazardous waste if it exhibits any of the hazardous waste characteristics described in 40 CFR 261.21-24. Testing shall be conducted by vacuum, pressure, or liquid methods in accordance with:

(1.) Requirements developed by the manufacturer (only if the manufacturer has developed such requirements); or

(2.) A code of practice developed by a nationally recognized association or independent testing laboratory; or

(3.) PEI RP1200 as referenced in Section 2; or

(4.) Requirements determined by the department to be no less protective of health and the environment than other testing methods listed in Section 10(d)(i)(A)(II).

(B) Overfill prevention equipment shall be inspected for functionality at least once every 3 years. At a minimum, the inspection shall ensure that overfill prevention equipment is set to activate at the correct level specified in Section 6(c) and will activate when regulated substance reaches that level. Inspections shall be conducted in accordance with one of the criteria in paragraph (d)(i)(A)(II) of this Section.

(ii) Owners and/or operators shall begin meeting these requirements as follows:

(A) For tank systems in use on or before October 13, 2015, the initial spill prevention equipment test, containment sump test and overfill prevention equipment inspection shall be conducted not later than October 13, 2018.

(B) For tank systems brought into use after October 13, 2015, these requirements apply at installation.

(iii) Owners and/or operators shall maintain records in accordance with Section 18 for spill prevention equipment, containment sumps used for interstitial monitoring of piping, and overflow prevention equipment as follows:

(A) All records of testing or inspection shall be maintained for 3 years; and

(B) For spill prevention equipment and containment sumps used for interstitial monitoring of piping not tested every 3 years, documentation showing that the prevention equipment is double-wall and integrity of both walls is periodically monitored shall be maintained for as long as the equipment is periodically monitored.

(iv) Testing required under this Section shall be conducted by a licensed tester as defined in Section 48.

Section 11. Operation and Maintenance of Cathodic Protection (CP) Systems. All owners and/or operators of metal storage tank systems with CP shall comply with the following requirements to ensure that releases due to corrosion are prevented until the storage tank system is permanently closed or undergoes a change-in-service pursuant to Part G:

(a) *Continuous Operation.* All CP systems shall be operated and maintained to continuously provide corrosion protection to the metal components of that portion of the tank and piping that routinely contain regulated substances and are in contact with the ground. Once installed, CP systems shall not be removed, even if the tank has also been internally lined, as long as metal tanks or connected piping exist on that site. This does not prevent replacing parts of the CP system that have become defective.

(b) *Periodic Inspections.* All storage tank systems equipped with CP systems shall be inspected for proper operation by a qualified CP tester in accordance with the following requirements:

(i) All CP systems shall be tested within 6 months of installation and at least once every 3 years thereafter.

(ii) The criteria that are used to determine that CP is adequate shall be in accordance with:

(A) NACE International Test Method TM0101, as referenced in Section 2;

(B) NACE International Test Method TM0497, as referenced in

Section 2;

Section 2; (C) NACE International Standard Practice SP0285, as referenced in

Section 2; or (D) NACE International Standard Practice SP0169, as referenced in

(E) STI Recommended Practice R051, as referenced in Section 2.

(iii) All CP systems shall be tested within 6 months of any repair or substantial modification to the storage tank system, or any other installation on the facility requiring excavation, in accordance with NACE Standard SP0285, as referenced in Section 2.

(c) *Impressed Current Systems.* Storage tank systems with impressed current CP systems shall also be inspected by the owner and/or operator every 60 days to ensure the equipment is running properly. The owner and/or operator shall make a record of these inspections, including the date of the inspection, the voltage reading on the rectifier, the amperage reading on the rectifier, and the hour reading on a properly connected hour meter showing how long the system has operated since the last inspection. The owner and/or operator shall compare those readings to the readings determined to be correct during the last inspection required under paragraph (b) of this Section. Large changes in the voltage or amperage readings, or zero readings, shall be investigated by the owner and/or operator.

(d) *Records.* CP system operation records shall be maintained in accordance with Section 13(c) to demonstrate compliance with the performance standards in this Section. These records shall provide the following:

(i) The results of testing from the last two CP system inspections required in accordance with paragraph (b) of this Section; and (if applicable)

(ii) The results of the last three CP system inspections required in accordance with paragraph (c) of this Section.

(e) *CP System Repairs.* In the event a CP system fails testing, the owner and/or operator shall have a CP expert evaluate and design necessary repairs within 30 days of failure and have the repairs completed within 90 days of failure. All repairs shall be made in accordance with one or more of the following standards or practices:

(i) STI-P3® Specification and Manual for External Corrosion Protection of Underground Steel Storage Tanks, as referenced in Section 2; or

(ii) UL Standard 1746, as referenced in Section 2; or

(iii) NACE Standard SP0285, as referenced in Section 2.

(f) *Stake-Type Sacrificial Anodes.* Stake-type sacrificial anodes connected to piping flex connectors may be replaced by a licensed CP tester without the repairs being designed by a CP expert.

Section 12. Compatibility.

(a) Storage tank systems shall be made of, or lined with, materials that are compatible with the regulated substance stored.

(b) Owners and/or operators shall notify the department at least 30 days prior to changing to a regulated substance containing greater than 10 percent ethanol, greater than 20 percent biodiesel, or any other STP-regulated substance identified by the department. In addition, owners and/or operators shall meet the following:

(i) Prior to storing these substances in an existing or new tank system, owners and/or operators shall demonstrate that storage tank system components are compatible with the substance to be stored. Compatibility demonstration shall be made by one of the following:

(A) Certification or listing of tank system equipment or components by a nationally recognized, independent testing laboratory for use with the regulated substance stored; or

(B) Equipment or component manufacturer certification that the tank system components are compatible for use with the substance to be stored. This certification shall be in writing, indicating an affirmative statement of compatibility, including the biofuel blend range (if applicable), for which the component is compatible.

(ii) **Compatibility Checklist.** The storage tank owner and/or operator shall complete the compatibility checklist developed by the department. The completed checklist and compatibility demonstration for each component of the tank system shall be submitted to the department. The department will issue written authorization to store the substance after review and acceptance of the submittal.

(iii) Owners and/or operators shall maintain component compatibility documentation for as long as the tank system is used to store the regulated substance.

(iv) API Recommended Practice 1626, as referenced in Section 2, may be used to comply with this Section.

Section 13. Inspection and Right of Entry, Reporting, and Recordkeeping.

(a) *Inspection and Right of Entry.* Any authorized agent of the State of Wyoming has the right of entry for inspection, assessments, monitoring, and corrective actions in accordance with the provisions of W.S. 35-11-1422. Owners and/or operators shall cooperate fully with inspections, including providing access to all manholes, dispenser cabinets, CP rectifiers, and tank monitoring equipment. Compliance with this Section requires that owners and/or operators open manholes and other access points so department inspectors can see the condition of all equipment. If an owner and/or operator is unable to open the access points, requiring department personnel to open this equipment, any damages to any equipment or property shall be the responsibility of the facility owner and/or operator. Damages include, but are not limited to, those resulting from misplacement of covers, lids, or dispenser cabinet doors.

(b) *Reporting.* Owners and/or operators of storage tank systems shall cooperate fully with inspections, monitoring, and testing conducted by the department; and requests by the department for the following documents, notifications, testing, and monitoring information:

- (i) Notification for all storage tank systems (Section 9), which includes certification of installation for new storage tank systems;
- (ii) Notification when any person assumes ownership of a tank system (Section 9);
- (iii) Notification for all substantial modifications (Section 6(e) for USTs and Section 35(q) for ASTs);
- (iv) Notification prior to changing tank systems to certain regulated substances (Section 12);
- (v) Reports of all releases including suspected releases (Section 19), spills and overfills (Section 22), and confirmed releases (Sections 23 through 25);
- (vi) Notification before permanent closure, change of status, or change-in-service (Part G);
- (vii) Documentation required in Section 25 by owners and/or operators eligible for the state corrective action account; and/or
- (viii) Documentation required in Section 24 by owners and/or operators not eligible for the state corrective action account.

(c) *Recordkeeping.* Owners and/or operators shall maintain and submit to the department (when requested) the following:

- (i) Documentation of CP systems operation (Section 11);
- (ii) Documentation of storage tank system repairs (Section 8);

- (iii) Documentation of storage tank system compatibility (Section 12);
- (iv) Documentation of compliance for spill and overflow prevention equipment and containment sumps used for interstitial monitoring of piping (Section 10);
- (v) Documentation of periodic walkthrough inspections (Section 13);
- (vi) Documentation of compliance with release detection requirements (Part D for USTs and Sections 36 and 37 for ASTs);
- (vii) Results of the site investigation conducted at permanent closure and changes in service (Section 31); and
- (viii) Documentation for all operator licensing and training as referenced in Section 46(h).

(d) *Monthly Inspections* To properly operate and maintain tank systems, the Class A or B Operator or licensed tank tester shall meet one of the following:

(i) Conduct a walkthrough inspection that, at a minimum, checks the following equipment every 30 days (except spill prevention equipment at tank systems receiving deliveries at intervals greater than every 30 days may be checked prior to each delivery):

(A) Spill prevention equipment. Visually check for damage, remove liquid or debris, check for and remove obstructions in the fill pipe, check the fill cap to ensure it is securely on the fill pipe; and for double-wall spill prevention equipment with interstitial monitoring, check for a leak in the interstitial area; and

(B) Release detection equipment. Check to ensure the release detection equipment is operating with no alarms or other unusual operating conditions present, and ensure records of release detection testing are reviewed and current; or

(ii) Conduct operation and maintenance walkthrough inspections according to PEI RP900, as referenced in Section 2.

(iii) Owners and/or operators who monitor their release detection system remotely may check the release detection equipment and records remotely every 30 days as long as the release detection system at the facility is determined to be in communication with the remote monitoring equipment.

(e) *Monthly Inspection Documentation.* The Class A or B Operator or licensed tank tester shall provide the facility owner and/or operator with a copy of each monthly inspection documentation and alert the owner and/or operator of any condition discovered during the monthly visual inspection that may require follow-up actions.

(f) *Monthly Inspection Records.* The owner and/or operator shall maintain a copy of the monthly inspection documentation and all attachments for the previous 12 months. Records shall include a list of each area checked, whether or not each area checked was acceptable or needed action taken, a description of actions taken to correct an issue, and delivery records if spill prevention equipment is checked less frequently than every 30 days due to infrequent deliveries. The records shall be maintained on-site, off-site at a readily available location within the State of Wyoming, or electronically in accordance with Section 13(i).

(g) *Operator's Annual Inspection.* Storage tank system owners and/or operators shall provide an annual inspection report to the department for the entire facility within 60 days of the inspection. This annual inspection shall be conducted by the owner, the operator, or a licensed tester within 1 year of the previous inspection. The inspector shall meet all qualifications of a CP tester if he or she inspects a CP system. The results of the operator's annual inspection and all associated documentation shall be maintained by the facility for at least 3 years. Records shall include a list of each area checked and each component tested, whether each area checked and each component tested was acceptable or needed action taken, a description of actions taken to correct an issue, and delivery records if spill prevention equipment is checked less frequently than every 30 days due to infrequent deliveries. This inspection shall:

(i) Test all CP systems on site that are due for testing in accordance with Section 11.

(ii) Provide pressure tests of pressurized piping or U.S. suction piping in accordance with Section 14(g).

(iii) Test all automatic line leak detectors as follows:

(A) Provide a simulated leak test for mechanical line leak detectors that demonstrates the leak detector meets the requirements of Section 14(g).

(B) Provide a simulated leak test for electronic line leak detectors that demonstrates the leak detector meets the requirements of Section 14(g). An internal electrical test of the system is not sufficient to meet this requirement.

(C) The annual inspection shall include a manual tripping of each sump sensor. A record shall be made showing the date when the test was done, the facility number, and recording whether or not the sensor operated as required. The sensor shall be placed in accordance with Section 14(h)(v).

(iv) Document that all automatic tank gauges (ATGs), interstitial monitoring systems, vapor monitoring systems, or other automatic systems are properly calibrated and functioning. Test alarms, verify system configurations, and test battery backup. This documentation includes a check to determine if probes are clean and are the proper ones for the regulated substance being stored.

(v) Provide copies of all inventory control calculations, statistical inventory reconciliation reports, automatic tank gauging test results, or results from other leak detection methods that indicate compliance for each month of the year preceding the inspection.

(vi) Include a physical inspection of all sumps, manholes, dispensers, under-dispenser containment, and other openings on the storage tank system. Visually check for damage and leaks. Any leaks found shall be immediately eliminated. Any liquid or debris found in spill prevention equipment such as spill buckets, sumps, or under-dispenser containment shall be removed at the time of inspection. Check for leaks in the interstitial area of double-wall sumps with interstitial monitoring.

(vii) Inspect probes and sensors for residual buildup, ensure floats move freely, ensure shaft is not damaged, ensure cables are free of kinks and breaks, and test alarm operability and communication with controller.

(viii) Ensure proper communication between vacuum pumps, pressure gauges, sensors, and controller.

(ix) Include documentation of Class A or B Operator's monthly inspections.

(x) Check hand-held release detection equipment such as tank gauge sticks or groundwater bailers for operability and serviceability.

(xi) Be documented on forms approved by the department. The forms shall include the name(s) and license number(s) of the person(s) performing the inspection.

(h) *Results.* The results of the operator's annual inspection shall be reviewed by the licensed facility operator. The name of the reviewing operator and operator's license number shall be included on the inspection form.

(i) *Availability and Records Maintenance.* Owners and/or operators of storage tank systems shall keep required records:

(i) At the storage tank site and immediately available for inspection by the department;

(ii) At a readily available alternate site. Records shall be provided to the department for inspection upon request. The readily available alternate site shall be within the boundaries of the State of Wyoming. If records are kept at an alternate site, the department shall be notified in writing of the name, address and telephone number for the alternate site; or

(iii) Electronically, but only if electronic records can be easily accessed at the facility during an inspection. Electronic records shall be accessed by the operator on a computer at the facility at the time of an inspection by the department. Due to size limitations, records

accessed by cell phone do not meet the requirements of this Section.

(iv) Owners/operators may submit records electronically to the department prior to an inspection. Electronic records submitted to the department prior to an inspection must be received by the Storage Tank Program (STP) not less than 7 working days prior to the date of the inspection. It is the owner's/operator's responsibility to ensure the records were received by the STP. If records are not received by the STP at least 7 working days prior to the date of the inspection, the owner/operator shall ensure records are available on site at the time of the inspection using another method in this Section.

(v) In the case of permanent closure records, owners and/or operators may mail closure records to the department if they cannot be kept at the site or an alternate site as indicated above.

PART D UST SYSTEMS: RELEASE DETECTION

Section 14. Requirements for All UST Systems.

(a) *Release Detection.* Owners and/or operators of UST systems shall provide a method, or combination of methods, of release detection that:

(i) Can detect a release from any portion of the tank and the connected piping that routinely contains a regulated substance;

(ii) Is installed and calibrated in accordance with the manufacturer's instructions showing that the leak detection equipment is fully operational and in proper calibration;

(iii) Beginning October 13, 2018, is operated and maintained and electronic and mechanical components are tested for proper operation in accordance with the manufacturer's instructions, PEI RP1200 as referenced in Section 2, or a method determined by the department to be no less protective of health and the environment than other testing methods in this Section; and

(iv) Meets the performance requirements in Sections 14, 15, 16, 17, or Part M, as applicable, with any performance claims and their manner of determination described in writing by the equipment manufacturer or installer. Methods used shall be capable of detecting the leak rate or quantity specified for that method in Sections 14, 15, 16, 17, or Part M with a probability of detection of 0.95 and a probability of false alarm of 0.05.

(b) *Release Reporting.* When a release detection method operated in accordance with

the performance standards in Sections 14, 15, 16, 17, or Part M indicates a release may have occurred, owners and/or operators shall notify the department in accordance with Part E.

(c) *Timing.* Owners and/or operators of UST systems shall comply with the release detection requirements of this Part immediately upon installation.

(d) *USTs Without Leak Detection.* Any owner and/or operator of an UST system that cannot apply a method of release detection that complies with the requirements of this Part shall complete the closure procedures contained in Part G. For previously deferred tank systems described in Parts A and M, this requirement applies on October 13, 2018.

(e) *Petroleum USTs with a Capacity of 1,000 Gallons or Less.* Owners and/or operators of USTs with a capacity of 1,000 gallons or less may use manual tank gauging as the sole leak detection method for the tank. Manual tank gauging shall be conducted weekly in accordance with Section 15(a).

(f) *Petroleum USTs with a Throughput of Less Than 15,000 Gallons per Month.* Notwithstanding any other provision of this Chapter, owners and/or operators of USTs with a throughput of less than 15,000 gallons per month may use inventory control as a monthly monitoring technique provided that:

(i) The inventory control balances within 150 gallons per month. In the event that a single month fails to balance within 150 gallons, the operator shall immediately submit that month's data to an outside vendor for Statistical Inventory Reconciliation;

(ii) The USTs are secured against theft in such a way that any theft is readily obvious; and

(iii) All requirements listed under Section 16(a) are met.

(g) *Piping.* Connected piping that routinely contains regulated substances shall be monitored for releases in a manner that meets one of the following requirements:

(i) Pressurized piping systems shall:

(A) Be monitored in accordance with Section 14(g)(i)(B). Whenever pressure systems have multiple dispensers hooked up to dispense product through a single meter, the pressurized piping between the first dispenser and the slave dispenser shall also be monitored and tested; and

(B) Be equipped with an automatic line leak detector. Automatic line leak detector methods that alert the owner and/or operator to the presence of a leak by restricting or shutting off the flow of regulated substances through piping or triggering an audible or visual alarm may be used only if they detect leaks of 3 gallons per hour at 10 pounds per square inch line pressure within 1 hour. An annual test of the operation of the leak detector shall be

conducted. Manufacturers are required to recommend procedures to be used for testing their equipment, but all automatic line leak detectors shall be tested annually. No manufacturer shall recommend that its equipment not be tested nor interfere with the testing of its equipment in any way. In addition, all underground pressurized piping shall:

(I) Be tightness tested annually. A periodic test of piping may be conducted only if it can detect a 0.1 gallon per hour (gph) leak rate at one and one-half times the operating pressure; or

(II) Be monitored using any of the methods listed in Sections 16(d), (e), (f), (g), (h), or (i). Methods not specifically named in these regulations shall be approved by the department prior to use pursuant to Section 33. The request for approval shall state that the method will detect a leak in lines.

(ii) A U.S. suction system is a system of underground piping that conveys a regulated substance using suction and has more than one check valve in the line. All U.S. suction systems shall:

(A) Have a line tightness test performed once every 3 years. A periodic test of piping may be conducted only if it can detect a 0.1 gallon per hour leak rate at one and one-half times the operating pressure; or

(B) Be monitored using any of the methods listed in Section 16(d), (e), (f), (g), (h), or (i). Methods not specifically named in these regulations shall be approved by the department prior to use pursuant to Section 33. The request for approval shall state that the method will detect a leak in lines.

(iii) Underground piping that conveys regulated substances using an exempt suction system is not required to have a release detection system. An exempt suction system is one that is designed and constructed to meet the following requirements:

(A) The below-grade piping operates at less than atmospheric pressure;

(B) The below-grade piping is sloped so that the contents of the pipe will drain back into the storage tank if the suction is released;

(C) Only one check valve is included in each suction line;

(D) The check valve is located directly below and as close as practical to the suction pump; and

(E) A method shall be provided that allows compliance with this Section to be readily determined.

(h) *UST System Installations or Replacements on or after December 1, 2005.*

Regardless of any other Section in this Chapter, all new or replacement installations occurring on or after December 1, 2005, shall meet the following secondary containment criteria:

(i) New or replacement tanks shall be provided with full secondary containment in the form of:

(A) Double-wall tanks; or

(B) Single-wall tanks with a polyethylene tank jacket.

(ii) New or replacement connected piping shall be provided with full secondary containment in the form of:

(A) Double-wall lines; or

(B) Single-wall lines with secondary containment piping.

(iii) All dispensers shall be equipped with full secondary containment in the form of dispenser pans.

(iv) All secondary containment systems shall be monitored in accordance with Section 16(f). Pressurized piping shall be equipped with an automatic line leak detector in accordance with Section 14(g).

(v) If mechanical line leak detectors or electronic line leak detectors are being used for leak detection, sump sensors used for interstitial monitoring do not need to meet the 3 gallons per hour leak detection requirement. In these cases, the sump sensors may be placed anywhere in the sump from the lowest point of the sump to no higher than 2 inches below the lowest penetration in the sump.

(i) *Interstitially Monitored Pressurized Piping Installed Prior to December 1, 2005.*

If double-wall piping systems using sumps for interstitial monitoring were installed before December 1, 2005, the owner and/or operator may install mechanical or electronic line leak detectors and perform annual line tightness testing in accordance with Section 14(g)(i)(B)(I) or an alternative tank leak detection method as described in Section 14(g)(i)(B)(II) to meet leak detection requirements. In this case, the owner and/or operator will not be required to perform periodic integrity testing of containment sumps used for interstitial monitoring.

Section 15. Petroleum USTs with a Capacity of 2,000 Gallons or Less. Tanks installed on or after December 1, 2005, shall be double-wall systems and interstitially monitored. Tanks installed on or before November 30, 2005, shall be monitored for releases at least every 30 days using one of the methods listed in Section 16. Tanks with a capacity of 550 gallons or less and tanks with a capacity of 551 to 1,000 gallons that meet the tank diameter criteria in Table 1 may use manual tank gauging as the sole method of release detection in accordance with Section

15(a). All other tanks with a nominal capacity of 551 to 2,000 gallons may use manual tank gauging in place of inventory control.

(a) *Manual Tank Gauging.* Manual tank gauging shall meet the following requirements:

(i) Tank liquid level measurements shall be taken at the beginning and ending of the minimum test duration shown in Table 1 during which no liquid is added to or removed from the tank;

(ii) Level measurements shall be based on an average of two consecutive stick readings at both the beginning and end of the period;

(iii) The equipment used shall be capable of measuring the depth of the regulated substance over the full range of the UST's height to the nearest one-eighth of an inch;

(iv) A suspected release shall be declared and the requirements of Part E shall be followed if the variation between beginning and ending measurements exceeds the weekly or monthly standards in Table 1:

TABLE 1 MANUAL TANK GAUGING VARIATION STANDARDS			
Nominal Tank Capacity	Weekly Standard (one test)	Monthly Standard (average of four tests)	Minimum Test Duration Hours*
550 gallons or less	10 gallons	5 gallons	36
551-1,000 gallons (when the tank diameter is 64")	9 gallons	4 gallons	44
551-1,000 gallons (when the tank diameter is 48")	12 gallons	6 gallons	58
551-1,000 gallons	13 gallons	7 gallons	36
1,001-2,000 gallons	26 gallons	13 gallons	36

* Nothing can be added to or removed from the UST for the duration of the test.

(b) *Other Release Detection Methods.* Owners and/or operators of petroleum USTs with a capacity of 2,000 gallons or less may also use any of the release detection methods listed in Section 16(a) through (j).

Section 16. Petroleum UST Systems with a Capacity of More Than 2,000 Gallons.

Petroleum USTs with a capacity of more than 2,000 gallons installed on or after December 1, 2005, shall be double-wall systems and interstitially monitored. Petroleum USTs installed on or before November 30, 2005, with a capacity of more than 2,000 gallons shall be monitored at least every 30 days for releases using one or more of the following methods:

(a) *Inventory Control.* Inventory control is not acceptable as a leak detection method except when it is combined with another method or when the UST meets the requirements of Section 14(f). Product inventory control (or another test of equivalent performance) shall be conducted monthly to detect a release of at least 1% of throughput plus 130 gallons in the following manner:

(i) Inventory volume measurements for regulated substance inputs, withdrawals, and the amount still remaining in the UST shall be recorded each operating day;

(ii) The equipment used shall be capable of measuring the depth of regulated substance over the full range of the UST's height to the nearest one-eighth of an inch;

(iii) The regulated substance inputs shall be reconciled with delivery receipts by measurement of the UST inventory volume before and after delivery;

(iv) Deliveries shall be made through a drop tube that extends to within 6 inches of the tank bottom;

(v) Regulated substance dispensing shall be metered and recorded within the local standards for meter calibration or an accuracy of 6 cubic inches for every 5 gallons of regulated substance withdrawn; and

(vi) Water in the bottom of the UST shall be measured to the nearest one-eighth of an inch at least once a month.

(vii) Owners and/or operators using inventory control shall report a suspected release under Section 19 whenever:

(A) The inventory control fails to balance within 1% of total throughput plus 130 gallons for the second consecutive month; or

(B) Daily over/short readings show a consistent non-zero trend for two consecutive months.

(viii) The following are methods of equivalent performance to inventory control:

(A) Vapor monitoring conducted in accordance with Section 16(d);

(B) Groundwater monitoring conducted in accordance with Section 16(e);

- (C) Interstitial monitoring conducted in accordance with Section 16(f);
- (D) Statistical inventory reconciliation conducted in accordance with Section 16(g);
- (E) Tracer surveys conducted in accordance with Section 16(h);
- (F) Manual tank gauging conducted in accordance with Section 15, provided the tank has a capacity of 2,000 gallons or less; or
- (G) Other methods approved under Section 16(i), provided that the request for approval of the method specifically states that the method is of equivalent performance to inventory control.

(b) *Tank Tightness Testing.* Tank tightness testing shall be capable of detecting a 0.1 gallon per hour leak rate from any portion of the UST that routinely contains regulated substance while accounting for the effects of thermal expansion or contraction of the regulated substance, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table. Whenever a tank tightness test shows a failing result, the owner and/or operator shall report a suspected release and follow either Section 20 or 21.

(c) *Automatic Tank Gauging.* Equipment for automatic tank gauging that tests for the loss of a regulated substance shall detect a 0.2 gallon per hour leak rate from any portion of the tank that routinely contains a regulated substance. Owners and/or operators using automatic tank gauging shall also:

- (i) Conduct inventory control in conformance with paragraph (a) of this Section, unless:
 - (A) The regulated substance is placed in the UST in batches of 25 gallons or less;
 - (B) The tank is used only to fuel an emergency power generator;
 - (C) A passing result is obtained monthly from the automatic tank gauge (ATG) with the tank at least 85% full;
 - (D) The ATG reconciles the inventory to the same levels as required by paragraph (a) of this Section; or
 - (E) A method of equivalent performance to inventory control is also conducted. To meet the definition of “equivalent performance to inventory control,” the method must measure volume for regulated substance inputs, withdrawals, and the amount still

remaining in the tank. Measurements must be recorded each operating day. The method must meet the requirements of Section 16(i) and be approved by the department prior to use.

(ii) Perform the test with the system operating in one of the following modes:

(A) In-tank static testing conducted at least once every 30 days; or

(B) Continuous in-tank leak detection operating on an uninterrupted basis or operating within a process that allows the system to gather incremental measurements to determine the leak status of the tank at least once every 30 days.

(iii) Report a suspected release and follow the requirements of Part E whenever:

(A) Any calendar month goes by when a passing result cannot be obtained from the ATG sometime during the month;

(B) A pattern becomes evident that the ATG produces a failing result whenever the level of a regulated substance in the tank is high, even if passing results can be obtained when the level is low; or

(C) Inventory control fails for the second consecutive month.

(d) *Vapor Monitoring*. Testing or monitoring for vapors within the soil gas of the excavation zone shall meet the following requirements:

(i) The materials used as backfill are sufficiently porous (e.g., gravel, sand, crushed rock) to readily allow diffusion of vapors from releases into the excavation zone;

(ii) The stored regulated substance, or a tracer compound placed in the UST system, is sufficiently volatile to result in a vapor level that is detectable by the monitoring devices located in the excavation zone in the event of a release from the tank;

(iii) The measurement of vapors by the monitoring device is not rendered inoperative by groundwater, rainfall, soil moisture, or other known interferences so that a release could go undetected for more than 30 days;

(iv) The soil and backfill material immediately surrounding the UST system shall not be contaminated with the regulated product in such a way as to interfere with the method used to detect releases from the UST system;

(v) The vapor monitors shall be designed and operated to detect any significant increase in concentration above background of the regulated substance stored in the UST system, a component or components of that substance, or a tracer compound placed in the UST system;

(vi) The UST excavation zone is assessed to ensure compliance with the requirements in this Section and to establish the number and positioning of vapor monitoring wells that will detect releases within the excavation from any portion of the tank that routinely contains the regulated substance; and

(vii) Vapor monitoring wells shall be clearly marked for identification and secured to avoid unauthorized access and tampering.

(viii) Owners and/or operators using vapor monitoring wells for leak detection shall report a suspected release in accordance with Section 19 whenever a vapor monitoring device detects a leak and cannot be made to reset within 48 hours.

(ix) New UST facilities shall not be installed using vapor monitoring as the only leak detection method. Owners and/or operators may install vapor monitoring wells as a secondary method. In the event that vapor monitoring wells are installed in the backfill, a permit to construct under Chapter 3, Wyoming Water Quality Rules and Regulations, is not required.

(e) *Groundwater Monitoring.* Testing or monitoring for liquids on the groundwater shall meet the following requirements:

(i) The regulated substance stored is immiscible in water and has a specific gravity of less than 1;

(ii) Groundwater is never more than 20 feet from the ground surface, and the hydraulic conductivity of the soil(s) between the UST system and the monitoring wells or devices is not less than 0.01 cm/sec (e.g., the soil should consist of gravels, coarse to medium sands, coarse silts or other permeable materials);

(iii) The slotted portion of the monitoring well casing or well screen shall be designed to prevent migration of natural soils or filter pack into the well and to allow entry of the regulated substance on the water table into the well under both high and low groundwater conditions;

(iv) Monitoring wells shall be sealed from the ground surface to the top of the filter pack with hydrated bentonite and concrete;

(v) Monitoring wells or devices shall intercept the excavation zone or are as close to it as is technically feasible;

(vi) The continuous monitoring devices or manual methods used shall be capable of detecting the presence of at least one-eighth of an inch of free product on top of the groundwater in the monitoring wells;

(vii) Within and immediately below the UST excavation zone, the site shall be assessed to ensure compliance with the requirements in this Section and to establish the number

and positioning of monitoring wells or devices that will detect releases from any portion of the UST system that routinely contains a regulated substance;

(viii) Monitoring wells shall be clearly marked for identification and secured to avoid unauthorized access and tampering; and

(ix) Groundwater monitoring shall not be used when the ambient groundwater is already contaminated with the regulated substance being stored in the UST system.

(x) Owners and/or operators using groundwater monitoring shall report a suspected release and follow the requirements of Part E whenever any regulated substance is observed in any monitoring well at any level.

(xi) New UST facilities shall not be installed using groundwater monitoring as the only leak detection method. Owners and/or operators may install groundwater monitoring wells as a secondary method. In the event that groundwater monitoring wells are installed in the backfill, a permit to construct under Chapter 3, Wyoming Water Quality Rules and Regulations, is not required.

(f) *Interstitial Monitoring.* Interstitial monitoring between the UST system and a secondary barrier immediately around or beneath it may be used if the system is designed, constructed, and installed to detect a leak from any portion of the tank that routinely contains a regulated substance and also meets one of the following requirements:

(i) The sampling or testing method for double-wall UST systems shall be capable of detecting a leak through the inner wall in any portion of the tank that routinely contains a regulated substance.

(ii) The sampling or testing method used for UST systems with a secondary barrier within the excavation zone shall be capable of detecting a leak between the UST system and the secondary barrier in accordance with the following:

(A) The secondary barrier around or beneath the UST system shall consist of artificially constructed material that is sufficiently thick and impermeable (at least 10^{-6} cm/sec for the regulated substance stored) to direct a leak to the monitoring point and permit its detection;

(B) The barrier shall be compatible with the regulated substance stored so that a leak from the UST system will not cause a deterioration of the barrier allowing a release to pass through undetected;

(C) The secondary barrier for cathodically protected USTs shall be installed so that it does not interfere with the proper operation of the CP system;

(D) Groundwater, soil moisture, or rainfall shall not render the testing or sampling method used inoperative so that a release could go undetected for more than 30 days;

(E) The site shall be assessed to ensure that the secondary barrier is always above the groundwater and not in a 25-year flood plain unless the barrier and monitoring designs are for use under such conditions; and

(F) Monitoring wells shall be clearly marked for identification and secured to avoid unauthorized access and tampering.

(iii) An automated device shall be capable of detecting a leak between the inner wall of the UST and the liner on USTs with internally fitted liners. The liner shall be compatible with the regulated substance stored.

(iv) Owners and/or operators using interstitial monitoring shall report a suspected release and follow the requirements of Part E whenever any monitoring device indicates a leak and the device cannot be shown to be defective within 48 hours of the initial alarm.

(v) Double-wall and interstitially monitored storage tank systems or piping installed after December 1, 2005, shall be interstitially monitored for the lifetime of the tank system or piping.

(vi) Monthly interstitial monitoring results shall be recorded by the owner and/or operator. This may be accomplished by maintaining a monthly log or obtaining a monthly printout from an approved monitoring system.

(g) *Statistical Inventory Reconciliation (SIR)*. All SIR methods shall:

(i) Meet the requirements in Section 16(a) for inventory control;

(ii) Report a quantitative result with a calculated leak rate;

(iii) Be capable of detecting a 0.2 gallon per hour leak rate or a release of 150 gallons within 30 days with a probability of detection of at least 0.95 and a probability of false alarm of no more than 0.05;

(iv) Use a threshold that does not exceed one-half the minimum detectible leak rate; and

(v) Be approved, in writing, by the department prior to use.

(vi) Monitoring results must be obtained by the owner and/or operator from the SIR provider within each 30-day monitoring period.

(vii) All “inconclusive” results shall be investigated by the owner and/or operator as soon as they are reported by the SIR company, including a complete audit of all input data. The owner and/or operator shall make every effort to resolve all “inconclusive” results as soon as they are reported. If the inventory for an entire month fails to balance within 2,000 gallons, that month shall be treated as inconclusive. A month with an unresolved inconclusive result is a month when no valid leak detection was provided.

(viii) Owners and/or operators using SIR shall report a suspected release and follow the requirements of Part E whenever:

(A) Any single month is reported as a failure for the UST system by the SIR company;

(B) Any month is reported by the SIR company as “inconclusive” unless that inconclusive result has been resolved by resubmission of audited inventory numbers to the SIR company.

(ix) UST systems with a throughput of more than 500,000 gallons per month in any single system shall not be monitored using SIR as the only release detection method.

(h) *Tracer Surveys.* Owners and/or operators may use tracer surveys as an approved monthly monitoring technique if:

(i) The tracer method can detect a 0.2 gallon per hour leak rate or a release of 150 gallons within 30 days with a probability of detection of 0.95 and a probability of false alarm of 0.05;

(ii) The tanks are inoculated with the same tracer each month;

(iii) The tanks are inoculated each month before the 10th day of the month;

(iv) The tracer survey is completed before the 25th day of each month;

(v) The report for each month includes the calculations of the amount of tracer needed, the amount actually added to each tank, and the calculated leak detection limit in gallons per day; and

(vi) The report for each test clearly states that the tank(s) either passed or failed the test.

(vii) Any failing test using tracer surveys shall be treated as a suspected release under Part E.

(i) *Other Technology.* With prior department authorization, pursuant to Section 33, other types of release detection methods, or combination of methods, may be used if:

(i) The method can detect a 0.2 gallon per hour leak rate or a release of 150 gallons within 30 days with a probability of detection of 0.95 and a probability of false alarm of 0.05; or

(ii) The owner and/or operator can demonstrate that the method can detect a release as effectively as any of the methods allowed in Section 16(b) through (h). In comparing methods, the department shall consider the size of release that the method can detect and the frequency and reliability with which it can be detected. If the method is approved, the owner and/or operator shall comply with any conditions imposed by the department to ensure the protection of human health and the environment.

(j) *Multiple Methods.* Whenever these regulations require the use of more than one leak detection method, owners and/or operators shall meet all requirements for all leak detection methods required.

Section 17. Hazardous Substance UST Systems. Owners and/or operators of hazardous substance UST systems shall provide containment that meets the following requirements and monitor these systems every 30 days using Section 16(f):

(a) *Release Detection.* Hazardous substance UST systems shall have a secondary containment system, be constructed with double-wall tanks, or be constructed with an external liner or vault surrounding the entire tank system. These systems shall meet the following requirements:

(i) Secondary containment systems shall:

(A) Be designed, constructed, and installed to contain regulated substances leaked from the primary containment until those substances are detected and removed;

(B) Be designed, constructed, and installed to prevent the release of regulated substances to the environment at any time during the operational life of the UST system; and

(C) Be inspected for evidence of a release at least once every 30 days.

(ii) Double-wall tanks shall:

(A) Be designed, constructed, and installed to contain a leak from any portion of the inner tank within the outer wall;

(B) Be designed, constructed, and installed to detect the failure of the inner wall; and

(C) Be inspected for evidence of a release at least once every 30 days.

(iii) External liners (including vaults) shall:

(A) Be designed, constructed, and installed to contain 100% of the capacity of the largest tank within its boundary;

(B) Be designed, constructed, and installed to prevent the interference of precipitation or groundwater intrusion with the ability to contain or detect a release of regulated substances;

(C) Be designed, constructed, and installed to surround the tank completely (i.e., capable of preventing lateral and vertical migration of regulated substances); and

(D) Be inspected for evidence of a release at least once every 30 days.

(b) *Connected Piping.* Connected piping shall be equipped with secondary containment that satisfies the requirements of this Section. Trench liners and double-wall pipe are examples of secondary containment systems. Connected piping that conveys regulated substances under pressure shall be equipped with an automatic line leak detector in accordance with Section 14(g)(i).

(c) *Other Methods.* Other methods of release detection may be used for hazardous substance UST systems installed on or before October 13, 2015, if owners and/or operators:

(i) Demonstrate to the department that an alternate method can detect a release of the stored regulated substance as effectively as any of the methods allowed in Section 16(b) through (h) can detect a release of petroleum;

(ii) Provide information to the department on effective corrective action technologies, health risks, and chemical and physical properties of the stored substance, and the characteristics of the UST site; and

(iii) Obtain authorization from the department to use the alternate release detection method before the installation and operation of the new or modified UST system.

Section 18. Release Detection Recordkeeping for UST Owners and/or Operators.

All UST system owners and/or operators shall maintain records in accordance with Section 13 demonstrating compliance with all applicable requirements of this Part. These records shall include the following:

(a) *Performance Claims.* All written performance claims pertaining to any release detection system used, and the manner in which these claims have been justified or tested by the equipment manufacturer or installer, shall be maintained for 5 years from the date of installation. Not later than October 13, 2018, records of site assessments required under Sections 16(d) and (e) shall be maintained for as long as the methods are used. Records of site assessments

developed after October 13, 2015, shall be signed by a professional engineer or professional geologist registered in the State of Wyoming;

(b) *Test Results.* The results of any sampling, testing, or monitoring shall be maintained for at least 3 years except:

(i) Tank tightness testing results shall be retained until the next test is conducted; and

(ii) Tank tightness testing, line tightness testing, and vapor monitoring using a tracer compound placed in the tank system conducted in accordance with Section 51(d) shall be retained until the next test is conducted.

(c) *Calibration, Maintenance and Repair.* Written documentation of all calibration, maintenance, and repair of release detection equipment permanently located onsite shall be maintained for the operational life of the tank in accordance with W.S. 35-11-1416(a)(vi). Any schedules of required calibration and maintenance provided by the release detection equipment manufacturer shall be retained for the operational life of the tank.

PART E
RELEASE REPORTING, INVESTIGATION, CONFIRMATION
AND RESPONSE

Section 19. Release Reporting. Storage tank system owners and/or operators shall report all releases or suspected releases to the department within 24 hours of discovery in accordance with Section 22 and follow the procedures of Section 22. All confirmed releases shall also be reported to the fire department having local jurisdiction. Owners of sites where storage tanks were formerly located shall report to the department within 7 days after discovering any new evidence of a release.

(a) *Release Reporting.* Release reporting shall be made for any of the following conditions:

(i) **Released Regulated Substances.** The discovery by owners and/or operators or others of released regulated substances at a storage tank site or in the surrounding area (such as the presence of free product or vapors in soils, basements, utility lines, nearby surface water and/or groundwater).

(ii) **Unusual Operating Conditions.** Unusual operating conditions observed by owners and/or operators (such as the erratic behavior of product dispensing equipment, the sudden loss of a regulated substance from a storage tank system, an unexplained presence of water in a storage tank, or liquid in the interstitial space of secondarily contained systems), unless:

(A) The system equipment or component is found not to be releasing regulated substance to the environment;

(B) Any defective system equipment or component is immediately repaired or replaced; or

(C) Except as provided in Section 16(f)(ii)(D), any liquid in the interstitial space of secondarily contained systems that is not used as part of the interstitial monitoring method (e.g., brine filled) is immediately removed.

(iii) **Monitoring Results.** Monitoring results, including investigation of an alarm, from a release detection method required under Part D that indicate a release may have occurred unless:

(A) The monitoring device is found to be defective, and is immediately repaired, recalibrated or replaced, and additional monitoring does not confirm the initial result;

(B) The leak is contained in the secondary containment and:

(I) Except as provided in Section 16(f)(ii)(D), any liquid in the interstitial space not used as part of the interstitial monitoring method (e.g., brine filled) is immediately removed, and

(II) Any defective system equipment or component is immediately repaired or replaced;

(C) In the case of inventory control described in Section 16(a), a second month of data does not confirm the initial result or the investigation determines no released has occurred; or

(D) The alarm was investigated and determined to be a non-release event (e.g., a power surge or caused by filling the tank during release detection testing).

(b) *Off-site Impacts.* Owners and/or operators of storage tank systems and owners of former storage tank sites shall follow the applicable procedures in Section 20 or 21 to determine if the storage tank system is the source of off-site impacts. These impacts include the discovery of regulated substances (such as the presence of free product or vapors in soils, basements, utility lines, nearby surface water and/or groundwater) that have been observed by the department or brought to its attention by another party.

Section 20. Release Investigation and Confirmation for Eligible Owners and/or Operators. Storage tank owners and/or operators who are eligible for cleanup under the Corrective Action Account shall comply with Section 25 and immediately investigate and confirm all suspected releases of regulated substances requiring reporting under Section 19 within 7 days of detection as follows:

(a) *System Test.* Owners and/or operators shall conduct tests according to the requirements for tightness testing in Sections 14(g) and 16(b) or, as appropriate, secondary containment testing described in Section 8(a)(v) that determine if a release has occurred from any portion of the storage tank system that routinely contains a regulated substance or a breach of either wall of the secondary containment has occurred. If the primary wall of a double-wall tank or double-wall/secondarily contained pipe fails, an integrity test of the outer wall and/or secondary containment shall be conducted. Owners and/or operators of all storage tanks shall also audit inventory control required by Section 16(a) or 36(e) for 12 months prior to the suspected release.

(i) Owners and/or operators shall repair, replace, or permanently close the storage tank system if the test results for the system, tank, or delivery piping indicate that a release exists.

(ii) Owners and/or operators shall conduct a thorough audit of their leak detection methods for the preceding year. This audit shall be performed by a qualified third party employed for this purpose by the owner and/or operator. In the event that the audit indicates a

pattern of releases over several months, the department will complete the site check as described in Section 20(c).

(iii) Further investigation is not required if the test results for the system, tank, and delivery piping and the audit do not indicate that a release exists and if environmental contamination is not the basis for suspecting a release.

(b) *Further Action.* If the test results required under Section 20(a) do not indicate a release, but environmental contamination is the basis for suspecting a release, the department will complete the site check required under Section 20(c) and other Part E activities determined by the Solid and Hazardous Waste Division Administrator.

(c) *Site Check.* The department shall test for the presence of a release where contamination is most likely to be present at the storage tank site. In selecting sample types, sample locations, and measurement methods, the department shall consider the nature of the stored regulated substance, the type of initial alarm or cause for suspicion, the type of backfill, the depth of groundwater, and other factors appropriate for identifying the presence and source of the release. If the test results for the site check do not indicate that a release has occurred, further investigation is not required.

(d) *Plans and Specifications.* All plans, specifications and reports submitted to the department under this Section shall be signed and sealed by a Wyoming Registered Professional Engineer and/or a Wyoming Registered Professional Geologist, as applicable and required by state statute.

Section 21. Release Investigation and Confirmation for Owners and/or Operators Not Eligible for the Corrective Action Account. Contaminated site owners and storage tank owners and/or operators may become ineligible for cleanup under the Corrective Action Account for any reason listed in W.S. 35-11-1424. Owners and/or operators who are not eligible for cleanup under the Corrective Action Account shall investigate and confirm all suspected releases of regulated substances requiring reporting under Section 19 within 7 days of detection as follows:

(a) *System Test.* Owners and/or operators shall conduct tests according to the requirements for tightness testing in Sections 14(g) and 16(b), or, as appropriate, secondary containment testing described in Section 8(a)(v) that determine if a release occurred from any portion of the storage tank system that routinely contains regulated substance or a breach of either wall of the secondary containment has occurred. Storage tank owners and/or operators shall also audit all inventory control required under Sections 16(a) or 36(e) for 12 months prior to the suspected release.

(i) Owners and/or operators shall repair, replace, or permanently close the storage tank system if the test results for the system indicate that a release exists.

(ii) When environmental contamination is the basis for suspecting a release, owners and/or operators shall also conduct a thorough audit of their leak detection methods for the preceding 12 months. This audit shall be performed by a qualified third party employed for this purpose by the owner and/or operator. In the event that the audit indicates a pattern of releases over several months, owners and/or operators shall conduct a site check as described in Section 20(c).

(iii) Owners and/or operators shall conduct a minimum site assessment as described in Section 29 any time results of the system test described in Section 21(a) indicate that a release exists or when environmental contamination is the basis for suspecting a release.

(b) *Further Action.* Further investigation is not required if the system test results required under Section 21(a) do not indicate that a release exists or if environmental contamination is not the basis for suspecting a release. If the test results for the excavation zone at an UST site or the results for the area immediately adjacent to the storage tank system at an aboveground storage tank site indicate that a release has occurred, owners and/or operators shall begin corrective action in accordance with Part E.

(c) *Permits Required.* Owners of contaminated sites and/or owners and/or operators of storage tank systems shall ensure that well permits have been issued prior to initiating site check activities.

(d) *Plans and Specifications.* All plans, specifications and reports submitted to the department shall be signed and sealed by a Wyoming Registered Professional Engineer and/or a Wyoming Registered Professional Geologist, as applicable and required by state statute.

Section 22. Spill and Overfill Reporting and Cleanup.

(a) *Cleanup and 24-Hour Reporting.* Owners and/or operators of storage tank systems shall contain and immediately clean up a spill or overfill. Spills and overfills shall be reported to the department within 24 hours by telephone (307) 777-7097 (STP) and (307) 777-7781 (spill response) and by logging into the spill response database on the DEQ website. The owner and/or operator shall begin corrective action in accordance with Sections 23 through 25 in the following cases:

(i) Spill or overfill of petroleum that results in a release to the environment that exceeds 25 gallons or that causes a sheen on nearby surface water; and/or

(ii) Spill or overfill of a regulated hazardous substance that results in a release to the environment that equals or exceeds its reportable quantity under 40 CFR Part 302 as referenced in Section 2.

(b) *Owner's and/or Operator's Costs.* Costs incurred by owners and/or operators to contain and/or cleanup surface spills and/or overfills are not eligible for the state Corrective Action Account funds. Releases that occur within a dispenser cabinet at or above the fire valve

are considered surface spills and are not eligible for cleanup under the Corrective Action Account. Releases that occur below the fire valve are considered releases from piping and are eligible for cleanup under the Corrective Action Account.

(c) *Small Spills.* Owners and/or operators of storage tank systems shall contain and immediately cleanup a spill or overflow of petroleum that is less than 25 gallons and a spill or overflow of a hazardous substance that is less than the reportable quantity. If cleanup cannot be accomplished within 24 hours, owners and/or operators shall immediately notify the department.

(d) *Other Reporting.* A release of a hazardous substance equal to or in excess of its reportable quantity must also be reported immediately (rather than within 24 hours) to the National Response Center in accordance with CERCLA (1980) and to appropriate state and local authorities under Title III of the Superfund Amendments and Reauthorization Act of 1986.

Section 23. General. Owners and/or operators of storage tank systems and owners of former storage tank sites shall, in response to a confirmed release from a storage tank system, comply with the requirements of this Part.

Section 24. Owners and/or Operators Not Eligible for the State Corrective Action Account.

(a) *Initial Response.* Within 24 hours of confirmation of a release in accordance with Section 21 or after a release from a storage tank system is confirmed in any other manner, owners and/or operators shall perform the following initial response actions:

(i) Report the release to the department by telephone (307) 777-7097 (STP) and (307) 777-7781 (spill response) and by logging into the spill response database on the DEQ website;

(ii) Take immediate action to prevent any further release of the regulated substance into the environment; and

(iii) Identify and mitigate fire, explosion, and vapor hazards.

(b) *Initial Abatement Measures and Site Check.* Owners and/or operators of storage tank systems shall complete the following abatement measures:

(i) Remove as much of the regulated substance from the storage tank system as is necessary to prevent further release to the environment;

(ii) Visually inspect any above ground or exposed below ground releases and prevent further migration of the released substance into surrounding soils, groundwater, or surface water;

(iii) Monitor and mitigate fire, explosion, and other safety hazards in subsurface structures (such as sewers or basements);

(iv) Remedy hazards posed by contaminated soils that are excavated or exposed as a result of release confirmation, site investigation, abatement, or corrective action activities. If these remedies include treatment or disposal of soils, the owner and/or operator shall comply with the applicable department requirements;

(v) Measure for the presence of a release where contamination is most likely to be present at the storage tank site, unless the presence and source of the release have been confirmed during the completion of the system test required by Section 21 or the minimum site assessment required by Section 31. In selecting sample types, sample locations, and measurement methods, the owner and/or operator shall consider the nature of the stored regulated substance, the type of backfill, depth to groundwater and other factors as appropriate for identifying the presence and source of the release;

(vi) Investigate to determine the possible presence of free product and begin free product removal as soon as practicable in accordance with Section 24(d); and

(vii) Within 30 days of release confirmation, submit a report to the department summarizing the initial abatement steps taken and any resulting information or data required by this Section.

(c) *Initial Site Characterization.* Owners and/or operators shall assemble information about the site and the nature of the release. The information shall be submitted to the department within 60 days of release confirmation. This information shall include data obtained while confirming the release or completing the initial abatement measures required by this Section. This information shall include, but is not limited to, the following:

(i) Data on the nature and estimated quantity of the release;

(ii) Data from available sources and/or site investigations regarding surrounding populations, water quality, use and approximate locations of wells potentially affected by the release, subsurface soil conditions, locations of subsurface sewers, climatological conditions, and land use;

(iii) Results of the site check required under Section 24(b);

(iv) Results of the free product investigations required under Section 24(b) to be used by owners and/or operators to determine if free product is to be recovered under Section 24(d); and

(v) Information necessary to classify the affected groundwater under Chapter 8, Wyoming Water Quality Rules and Regulations.

(d) *Free Product Removal.* When free product is discovered, owners and/or operators shall contact the department within 24 hours of the discovery by telephone (307) 777-7097 (STP) or (307) 777-7781 (spill response) and by logging into the spill response database on the DEQ website. Owners and/or operators shall submit a Corrective Action Plan (CAP) for product removal at sites where investigations under Section 24(b) indicate the presence of free product. Owners and/or operators shall remove free product to the maximum extent practicable as determined by the department. Owners and/or operators shall:

(i) Conduct free product removal in a manner that minimizes the spread of contamination into previously uncontaminated areas. Free product recovery and disposal techniques shall be appropriate for the hydrogeologic conditions at the site. Techniques shall properly treat and discharge or dispose of recovery by-products in compliance with applicable local, state, and federal regulations;

(ii) Use abatement of free product migration as a minimum objective for the design of the free product removal system;

(iii) Handle any flammable products in a safe and competent manner to prevent fires and explosions; and

(iv) Prepare and submit to the department, within 45 days of confirming a release, a free product removal plan that provides at least the following information:

(A) The name of the person(s) responsible for implementing the free product removal measures;

(B) The estimated quantity, type, and thickness of free product observed or measured in wells, boreholes, and excavations;

(C) The type of free product recovery system used;

(D) Whether or not any discharge will take place on-site or off-site during the recovery operation and where this discharge will be located;

(E) The type of treatment applied to, and the effluent quality expected from, any discharge;

(F) The steps that have been or are being taken to obtain necessary permits for any discharge; and

(G) The disposition of the recovered free product.

(e) *Investigation for Soil and Groundwater Cleanup.* To determine the full extent and location of soil and/or groundwater contaminated by a release, owners and/or operators shall

conduct a subsurface investigation. The release site and the surrounding area possibly affected by the release shall be investigated to determine if any of the following conditions exist:

- (i) Existing groundwater wells have been affected by the release;
- (ii) Free product is present requiring recovery;
- (iii) Contaminated soils are in contact with groundwater; and/or
- (iv) There are potential threats to nearby surface water and/or groundwater

resources.

(v) Owners and/or operators shall submit the information collected under this Section to the department in accordance with a schedule established by the Solid and Hazardous Waste Administrator.

(f) *Corrective Action Plan (CAP).*

(i) Any owner and/or operator, the department, or other person, taking a corrective action required by this regulation, shall restore the environment to a condition and quality consistent with the standards established in Sections 38 and 39.

(ii) At any point after reviewing the information submitted in compliance with this Section, the department may require owners and/or operators to submit additional information or develop and submit a CAP for responding to contaminated soils and groundwater. If a CAP is required, owners and/or operators shall submit the CAP according to a schedule and format established by the department. Alternatively, owners and/or operators may, after fulfilling the requirements of this Section, choose to submit a CAP for responding to contaminated soil and groundwater. In either case, owners and/or operators are responsible for submitting a plan that provides adequate protection of human health and/or restoration of the environment, as determined by the department, and shall modify their plan as necessary to meet the requirements of this regulation.

(A) The department will authorize and issue applicable department permits for the CAP only after ensuring that implementation of the plan will adequately protect human health, safety, and the environment, and the plan is in compliance with other applicable department rules and regulations. In making this determination, the department will consider the following factors:

(I) The physical and chemical characteristics of the regulated substance, including its toxicity, persistence, and potential for migration;

(II) The hydrogeologic characteristics of the site and the surrounding area;

(III) The proximity, quality, and current and future uses of nearby surface water and groundwater;

(IV) The potential effects of residual contamination on nearby surface water and groundwater;

(V) An exposure assessment; and

(VI) Any information assembled in compliance with this Section.

(B) Upon authorization and issuance of applicable department permits for the CAP, owners and/or operators shall implement the plan, including modifications to the plan made by the department. Owners and/or operators shall monitor, evaluate, and report the results of implementing the plan in accordance with the schedule and a format established by the department.

(C) In the interest of minimizing environmental contamination, remediating an imminent health and/or safety hazard, and/or promoting more effective cleanup, owners and/or operators may begin remediation of soil and groundwater before the CAP is authorized and permitted by the department provided they:

(I) Notify the department of their intention to begin cleanup;

(II) Comply with any conditions imposed by the department, including halting cleanup or mitigating adverse consequences from cleanup activities; and

(III) Incorporate these self-initiated cleanup measures in the CAP that is submitted to the department for authorization and permitting.

(g) *Voluntary Remediation Program.* Owners and/or operators not eligible for the state Corrective Action Account may be eligible to enter the Solid and Hazardous Waste Voluntary Remediation Program.

Section 25. Owners and/or Operators Eligible for the State Corrective Action Account.

(a) *Initial Response.* Within 24 hours of release confirmation in accordance with Section 20 or after a release from the storage tank system is identified in any other manner, owners and/or operators shall perform the following initial response actions:

(i) Report the release to the department by telephone (307) 777-7097 (STP) and (307) 777-7781 (spill response) and by logging into the spill response database on the DEQ website;

(ii) Take immediate action to prevent any further release of the regulated substance into the environment; and

(iii) Orally notify the department immediately of any fire, explosion, or vapor hazards. The department shall begin resolving these hazards as soon as practicable.

(b) *Initial Abatement Measures and Site Check.* Owners and/or operators shall complete the following abatement measures:

(i) Remove as much of the regulated substance from the storage tank system as is necessary to prevent further release to the environment; and

(ii) Visually inspect any above ground or exposed below ground releases and prevent further migration of the released substance into surrounding soils, groundwater, and/or surface water.

(c) *Site Characterization and Corrective Action.* The department will prioritize the site pursuant to Section 27 after completion of initial abatement measures. The department will also collect sufficient data for classification of the affected groundwater under Chapter 8, Wyoming Water Quality Rules and Regulations.

Section 26. Public Participation.

(a) *Notice Provided.* Whenever a confirmed release from a storage tank system occurs that requires a CAP for soil or groundwater remediation, the department shall provide notice to the public directly affected by the release and the planned corrective action. This notice may include, but is not limited to, public notice in local newspapers, block advertisements, public service announcements, or personal contacts by staff. All public notices shall be posted to the DEQ website.

(b) *Notice Content.* All public notices issued under this Chapter shall contain the following minimum information:

(i) Name and address of the facility where the release occurred;

(ii) Name and address of the owner and/or operator;

(iii) Name and address of the department;

(iv) Name and phone number of the department representative where additional information can be obtained;

(v) Type and estimated volume of the release, if known; and

(vi) The Class of Use of all affected groundwater as determined under Chapter 8, Wyoming Water Quality Rules and Regulations.

(c) *Information Requests.* Upon request, the department shall provide or make available information concerning the nature of the release and corrective actions planned or taken.

(d) *Public Meetings.* A public meeting may be held to consider comments on a proposed CAP or at the termination of a CAP if the Solid and Hazardous Waste Division Administrator determines there is sufficient public interest or whenever such a meeting may clarify issues involved in a CAP.

Section 27. Corrective Action Prioritization Ranking System.

(a) *Criteria.* This ranking system establishes criteria for use by the department in determining priorities for conducting state corrective actions at leaking storage tank sites. The ranking is based upon the following primary factors:

- (i) Degree of immediate adverse health exposure and/or safety hazards to people in nearby occupied buildings or to public utilities;
- (ii) Water quality protection;
- (iii) Potential for contaminant(s) migration; and
- (iv) Ecological protection.

(b) *Scoring.* The scoring system provides that the sites with the highest scores shall be of the highest priority in conducting department corrective actions. The following listing and point values compose the department's corrective action prioritization ranking system. Points will be applied to each site, as appropriate, depending upon local circumstances. The total score for each leaking storage tank site is the sum of all applicable categories in Table 2.

TABLE 2
WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
STORAGE TANK PROGRAM
CONTAMINATED SITE EVALUATION WORKSHEET

Facility ID, Site Name _____
Location _____
Staff Name _____
Date _____

Score 1-5: Score only one line under each criterion. Total = Score X Weight

CONTAMINANT CRITERIA	SCORE	WEIGHT	TOTAL
Toxicity/Hazard			
1 Unrefined petroleum, produced water, dry solids		1	
3 Refined petroleum, liquid commercial chemical products		2	
5 Explosive materials or hazardous wastes (corrosive, reactive, toxic, flammable)		3	
<i>Comments (consider volumes)</i>			
Concentration – Soil			
1 Greater than the soil cleanup levels		1	
TABLE 2 (Continued)	SCORE	WEIGHT	TOTAL
3 Ten times greater than soil cleanup levels		2	
5 Free product (saturated soil or waste material)		3	
<i>Comments (consider volumes)</i>			
Concentration – Groundwater			
1 Greater than MCLs or DWELS		1	
3 MCLs/DWELS to 10X MCLs/DWELS or unknown		2	
5 Greater than 10X MCLs/DWELS or free product		3	
<i>Comments</i>			
Hazardous Vapors and Particulates			
1 Noticeable odors		1	
3 Known vapor emitting volatiles present		2	
5 Explosive conditions		3	
<i>Comments</i>			
ENVIRONMENTAL CRITERIA			
Depth to Groundwater			
1 Greater than 100 feet		1	
3 Less than 100 feet, but greater than 20 feet		2	
5 Less than 20 feet		3	
<i>Comments</i>			
Proximity to Surface Water			
1 Greater than 1 mile		1	
3 Greater than ¼ mile, but less than 1 mile		2	
5 Features present within ¼ mile		3	
<i>Comments</i>			
HUMAN EXPOSURE CRITERIA			
Proximity to Drinking Water Source			
1 Greater than 1 mile		1	
3 Greater than ¼ mile, but less than 1 mile		2	
5 Features present within ¼ mile		3	
<i>Comments</i>			
Land Use			

1	Open range or vacant and greater than 1 mile to a residence		1	
3	Commercial/industrial/recreational use or less than 1 mile to residence		2	
5	Residence present or within ¼ mile		3	
<i>Comments</i>				
ECOLOGICAL EXPOSURE CRITERIA				
Important/Sensitive Habitats or Threatened or Endangered Species				
1	I/S habitats OR T/E species greater than 1 mile		1	
TABLE 2 (Continued)		SCORE	WEIGHT	TOTAL
3	I/S habitats or T/E species greater than ¼ mile, but less than 1 mile		2	
5	I/S habitats or T/E species within ¼ mile		3	
<i>Comments</i>				
SITE EVALUTION SUMMARY – TOTAL SCORE				

Section 28. Termination of Corrective Actions.

(a) Corrective actions that have not met the applicable standard(s) in Part J may be stopped if the Solid and Hazardous Waste Administrator determines that continued operation of remedial methods (including mechanical systems, monitored natural attenuation, or other remediation technologies) is not technically and economically feasible. If a technically and economically feasible remediation alternative becomes available or impacts are found that pose a threat to human health and/or the environment, active remediation may be resumed.

(b) The department shall provide public notice in accordance with Section 26 if it is determined that an approved CAP will not achieve the established cleanup levels and termination of the CAP is under consideration.

(c) If 10 years of contaminated site fees have been paid and the fees have lapsed, annual contaminated site fees will be due from the site owner and/or operator in accordance with W.S. 35-11-1424(e) when active remediation resumes.

PART F
MINIMUM SITE ASSESSMENTS (MSAs)

Section 29. MSA Requirements.

(a) *When an MSA is Required.* MSAs are used to determine if a regulated substance has been released from a storage tank system and, if so, to determine if soil and/or groundwater contamination is present in excess of applicable standards. The MSA results will determine the site's eligibility for the Corrective Action Account. MSAs are required when any of the following conditions are met:

(i) Unless the site is already listed as a contaminated site, all tank owners and/or operators that have not previously performed an MSA shall perform an MSA. This MSA shall be performed at the site owner's and/or operator's expense no sooner than 18 years, and no later than 20 years, after the tanks were installed. This requirement applies to all USTs installed after September 22, 1988, and to all regulated ASTs.

(ii) Owners and/or operators who permanently close or change the service of storage tanks without obtaining the required department authorization and inspection shall complete an MSA at their own expense within 45 days of the tank closure or change in service. To obtain the required department inspection, the owner and/or operator shall notify the department 30 days prior to tank closure or change in service activities. If tank closure or change in service activities are not sufficient for department personnel to characterize the subsurface conditions at the site, the owner and/or operator shall complete an MSA at his/her expense. The department will assign a priority ranking in accordance with Section 27 based on the results of the inspection or owner's and/or operator's MSA.

(iii) Owners and/or operators who change a regulated tank to a non-regulated use in accordance with Section 31, or change a non-regulated tank to a regulated use shall complete an MSA at their own expense regardless of whether or not the site is listed as a contaminated site. The MSA shall be completed within 45 days of the change of use.

(iv) Any owner and/or operator of a storage tank system abandoned prior to the program that now elects to participate in the state program shall:

(A) Provide written documentation that the site actually had a program-eligible storage tank system at some time;

(B) In the case where the storage tank was an AST, provide documentary evidence that the storage tank was used to dispense gasoline or diesel fuels to the public;

(C) Complete an MSA in accordance with this Part and prove that the site has been contaminated by a program-eligible storage tank system; and

(D) Pay one year's storage tank fee for all storage tanks on the site at the time of the initial site registration. If all tanks were removed and it is not possible to determine how many storage tanks were on the site, pay the fee for one tank.

(v) Unless the site is already listed as a contaminated site, an MSA shall be completed by the owner and/or operator, in accordance with this Part, before permanently closing a storage tank in place.

(vi) When a storage tank system is temporarily closed for more than 12 months, the owner and/or operator shall complete a minimum site assessment in accordance with this Section unless the site is already listed as a contaminated site or a time extension has been granted, in writing, by the department.

(b) *MSA Work Plan.* At least 30 days prior to performing an MSA, the owner and/or operator shall submit a Work Plan to the appropriate Storage Tank Program (STP) District Office for review and approval. The STP will review the Work Plan to ensure the proposed MSA will meet the requirements of this Part. At a minimum, the Work Plan shall include the following:

(i) Facility name, address and identification number, if applicable;

(ii) Name, address and telephone number of person(s) who will be conducting the MSA;

(iii) Number of storage tanks, whether they are ASTs or USTs, and how many are regulated versus unregulated;

(iv) Description of MSA methodology to be used for storage tanks and connected piping, including borehole and/or soil excavation installation and abandonment, temporary monitoring well installation and abandonment, equipment decontamination, and contaminated soil and groundwater disposal;

(v) Soil and Groundwater Sampling and Analysis Plan, including proposed sample collection and shipment protocols and analytical methods;

(vi) A plan map showing the location of property lines, drainages, buildings, tanks, connected piping, and proposed boreholes/monitoring wells and/or soil excavations. All maps shall be to scale and provide a north arrow; and

(vii) Proposed construction for any permanent monitoring wells being installed. Well construction shall be approved by the STP.

(c) *MSA Completion Requirements.*

(i) The MSA shall be inclusive for all storage tanks, associated piping, and dispensers located on the site.

(ii) MSAs for Storage Tanks.

(A) The MSA for storage tanks shall consist of boreholes and/or soil excavations completed within 5 horizontal feet of the UST basin or AST secondary containment structure.

(B) To the extent possible, the boreholes and/or soil excavations shall surround the tank area and provide an adequate representation of any potential contamination that may have been released from the storage tank system(s). The total number and locations of the boreholes or soil excavations will vary depending on the number of storage tanks and the total storage tank capacity at the location. The number and location of the boreholes shall be provided in the Work Plan and approved by the District Office reviewing the Work Plan. In addition to the soil borings/excavations, any site that is permanently closing by abandoning USTs in place or removing ASTs shall install at least three temporary groundwater monitoring wells. The wells shall be drilled at least 5 feet into groundwater or 40 feet deep, whichever comes first. The location, depth, and exact number of wells to be installed shall be determined by actual site conditions and construction requirements for monitoring wells. The wells may be abandoned after sampling. This requirement is intended to provide data on the condition of the groundwater at the site and allow the STP to evaluate site closure without further work.

(C) Whenever groundwater is encountered in a borehole or excavation, a groundwater sample shall be collected for laboratory analysis. If groundwater is encountered in more than one borehole or excavation, up to three groundwater samples shall be collected; one sample from each borehole or excavation.

(iii) MSAs for Connected Piping and Dispensers. The MSA for connected piping and dispensers shall consist of boreholes or soil excavations completed within 3 horizontal feet of the piping or dispenser. The total number and locations of the boreholes or soil excavations will vary depending on the length of the piping and the number of dispensers. If the dispenser is located less than 20 feet from the storage tank(s), one borehole or soil excavation shall be completed at the dispenser. At sites where the dispenser is located more than 20 feet from the storage tank(s), a borehole or soil excavation shall be completed at the dispenser and every 20 feet along the piping from the dispenser to the storage tank(s).

(iv) Borehole or Soil Excavation Completion Requirements.

(A) Either borehole drilling or soil excavation are acceptable techniques for accomplishing the MSA as long as the results meet the purpose of the MSA in this Part. The MSA technique shall be proposed in the Work Plan for review and approval by the STP.

(B) Boreholes or soil excavations shall be completed to a depth of 5 feet below the bottom of a UST and 5 feet below ground surface of an AST. Boreholes or excavations shall extend to a depth of 5 feet below the bottom of the piping and 5 feet below the bottom of dispenser sumps.

(C) An accurate log of subsurface conditions shall be provided for all boreholes, wells, and/or soil excavations. This documentation shall be provided by a person qualified and experienced to describe soils based on the Unified Soil Classification System.

(D) All boreholes and temporary wells shall be abandoned in accordance with the approved Work Plan. Boreholes that do not penetrate the groundwater table may be abandoned with drill cuttings to within 2 feet of the surface. The upper 2 feet of the borehole shall consist of a hydrated bentonite plug. Boreholes or wells that encounter groundwater shall be abandoned with a bentonite slurry from the bottom of the borehole to the ground surface completion.

(E) Soil excavations shall be abandoned in accordance with the approved Work Plan. Soils may be returned to the excavation with approval from the STP project manager.

(v) Soil Sampling.

(A) All borehole and/or soil excavation samples shall be collected in a manner that ensures the samples are representative of the in-place soil at the sampling location. Soil samples shall be submitted to an STP-approved laboratory (A2LA or NELAP certification required; refer to STP website for current list of approved laboratories).

(B) Based on field instrument measurements, the most heavily contaminated soil sample shall be properly packaged and submitted to an STP-approved analytical laboratory for analysis. If field instrument measurements do not indicate a contaminated soil layer, the soil sample submitted to the laboratory shall be from the bottom of the borehole or excavation.

(vi) Groundwater Sampling.

(A) Groundwater samples shall be collected in accordance with the approved Work Plan and in a manner that ensures the samples are representative of the in-place groundwater formation.

(B) All groundwater samples shall be properly preserved and packaged prior to submission to an STP-approved analytical laboratory (A2LA or NELAP certification required; refer to STP website for current list of approved laboratories).

(d) *Documented Contamination.* If contamination is documented during this MSA process and the storage tank system is currently in use, the site owner and/or operator site shall implement the requirements in Part E.

(e) *MSA Report.* Within 45 days after the completion of the MSA, the owner and/or operator shall submit one copy of the MSA summary report to the appropriate STP District Office for review and approval. At a minimum, the report shall include the following:

- (i) Facility name, address and ID number; owner's name and address; and name of person(s) or company performing the MSA;
- (ii) Date assessment was completed;
- (iii) Storage tank(s) information, including tank number, type (AST or UST), capacity, regulated substance stored, and depth to bottom of tank(s);
- (iv) Borehole, temporary well, and/or soil excavation information, including borehole, well, and/or soil excavation identification, total depth, depth to groundwater, and description of soils and/or groundwater;
- (v) Discussion of any contamination noting depths encountered or lack of contamination discovered;
- (vi) All analytical results and field measurements;
- (vii) Description of temporary monitoring well installations; and
- (viii) Plan map showing the location of the following: structures, drainages, property lines, boreholes or soil excavations, monitoring wells, tank(s), piping, and dispensing pumps. Drawings shall include title, north arrow, and scale.

PART G
OUT-OF-SERVICE TANK SYSTEMS AND CLOSURE

Section 30. Temporary Closure.

(a) *General Requirements.* When a storage tank system is temporarily closed, owners and/or operators shall:

- (i) Notify the department within 30 days of placing the tanks in temporarily out-of-use status;
- (ii) Continue operation and maintenance of corrosion protection in accordance with Section 11 for USTs and Part I for ASTs;
- (iii) Continue release detection and release detection operation and maintenance testing and inspections in accordance with Parts C, D, I, and M;
- (iv) Comply with Parts E and F if a release is suspected or confirmed; and
- (v) Provide licensed Class A and B Operators in accordance with Section 46.
- (vi) Release detection and release detection operation and maintenance testing and inspections in Parts C, D, and I are not required as long as the tank does not contain more than 1 inch of regulated substance at the measuring point directly under the fill tube.

(b) *Tanks Temporarily Closed for 3 Months or More.* When a storage tank system is temporarily closed for 3 months or more, owners and/or operators shall comply with the following requirements:

- (i) All requirements in Section 30(a);
- (ii) Leave vent piping open and functioning;
- (iii) Drain, cap, and secure all other connected piping, pumps, manways, and ancillary equipment; and
- (iv) Continue to pay the annual tank fee and maintain financial responsibility pursuant to Part N.

(c) *Tanks Temporarily Closed for 12 Months or More.* When a storage tank system is temporarily closed for more than 12 months, the owner and/or operator shall complete a minimum site assessment in accordance with Section 29. Except tanks within operating fueling facilities, the tank shall be permanently closed in accordance with this Part not later than 12 months after the date on which the tank is placed in temporarily out-of-use status or July 1, 2018, whichever is later, unless a time extension is authorized in writing by the department.

Section 31. Permanent Closure and Changes In Service.

(a) *Notification.* At least 30 days before beginning either permanent closure or changing a storage tank system to a non-regulated use under Section 31(b) or (c), owners and/or operators shall notify the department of their intent, unless such action is in response to corrective action. The required MSA shall be completed after notifying the department but before work begins to permanently close the tank or change the tank system to a non-regulated use.

(b) *Permanent Closure.* To permanently close a UST or AST system, owners and/or operators shall empty and clean it by removing all liquids and accumulated sludges and perform an MSA as defined in Section 29. All USTs taken out of service permanently shall also be removed from the ground or filled with an inert solid material. All USTs and ASTs taken out of service permanently shall be managed in accordance with Solid Waste Rules and Regulations. The tank cleaning and closure procedures shall be properly conducted in accordance with one of the following industry standards or practices:

- (i) API Recommended Practice 1604, as referenced in Section 2;
- (ii) API Standard 2015, as referenced in Section 2;
- (iii) API Recommended Practice 1631, as referenced in Section 2;
- (iv) API Recommended Practice 2016, as referenced in Section 2;
- (v) U.S. Department of Health, Education, and Welfare, Criteria for a Recommended Standard, Working in Confined Spaces, as referenced in Section 2; and/or
- (vi) NFPA Standard 326, as referenced in Section 2.
- (vii) Section 33 provides a process for evaluating and permitting designs or procedures that deviate from recognized industry standards or practices.

(c) *Change of Service.* Before converting any regulated storage tank to store a non-regulated substance, owners and/or operators shall empty and clean the tank by removing all liquid and accumulated sludge in accordance with Section 31(b) unless the non-regulated substance is the same as the regulated substance. Before converting any regulated storage tank to store a non-regulated substance, owners and/or operators shall conduct an MSA in accordance with Section 29. An MSA shall be performed at all sites, including known contaminated sites, where a tank is converted from a regulated use to a non-regulated use. ASTs and USTs converted to a use not regulated by the department shall be managed under the federal or local jurisdiction having authority for such non-regulated use.

(d) *Owners and/or Operators not Eligible for the Corrective Action Account.* If contaminated soils, contaminated groundwater, or free product as a liquid or vapor is discovered

during the MSA, or by any other manner, owners and/or operators not eligible for use of the Corrective Action Account shall begin corrective action in accordance with Section 24.

(e) *Records.*

(i) Results of the MSA required under this Section shall be submitted to the department within 90 days of MSA completion.

(ii) Owners and/or operators shall maintain records that are capable of demonstrating compliance with closure requirements under this Part. The results of the excavation zone assessment shall be maintained for at least 3 years after completion of permanent closure or change-in-service in one of the following ways:

(A) By the owners and/or operators who took the tank system out of service;

(B) By the current owners and/or operators of the tank system site; or

(C) By mailing these records to the department only if they cannot be maintained at the closed facility.

Section 32. Applicability to Previously Closed or Abandoned Storage Tank Systems.

(a) Owners and/or operators with UST systems permanently closed after December 22, 1988, or AST systems permanently closed after the date of these regulations shall comply with Section 31.

(b) When directed by the Solid and Hazardous Waste Administrator, the owner and/or operator of a storage tank system or an owner of a site upon which such a system was located that was permanently closed before the effective date of these regulations shall complete an MSA in accordance with Section 29. When directed by the Solid and Hazardous Waste Administrator, abandoned storage tank systems shall be permanently closed in accordance with Section 31. The Solid and Hazardous Waste Administrator may take action under this Section if the department determines that releases from the storage tank system pose a current or potential threat to human health and/or the environment. Owners and/or operators of UST systems permanently closed before December 22, 1988, shall have complied with API Recommended Practice 1604, as referenced in Section 2.

PART H
TECHNOLOGY AND PROCEDURES NOT SPECIFICALLY AUTHORIZED

Section 33. New Technologies, Procedures, or Equipment.

(a) *General.* This Part is provided to encourage new technology, procedures, or equipment that are not specifically authorized and provide a process for evaluating and authorizing those that deviate from the regulations in this Chapter. The proposed use of technologies, systems, or processes not in compliance with these regulations will be authorized provided they function or comply with the intent or purpose of this Chapter.

(b) *Application Contents.* Each application for authorization to utilize new technology, systems, or processes under this Section shall be evaluated on a case-by-case basis using the best available scientific information. The following information shall be included with a written application to the department for review and authorization:

(i) Data obtained from a full scale, comparable installation or process that demonstrates compliance with the intent or acceptability of the technology, or;

(ii) Data obtained from a pilot project operated under the design condition for a sufficient length of time to demonstrate the acceptability of the design, or;

(iii) Data obtained from a theoretical evaluation of the technology or procedure that demonstrates a reasonable probability of compliance with the intent of this Chapter, and;

(iv) An evaluation of the flexibility of making corrective changes in the event the technology or process does not function as planned.

PART I
AST SYSTEMS

Section 34. Tanks Covered by this Part. This Part covers all ASTs that meet the requirements found in W.S. 35-11-1415(a)(xi). Regulated AST components are those from the fire valve to the tank including the tank and fire valve.

Section 35. Construction Requirements for AST Systems.

(a) *Tanks.* All tanks regulated by this Part, whether existing or new, shall be welded steel tanks. Bolted or riveted steel tanks or tanks made of any material other than steel shall not be used as a regulated AST. A tank intended for use as a UST shall not be installed as an AST.

(b) *Secondary Containment.* All ASTs regulated under this Section shall be constructed with secondary containment equal to at least 110% of storage capacity of the largest single AST within the secondary containment wall. The owner and/or operator of any AST shall control runoff captured inside the secondary containment system and ensure that runoff is free of floating oils prior to discharge from the secondary containment structure. Secondary containment shall be constructed of materials that are:

- (i) Fireproof; and
- (ii) Compatible with the regulated substance stored.

(c) *Vehicle Impact Protection.* ASTs shall be protected against vehicle impact by barriers. Barriers are required on any side of the AST subject to impact by a vehicle traveling on any surface accessible to the public. Vehicle impact protection is not required for tanks meeting UL-Standard 2085, as referenced in Section 2, if the manufacturer certifies that the tank provides vehicle impact protection. Barriers shall meet one of the following specifications:

(i) Guard posts constructed of concrete-filled steel no less than 4 inches in diameter, spaced not more than 4 feet apart, and set not less than 3 feet above ground in a concrete-filled footing. Footing shall be 15 inches minimum diameter and set into the ground a minimum of 3 feet deep. Posts shall not be located less than 5 feet from the tanks.

(ii) Concrete secondary containment walls that are at least 5 feet from the tanks; extend at least 3 feet above ground level on the outside of the containment wall; and contain a minimum of two, 5/8-inch reinforcing rods placed in the concrete as a continuous band within 1 foot of the top of the containment wall. Concrete secondary containment structures that do not meet this requirement may be approved by the department on a case-by-case basis.

(iii) Concrete barriers constructed to Department of Transportation specifications for use as barriers along highways. These barriers are commonly called “jersey barriers.”

(d) *Corrosion Protection.* AST systems shall be protected against corrosion using one of the following methods:

(i) *Sacrificial/Galvanic Anode CP System.* Sacrificial/galvanic anode CP systems shall be tested by a CP tester at least once every 3 years for proper operation. These systems shall be designed by a corrosion expert. Owners and/or operators of ASTs protected by sacrificial/galvanic anode systems shall also comply with Section 11;

(ii) *Impressed Current CP System.* Impressed current CP systems shall be checked at least once every 60 days by the owner and/or operator and tested by a CP tester at least once every 3 years for proper operation. These systems shall be designed by a corrosion expert. Owners and/or operators of ASTs protected by impressed current systems shall also comply with Section 11; or

(iii) *Isolation.* Isolating the AST system from the ground by placing the tank on a bed of dry and freely draining gravel, at least 3 inches thick, on a concrete floor within a concrete secondary containment system. Horizontal cylindrical tanks on saddles and tanks that meet the requirements of UL Standard 2085, as referenced in Section 2, meet this corrosion protection method.

(e) *Additional Requirements for Cathodic Protection.*

(i) Both sacrificial/galvanic anode and impressed current CP systems on ASTs shall be designed and installed with test stations to enable the owners and/or operators to monitor the operation of the CP system.

(ii) All CP systems installed on ASTs shall be designed by a corrosion expert. All CP systems shall be designed, installed, inspected and maintained to meet or exceed one or more of the following industry standards or practices:

(A) NACE Standard SP0193, as referenced in Section 2;

(B) NACE Standard SP0285, as referenced in Section 2; and/or

(C) API Standard 651, as referenced in Section 2.

(f) *Overfill Protection.* ASTs shall have overfill protection as follows:

(i) Systems shall sound an audible or visible alarm at the filling rack when the AST is 90% full;

(ii) Systems shall close valves and prevent overfilling the tank before the AST is 95% full; and

(iii) The system for tanks larger than 100,000 gallons shall sound a second audible and visible alarm at the filling rack when the AST is 95% full.

(g) *Spill Prevention.* AST systems shall have fill lines protected with a double-check valve to prevent backflow from the tank and a self-closing fire valve, activated by a frangible, fusible link. Additionally, spill prevention equipment shall meet one of the following:

(i) The fill lines shall be completely enclosed within the secondary containment system; or

(ii) Each fill line shall have its own system to control spillage.

(h) *Connected Lines.* All underground pipelines connected to ASTs shall be non-corrodible, double-wall lines equipped with working leak detection equipment. All aboveground lines shall be steel. All connections between aboveground lines and underground lines shall be made inside accessible leak-proof sumps. All new and replacement underground piping shall be double-wall and interstitially monitored.

(i) *Applicable Standards for New ASTs.* All new AST systems shall meet the requirements of one or more of the following industry standards or practices:

(i) Field Constructed Steel Tanks.

(A) API Specification 12D, as referenced in Section 2;

(B) API Standard 620, as referenced in Section 2;

(C) API Standard 650, as referenced in Section 2;

(D) NFPA Standard 30, as referenced in Section 2;

(E) NFPA Standard 30A, as referenced in Section 2;

(F) API Standard 653, as referenced in Section 2;

(G) PEI RP200, as referenced in Section 2; and/or

(H) Other standards approved by the department.

(ii) Shop Constructed Tanks.

(A) UL Standard 2085, as referenced in Section 2;

(B) UL Standard 142, as referenced in Section 2;

- (C) API Standard 650, as referenced in Section 2;
- (D) NFPA Standard 30, as referenced in Section 2;
- (E) API Standard 653, as referenced in Section 2; and/or
- (F) PEI RP200, as referenced in Section 2.

(j) *ASTs Installed After the Effective Date of These Regulations.*

(i) ASTs shall have a foundation designed by a Registered Professional Engineer, licensed in the State of Wyoming. The foundation design shall provide positive drainage of water away from the base. ASTs located in areas subject to flooding shall be anchored to prevent flotation. The foundation shall also meet one of the following:

(A) Capable of supporting the tank, when full, without excessive differential settlement as defined in API Standard 653, as referenced in Section 2; or

(B) Designed per the manufacturer's recommendation.

(ii) ASTs installed or re-installed shall meet all requirements of Part I before being placed in service.

(iii) ASTs shall be placed on a release prevention barrier. The integrity of the barrier shall not deteriorate due to exposure to the elements or soil contaminated by regulated substances. Double-wall vaulted tanks with an interstitial monitoring device shall meet all requirements for both secondary containment and the release detection barrier. The following are acceptable release prevention barriers:

(A) An impermeable geosynthetic clay liner with a permeability of 10^{-6} cm/sec or less;

(B) An impermeable geosynthetic liner installed in accordance with manufacturer's recommendations, such as a 60-mil unreinforced liner or a 40-mil reinforced liner, or a material of similar or more stringent specifications that is compatible with the regulated substance stored; or

(C) A double-bottom tank equipped with a leak detection system that will detect the presence of the regulated substance in the space between the bottoms.

(D) For tanks of less than 100,000 gallons capacity, an impermeable reinforced concrete slab.

(iv) Owners and/or operators of field constructed ASTs shall keep on file for the life of the tank, and make available to the department upon request, the following:

(A) Floor and wall/shell thickness measurements;

(B) Material certifications for all materials used in the construction of the AST system, including secondary containment and release prevention barriers; and

(C) A report including welding procedures, welding certification reports, and any non-destructive testing performed on the AST.

(v) Owners and/or operators of shop fabricated ASTs shall keep on file for the life of the tank, and make available to the department on request, the following:

(A) The floor and wall/shell thickness measurement if a UL label does not exist on the tank; and

(B) Material certifications for all materials used in the construction of the entire AST system.

(vi) All exposed exterior surfaces of field constructed ASTs shall be protected against corrosion. This requirement may be met using field applied coatings, compatible with the stored regulated substance, on visible tank surfaces.

(vii) The completed installation of metallic field constructed ASTs shall be inspected and certified by a certified API Standard 653, as referenced in Section 2, inspector.

(viii) Owners and/or operators of shop fabricated ASTs shall keep on file for the life of the AST, and provide to the department on request, a report including welding procedures, welding certification reports, and any non-destructive testing performed on the AST.

(ix) Owners and/or operators of ASTs shall provide a certificate of installation to the department that meets the requirements of Section 6(e).

(k) *Labeling.* Tanks do not need to be UL labeled but shall be designed, constructed, and tested to the approved standards. ASTs shall bear an all-weather label with the following information: name and address of the tank manufacturer, year the tank was built or date of re-certification, capacity of the tank in U.S. gallons, and the tank construction or inspection standard used.

(l) *Operational Venting.* Normal operation vents are required to prevent the development of vacuum or pressure within ASTs. Such vents shall be sized in accordance with IFC 5704.2.7.3, as referenced in Section 2, and shall be at least the size of the fill or withdrawal connection but not less than 1-1/4 inches inside diameter. Flammable liquid vents shall terminate not less than 12 feet above grade and 5 feet from a building opening or property line. Vents shall discharge upward and outward. Operational venting shall comply, as applicable, with: API Standard 2000, as referenced in Section 2; NFPA Standard 30, as referenced in Section 2; UL Standard 142, as referenced in Section 2; and UL Standard 2085, as referenced in Section 2.

(m) *Emergency Venting.* ASTs shall be equipped with adequate additional emergency venting that will relieve excessive internal pressure caused by fire exposure. Emergency venting shall comply, as applicable, with: API Standard 2000, as referenced in Section 2; NFPA Standard 30, as referenced in Section 2; UL Standard 142, as referenced in Section 2; and UL Standard 2085, as referenced in Section 2.

(n) *Warning Signs.* Signs, product placarding, and no smoking signs shall be properly posted in accordance with IFC 5704.2.3.1, 5704.2.3.2, and 5703.5, all as referenced in Section 2.

(o) *Upgrading Existing Tanks.* Existing ASTs that do not meet the requirements of this Chapter shall be upgraded to meet all requirements of this Chapter for new ASTs.

(p) *Fire Marshall Plan Review.* Owners and/or operators of AST systems installed or modified after the date of these rules shall provide documentary proof to the department that the installation plans were reviewed and approved by the appropriate authorizing authority under the State Fire Marshall.

(q) *New Installation, Upgrade, and Modification Inspections.* AST system upgrades required by this Part, modifications, and new AST installations shall be inspected by the department. Notification of new installations, upgrades, and modifications shall be made to the department in accordance with Section 9.

(r) *Access to Tank Tops.* ASTs greater than 6 feet in height shall have a permanently mounted, solidly constructed, non-combustible ladder or stairs. The ladder or stairs shall provide access to the top of the AST for visual inspection of venting, overfill equipment, and other equipment requiring inspection. Other Occupational Safety and Health Administration requirements may apply.

(s) *Piping Connections.* All AST piping connections that are below normal liquid level shall have internal or external fire/impact valves located as close as possible to the tank shell. All lines shall be equipped with anti-siphon devices.

(t) *Emergency Switches.* Emergency disconnect switches shall be provided at prominent locations to stop the transfer of fuel to the fuel dispenser in the event of a spill or other emergency. These switches shall be within 100 feet, but not less than 20 feet, of dispensers. All emergency disconnect switches shall be labeled: "EMERGENCY FUEL SHUT OFF" using a durable, weatherproof sign that is prominently posted and visible from the dispensers.

(u) *Direct Connection Between USTs and ASTs.* An existing UST directly connected to an AST shall have an automatic tank gauging system. This system shall be equipped with an audible and visual alarm that will sound when the UST is 90% full or automatically shut off the flow to the UST when the UST is 95% full. This system shall be separate from any system that controls the filling of the UST. New connections shall not be made between a UST and an AST.

(v) *Repairs.* Repairs to ASTs shall be performed in accordance with Section 8.

(w) *Submerged ASTs.* ASTs shall not be operated submerged in water.

(x) *Site Security.* ASTs shall be protected from vandalism and unauthorized product release by security fencing. Security fences shall be galvanized wire mesh, no less than 6 feet high, and topped with three strands of barbed wire on an angled support bracket. Fencing shall be no less than 5 feet from any of the tanks within the secondary containment structure. At facilities where wire fencing is not allowed by any other authority, the owner and/or operator may substitute other types of fencing at least 6 feet high.

(y) *Compatibility.* AST systems shall be compatible with the substance stored. Owners and/or operators that intend to store biofuel blends in a new or existing AST system shall demonstrate compatibility of the biofuel blend with the AST system in accordance with Section 12.

(z) *Monthly Inspections.* Monthly inspections shall be completed in accordance with Section 13.

Section 36. AST Leak Detection Requirements.

(a) *Methods.* AST owners and/or operators shall provide leak detection for the tank using one of the following methods:

(i) *Automatic Tank Gauging.* AST owners and/or operators using this method shall conduct automatic tank gauging in accordance with Section 16(c). Automatic tank gauges used for ASTs shall be third-party certified for use in an AST.

(ii) *Manual Tank Gauging.* Owners and/or operators of ASTs with a capacity of less than 1,320 gallons may monitor the tanks using manual tank gauging in accordance with Section 15(a).

(iii) *Interstitial Monitoring.* Owners and/or operators of ASTs that were constructed under UL Standard 2085, as referenced in Section 2, shall monitor the interstitial space between the inner tank and the outer shell. Records shall be kept showing the date of the monitoring, the name of the person doing the monitoring and the monitoring results. Monthly sensor status printouts from an automatic system may be used to meet this requirement.

(iv) *Visual Monitoring of Tank Bottoms.* Owners and/or operators of ASTs that are elevated aboveground, and the entire surface of the tank is visible from beneath, shall monitor the tanks monthly for visible signs of leakage. Records of these inspections shall be made showing the date of the inspection, the name of the person doing the inspection, and any sign of leakage noted. Records shall be kept by the owner and/or operator for 3 years.

(v) *Passive Acoustic Sensing.* If passive acoustic sensing is used, the AST shall be equipped with a continuous sensing system. This system shall be capable of detecting a release of 0.2 gallons per hour or a release of 150 gallons per month with a probability of

detection of 0.95 and a probability of false alarm of 0.05. All passive acoustic sensing systems shall produce a written record showing that the system is on and operable. All passive acoustic sensing systems shall be calibrated annually.

(vi) *Tracer Surveys.* Tracer surveys shall be conducted on a monthly basis in accordance with Section 16(h).

(vii) Another method approved in accordance with Section 16(i).

(b) *ASTs With a Capacity of 100,000 Gallons or Larger.* Owners and/or operators of ASTs with a capacity of 100,000 gallons or more shall follow the inspection requirements of API Standard 653, as referenced in Section 2.

(c) *SPCC Plans.* Owners and/or operators of any single AST or combination of more than one AST, with a capacity of 1,320 gallons or more, shall have a Spill Prevention Control and Countermeasures (SPCC) Plan on file with the department. This is the same document required by the Environmental Protection Agency under 40 CFR 112 as referenced in Section 2.

(d) *Additional Requirements for Large Facilities.* Facilities with above ground capacity of 100,000 gallons or more shall provide at least one additional leak detection method beyond the requirements for Section 36(a). Such methods may be custom designed for the facility at the option of the owner and/or operator, or may be a second method named in Section 36(a). Department approval is required before implementing methods in compliance with this Section.

(e) *Inventory Control.* ASTs shall be monitored using inventory control in accordance with Section 16(a) unless the tank and all lines are isolated from ground contact and can be visually monitored, or the tank is isolated from ground contact and the connected underground piping is double-wall and interstitially monitored.

(f) *Operator's Annual Inspection.* Owners and/or operators of ASTs shall conduct an annual inspection of all AST systems in accordance with Section 13(g).

Section 37. Leak Detection Requirements for Underground Lines Connected to ASTs. Leak detection requirements for underground piping connected to ASTs shall be the same as those found in Section 14. Sump sensors shall be wired to shut down all pumps and dispensers in the event of an alarm. Containment sumps used for interstitial monitoring of piping shall be tested in accordance with Section 10(d).

PART J
ENVIRONMENTAL RESTORATION STANDARDS FOR
LEAKING STORAGE TANK REMEDIATION

Section 38. Soil Remediation. Soil remediation criteria shall be based on evaluation of: 1) the potential to contaminate groundwater, and 2) potential adverse impacts to public health. The potential to impact groundwater quality shall be determined by evaluating the subsurface fate and transport characteristics of the regulated substance using site-specific soil conditions. If groundwater monitoring data conflict with fate and transport modeling estimates, the groundwater monitoring data shall be used. Potential adverse public health impacts shall be evaluated using an environmental risk assessment process for contaminated soil ingestion and inhalation.

Section 39. Water Quality Standards. If background concentrations of a constituent are higher than the protection standards presented in this Section, cleanup shall be completed to the background level. Cleanup shall only be completed for constituents from an eligible storage tank system.

(a) *Surface Water.* Storage Tank Program remediation actions shall protect surface water quality to the standards contained in Chapter 1, Wyoming Water Quality Rules and Regulations, Quality Standards for Wyoming Surface Waters.

(b) *Groundwater.* Storage Tank Program remediation actions shall:

(i) Protect Class I, II, III, IV(a), IV(b) or Special A groundwater quality to the most stringent of the:

(A) Federal primary MCL contained in 40 CFR 141, as referenced in Section 2;

(B) Water quality standards contained in this Section when there is no federal MCL for a substance; or

(C) Groundwater quality standards found in Chapter 8, Wyoming Water Quality Rules and Regulations, Quality Standards for Wyoming Groundwaters.

(ii) Protect Class VI groundwater to the groundwater quality standards found in Chapter 8, Wyoming Water Quality Rules and Regulations, Quality Standards for Wyoming Groundwaters.

(c) *Eligible Sources.* Groundwater remediation shall address contaminants that originated from an eligible storage tank system. Remediation of constituents that are naturally occurring or are from sources other than an eligible storage tank system shall not be completed, except as incidental and necessary to the remediation of the eligible contaminants.

(d) *Free Product.* Whenever any free-phase liquid layer of a regulated substance is encountered in groundwater or floating on the groundwater surface with a thickness in excess of 0.05 inches, restoration shall begin as soon as possible to remove the regulated substance(s) and prevent contaminant migration into previously uncontaminated areas.

(e) *Drinking Water Equivalent Levels.* If an MCL does not exist and there is no standard for a constituent in either Chapter 1 or 8, Wyoming Water Quality Rules and Regulations, the following procedures shall be used to calculate a state Drinking Water Equivalent Level (DWEL). Calculations shall be based on chronic exposure.

(i) Non-carcinogenic substances:

Equation 1:

$$DWEL = \frac{(RfD_o)(ABW)(HQ)}{(DWI)(AB)(FOE)}$$

(ii) Carcinogenic substances:

Equation 2:

$$DWEL = \frac{(RISK)(ABW)(LIFE)}{(CPF_o)(DWI)(AB)(FOE)(DUR)}$$

where:

DWEL =	Drinking water equivalent level, mg/L.
RISK =	Cancer risk for drinking water, (1 x 10 ⁻⁶).
ABW =	Average adult body weight over exposure period (70 kg).
CPF _o =	Oral cancer potency factor (mg/kg-day) ⁻¹ ; chemical specific.
RfD _o =	Oral reference dose (mg/kg-day); chemical specific.
DWI =	Adult drinking water intake, 2 L/day.
AB =	Gastrointestinal absorption rate (1.0).
LIFE =	Lifetime (70 years).
DUR =	Duration of exposure (30 years).
FOE =	Frequency of exposure, (350 days/365 days = 0.96).
HQ =	Hazard quotient (1).

Values for oral toxicological reference doses (RfD_o) and/or cancer potency factors (CPF_o) shall be obtained from current data in the U.S. Environmental Protection Agency's (EPA) Integrated Risk Information System (IRIS), the EPA Health Effects Assessment Summary Tables (HEAST) toxicity data sources, or the EPA Region IX Preliminary Remediation Goals Data Base. If an oral reference dose or cancer potency factor is not listed in the above database sources, the administrator shall determine a state DWEL using the latest available toxicological data.

(f) *Multiple Standards.* When more than one standard exists in Section 39 for any constituent, the most stringent standard shall be used.

Section 40. Soil Human Health Risk Assessment.

(a) *Introduction.* A risk assessment for potential human health impacts is required for storage tank remediation actions to evaluate the risk component from a release and to develop quantitative soil cleanup concentrations directly related to the environmental risk. The human health risk assessment model is based on existing EPA methodologies and exposure constant values. The routes of potential exposure to be considered are soil ingestion and inhalation of substances released from regulated storage tank systems. A remedial action plan shall be submitted to the department for approval. The remedial action plan shall be approved by the department after it has been determined that the plan will adequately protect human health, safety, and the environment. In making this determination, the department shall consider the following factors, as appropriate:

- (i) The physical and chemical characteristics of the released substance, including its toxicity, persistence, and potential for migration;
- (ii) The hydrogeologic characteristics of the site and the surrounding area;
- (iii) The proximity, quality, and current and future uses of nearby surface water and groundwater;
- (iv) The potential effects of residual contamination on nearby surface water and groundwater;
- (v) An exposure assessment; and
- (vi) Any additional factors relevant to assessing risks to human health and the environment.

(b) *Risk Assessment Calculation Model.* Using soil property data collected during site investigation, site-specific soil risk assessment calculations shall be completed using equations in this Section. This model estimates chronic exposure(s) on a site-specific basis by combining an average exposure point concentration with reasonably conservative values for human intake and exposure duration. Thus, all site-specific soil parameters used to calculate risk assessment remedial concentrations at each site should reflect average or typical site conditions. In addition to site-specific soil conditions and chemical compounds, default values have been established for other equation input parameters.

(i) Combined Oral Ingestion and Inhalation Exposures to Carcinogenic Contaminants in Residential Soil:

Equation 3:

$$C_s(mg/kg) = \frac{(RISK)(AT_c)}{EF \left(\frac{(IFS_{adj})(CPF_o)}{10^6 mg/kg} + \frac{(INHf_{adj})(CPF_i)}{VF_s} \right)}$$

(ii) Combined Oral Ingestion and Inhalation Exposures to Non-carcinogenic Contaminants in Residual Soil:

Equation 4:

$$C_s(mg/kg) = \frac{(HQ)(BW_c)(ED_c)(365/yr)}{(EF)(ED_c) \left(\frac{IRS_c}{(RfD_o)(10^6)} + \frac{(IRA_c)}{(RfD_i)(VF_s)} \right)}$$

where:

Equation 5:

$$VF_s(m^3/kg) = (Q/C) \left(\frac{10^{-4}(m^2/cm^2)\sqrt{\pi(D_A)(T)}}{(2)(\rho_b)(D_A)} \right)$$

where:

Equation 6:

$$D_A = \frac{(\phi_a^{10/3})(D_iH') + (\phi_w^{10/3})(D_w)}{n^2\{(\rho_b)(K_d) + \theta_w + (\phi_a)(H')\}}$$

where:

C_s	=	Soil contaminant cleanup concentration, mg/kg.
RISK	=	Cancer risk for soil cleanup actions, 1×10^{-6} .
AT_c	=	Averaging time, carcinogens, 25,550 d.
EF	=	Exposure frequency, residential, 350 d.
IFS_{adj}	=	Ingestion factor, soil, 114 (mg-yr)/(kg-d).
CPF_o	=	Cancer potency factor, oral, chemical specific, (mg/kg-d) ⁻¹ .
CPF_i	=	Cancer potency factor, inhalation, chemical specific, (mg/kg-d) ⁻¹ .
$INHf_{adj}$	=	Inhalation factor, air, 11 (m ³ -yr)/(kg-d).
VF_s	=	Volatilization factor, soil, m ³ /kg.
HQ	=	Hazard quotient, 1

BW _c	=	Body weight, child, 15 kg.
ED _c	=	Exposure duration, child, 6 yrs.
IRS _c	=	Soil ingestion rate, child, 200 mg/d.
IRA _c	=	Soil inhalation rate, child, 10 m ³ /d.
RfD _o	=	Reference dose, oral, mg/kg-d.
RfD _i	=	Reference dose, inhalation, mg/kg-d.
Q/C	=	Inverse of the mean concentration at the center of a 0.5 acre square source in Wyoming, 100.13 (g/m ² -s per kg/m ³).
D _A	=	Apparent diffusivity, cm ² /s.
D _i	=	Chemical diffusivity in air, cm ² /s, chemical specific.
D _w	=	Chemical diffusivity in water, cm ² /s, chemical specific.
T	=	Exposure interval, s, 9.5E08.
ρ _b	=	Soil density, g/cm ³ , 1.5 or actual value.
ρ _s	=	Soil particle density, g/cm ³ , 2.65.
Θ _a	=	Air filled soil porosity, L _{air} /L _{soil} , 0.28 or, n - Θ _w
Θ _w	=	Water filled soil porosity, L _{water} /L _{soil} , 0.15.
n	=	Total soil porosity, L _{pore} /L _{soil} , 0.43 or, 1 - (ρ _b /ρ _s).
H'	=	Dimensionless Henry's Law Constant, H(41), chemical specific.
K _d	=	Soil-water partition coefficient cm ³ /g, K _{oc} f _{oc} , chemical specific.
K _{oc}	=	Soil organic carbon-water partition coefficient, cm ³ /g, chemical specific.
f _{oc}	=	Fraction organic carbon in soil, g/g, 0.001 or site specific value.

Values for oral toxicological reference doses (RfD_o) and/or oral cancer potency factors (CPF_o) are obtained from current data in the U.S. Environmental Protection Agency (EPA) Integrated Risk Information System (IRIS), the EPA Health Effects Assessment Summary Tables (HEAST), or the EPA Region IX Preliminary Remediation Goals Data Base. If an oral reference dose or cancer potency factor is not listed in the above database sources, the administrator will determine an acceptable soil cleanup concentration using the latest available toxicological information from other appropriate sources.

Section 41. Soil Environmental Fate and Transport Evaluation. A soil environmental fate and transport evaluation shall be completed. The evaluation shall estimate the potential for soil to contaminate groundwater at levels exceeding STP groundwater restoration standards.

(a) *Conceptual Organic Compound Fate and Transport Model.*

(i) The model is based on the following assumptions:

(A) A finite amount of soil contamination exists at variable depths beneath a leaking storage tank site. It may extend from the surface to below the groundwater table, or it may be confined to a discrete zone. There is an uppermost aquifer beneath the site that is not adequately protected by an impermeable barrier between the contaminated soil and the aquifer. Percolating rainfall or snow melt moves through the contaminated soil, mobilizes some

of the contamination as a leachate and carries the contamination towards the aquifer. A portion of the contamination remains strongly adsorbed to the soil. The portion of the contaminants that are not permanently adsorbed are available for biodegradation and a limited amount of leaching.

(B) The point of compliance for protecting groundwater quality is directly below the contaminated soils at the surface of the aquifer.

(C) The rate of leaching from the soil has reached a steady state.

(D) The soils beneath the leaking storage tank(s) represent the only source of contamination to the groundwater.

(E) Vapors emanating from the contaminants in the soil are moving *primarily* upwards to the ground surface, and there is no perched saturated zone above the contaminated soils. Based on existing program experience, the potential does exist for some lateral movement of contaminant vapors; however, this movement is not the primary direction.

(F) A leachate plume beneath the contaminated zone has not yet reached the groundwater table.

(ii) The model for calculating soil cleanup concentrations involves a set of mathematical equations designed to calculate soil remediation concentrations. The equations have been modified and simplified to make it possible to calculate soil cleanup concentrations using as much site-specific data/information as possible. The site-specific data used in the equations should be available from the subsurface investigations and are preferred over using the default values.

(iii) The equations are a mathematical expression of the conceptual model. The organic contaminant concentration in the soil is reduced by a fractional amount that has been biodegraded by natural bacteria in the soil system. Therefore, a biodegradation factor, e^{-kt} , has been included in the evaluation process. Because the biodegradation factor will reduce the amount of contaminant available for leachate generation, the soil cleanup concentration can be adjusted upward by a calculated amount. The amount, which is adsorbed, is calculated using the chemical-specific adsorption coefficient, K_d .

(iv) The adsorption coefficient, K_d , is calculated from the following equation using site-specific data:

Equation 7:

$$K_d = (f_{oc})(K_{oc})$$

where:

- f_{oc} = Site-specific fraction of organic carbon, mg organic carbon/mg soil in the uncontaminated subsurface site soil. Normal range of f_{oc} in Wyoming soils is 0.1-3%. If a site-specific f_{oc} value is not determined, use a default value of 0.1%.
- K_{oc} = Chemical specific organic carbon partition coefficient, mL/gm.

(v) The conceptual model discussed above is represented by the following series of equations with further explanation, as necessary:

(A) Determine travel time to reach groundwater table, t .

(I) Subsurface soil contamination separated from the groundwater table by more than 1 foot of depth is calculated as follows. Because subsurface organic carbon content below 1 foot is expected to approach a very low number in Wyoming soils, the following contaminant travel time equation has been developed:

Equation 8:

$$t = \frac{(d)[(K_d)(\rho) + \theta]}{0.5(\alpha)}$$

where:

- t = Time for contaminant(s) to travel from the bottom of the contaminated zone to the groundwater table, yrs.
- d = Depth to the groundwater table from the bottom of the contaminated zone(s), cm.
- Θ = Volumetric soil moisture content(s) at field capacity, mL/cm³.
- 0.5 = 50% infiltration rate for precipitation (worst case).
- α = Average annual precipitation, cm/yr.
- ρ = Bulk soil density, gm/cm³.

(II) If more than one soil type exists at a contaminated site or remediation project location where the organic carbon content differs by 0.5% or greater and the different soil type is 1 foot or greater in thickness, individual soil type specific values for K_d , Θ , and ρ shall be used in the time of travel calculation for *each* soil type. Further, the individual values for depth, d , to the groundwater table from the bottom of *each* contaminated soil type zone shall be used in the calculation. If the depth, d , from the bottom of the contaminated soil type zone to the groundwater table is less than 12 inches, this method for determining contaminated soil remediation concentrations is not valid. In these cases, cleanup of

contaminated groundwater will govern the satisfactory remediation of contaminated soil within this 12-inch interval. The final time of travel, t , is the sum of the individual soil-type segments.

(III) Surface contamination extending from the ground surface to depths greater than 2 feet. In order for the following equation to be used, the subsurface soil within the 2-foot distance shall contain at least 3 percent total organic carbon, otherwise Equation 8 applies for the time of travel calculation. If using two different K_d values for different soil organic carbon concentrations, the equation is derived as follows:

Equation 9:

$$t = \frac{(Z)[(K'_d)(\rho') + \theta'] + (d)[(K_d)(\rho) + \theta]}{0.5(\alpha)}$$

where:

Z	=	Thickness of soil containing 3 percent or greater organic carbon, cm.
K'_d	=	Adsorption coefficient in the top 2 feet of soil, which is equal to the measured fraction of organic carbon, f_{oc} , times the K_{oc} value.
K_d	=	Soil adsorption coefficient in the remaining soil column calculated from Equation 7, mL/gm.
ρ'	=	Bulk soil density of soil containing 3 percent or greater organic carbon, gm/cm ³ .
Θ'	=	Volumetric soil moisture content at field capacity of soil containing 3 percent or greater organic carbon, mL/cm ³ .

The parameter, Z , takes into account natural organic carbon that may be present at the ground surface, and it may extend for a limited vertical distance [0-60 cm (0-24 inches)] into the ground. Development of site-specific soil adsorption coefficient isotherms *may* be required for complex surface environments where f_{oc} is greater than 3 percent. If the uppermost 2-foot zone contains less than 3 percent natural organic carbon, the Z portion of the time of travel calculation drops out, leaving Equation 8 to apply for the time of travel calculation. This portion of the calculation provides a mechanism to account for higher surface contaminant adsorption by naturally occurring organic carbon within this zone.

(B) Calculate the soil remediation concentration for the *biodegradation potential*, $C_{s,org}$, for the organic compound(s) using Equation 10:

$$C_{s,org} = \frac{(C_{st,org})(K_d)}{e^{-kt}}$$

where:

k	=	Biodegradation rate constant, $0.693/T_{1/2}$, 1/yr.
$T_{1/2}$	=	Half-life for the specific chemical substance in groundwater in years.
t	=	Contaminant travel time to reach groundwater table, yrs.
$C_{st,org}$	=	Organic compound drinking water MCL, or state DWEL, mg/L.
$C_{s,org}$	=	Soil cleanup concentration for organic chemical compound, mg/kg.
K_d	=	Soil adsorption coefficient calculated from Equation 7, mL/gm. Where more than one K_d value is used for two or more different organic carbon soil types, use the lowest individual K_d value.

Equation 10 establishes the site soil remediation concentration for each organic chemical compound that could be allowed to remain in soil without threatening degradation of groundwater quality even if groundwater seasonally passes through the contaminated zone.

(vi) The soil saturation limit is the contaminant concentration at which soil pore air and pore water are saturated with the chemical and the adsorptive limits of the soil particles have been reached. Above this limit, the contaminant may be present in the free phase. Equation 11 is used to calculate the soil saturation limit for each organic chemical at the site:

Equation 11:

$$C_{sat} = \frac{S(K_d\rho_b + \theta_w + H'\theta_a)}{\rho_b}$$

(b) *Conceptual Metal, Inorganic Compound, and Total Petroleum Hydrocarbon Fate and Transport Model.*

The conceptual model for metals, inorganic compounds, and total petroleum hydrocarbons (TPH) assumes that these substances are distributed in subsurface soils around, or below, the level of a storage tank that had contained leaded regular gasoline or a hazardous substance. Some of these substances will be mobilized in percolating rainfall or snow melt and may be transported to the groundwater table as a leachate. That portion of these substances that remains adsorbed to the soil particles is determined by the adsorptive properties of both the substance and soil. It is calculated using the adsorption coefficient, K_d . The factor, $e^{-\lambda t}$, is used as a leaching rate factor in this model to determine the rate at which leachate is released from the contaminated soil.

The conceptual model for metals, inorganic compounds, and TPH is represented by the following series of equations:

(i) Determine the *leaching rate constant*, λ

Equation 12:

$$\lambda = \frac{(0.5)(\alpha)}{(\Theta)(\tau)(1 + \frac{\rho(K_d)}{\theta})}$$

where:

λ	=	Leaching rate constant, 1/yr.
α	=	Average annual precipitation, cm/yr.
Θ	=	Volumetric soil moisture content at field capacity, mL/cm ³ .
ρ	=	Bulk soil density, gm/cm ³ .
K_d	=	Soil metal, inorganic compound, or TPH adsorption coefficient, mL/gm.
τ	=	Thickness of contaminated soil seam, cm.

If more than one soil type exists at a contaminated site where the organic carbon content differs by 0.5% or more and the different soil type is 1 foot or greater in thickness, individual specific soil type values for K_d , Θ and ρ shall be used in the leaching rate constant calculation for each soil type. The final leaching rate constant, λ , is the sum of the individual soil type segments.

(ii) Calculate *travel time* to reach groundwater table, t .

Subsurface soil contamination separated from the groundwater table by more than 1 foot is handled in the following way:

Because subsurface organic carbon content below 1 foot is expected to approach a very low number in Wyoming soils, contaminant travel time is calculated by:

Equation 13:

$$t = \frac{(d)[(K_d)(\rho) + \theta]}{0.5(\alpha)}$$

where:

t	=	Time for contaminant to travel from the bottom of the contaminated zone to the groundwater table, yrs.
d	=	Depth to the groundwater table from the bottom of the contaminated zone, cm.
Θ	=	Volumetric soil moisture content at field capacity, mL/cm ³ .
0.5	=	50% infiltration rate for precipitation (worst case).
α	=	Average annual precipitation, cm/yr.
ρ	=	Bulk soil density, gm/cm ³ .

If more than one soil type exists at a contaminated site where the organic carbon content differs by 0.5% or greater and the different soil type is 1 foot or greater in thickness, individual soil type specific values for K_d , Θ , and ρ shall be used in the time of travel calculation for each soil type. Further, the individual values for depth, d , to the groundwater table from the bottom of each contaminated soil-type zone shall be used in the calculation. If the depth, d , from the bottom of the contaminated soil-type zone to the groundwater table is less than 12 inches or groundwater travel fluctuates this distance, this method for determining contaminated soil remediation concentrations is not valid. In these cases, cleanup of contaminated groundwater will govern the satisfactory remediation of contaminated soil within this 12-inch interval. The final time of travel, t , is the sum of the individual soil type segments.

(iii) Calculate the soil remediation concentration for the leaching potential of the metal, inorganic compound, or TPH using the following derived equation:

Equation 14:

$$C_{s,inorg} = \frac{(C_{stm})(K_d)}{e^{-\lambda t}}$$

where:

$C_{s,inorg}$	=	Soil cleanup concentration due to metal, inorganic compound, or TPH leaching potential, mg/kg.
C_{stm}	=	Environmental standard concentration, primary MCL, or state DWEL, mg/L.
	=	Chemical leaching rate, 1/yr.
t	=	Contaminant travel time to reach groundwater table, yrs.
K_d	=	Soil metal, inorganic compound, or TPH adsorption coefficient, ml/gm.

The soil cleanup concentration for metals, inorganic compounds, or TPH is determined by evaluating the above calculations and the natural background concentration. Information concerning the natural subsurface concentration may be available from either: (1) a subsurface investigation report, or (2) site-specific subsurface soil samples from an uncontaminated, up-gradient location immediately near the leaking storage tank site. Soil metal remediation is not required for concentrations that are below natural background concentration(s).

(c) *Final Storage Tank Cleanup Concentration.* The final numerical soil cleanup concentration for organic chemical compounds shall be the lower numerical value of the total petroleum hydrocarbon concentration, the human health risk assessment, the soil saturation concentration, or the environmental fate and transport considerations. The final numerical soil cleanup concentration value for metals, inorganic compounds, or total petroleum hydrocarbons shall be the lower numerical value of the environmental fate and transport calculation or the human health risk assessment component. The goal of the final cleanup concentration(s) is to

ensure that the remedial action will result in an acceptable cleanup for organic chemical compounds, inorganic compounds, TPH, and metals.

Section 42. Vapor Hazards Evaluation.

(a) Petroleum and/or hazardous substance vapors in soil, the vadose zone, or groundwater resulting from a storage tank release and that have caused, or have a potential to cause, an explosive atmosphere in a private residence, business, or other occupied structure, or in a confined space such as utility conduits, sewer mains, etc., shall be evaluated and remediated according to this Section. Monitoring for explosive atmosphere action levels shall be completed using a properly calibrated and operating combustible gas meter. Explosive atmosphere action levels for volatile substances are defined as 25% of the substance's lower explosive limit (LEL).

(b) When an explosive action level is exceeded, immediate measures shall be taken to reduce the explosive environment to below the action level. If a mechanical remediation system capable of mitigating vapors is installed, it shall be operated and maintained until, at a minimum, the explosive atmosphere has been eliminated. Atmospheric monitoring shall continue until the explosive atmosphere has been eliminated.

(c) Contamination may not remain in soil or groundwater if the contamination could cause a release of vapors to receptors in an indoor structure or confined space at levels that present a human health hazard.

(d) Chemical substance airborne concentrations in *occupational* environments are regulated by the Wyoming Occupational Health and Safety Division, Department of Employment, for protection of employees in a work place.

(e) Hazardous substance *indoor* air quality action levels shall be calculated using the following equations:

(i) *Carcinogens:*

Equation 15:

$$IAAL(\mu g/m^3) = \frac{(RISK)(ABW)(LIFE)(UCF)}{(CPF_i)(BR)(ABS)(DUR)}$$

(ii) *Non-carcinogens:*

Equation 16:

$$IAAL(\mu g/m^3) = \frac{(RfD_i)(ABW)(UCF)(HQ)}{(BR)(ABS)}$$

where:

<i>IAAL</i>	=	Indoor Air Action Level, $\mu\text{g}/\text{m}^3$.
<i>RISK</i>	=	Cancer risk (1×10^{-6}).
<i>RfDi</i>	=	Inhalation Reference Dose; chemical specific.
<i>CPF_i</i>	=	Inhalation Cancer Potency Factor; chemical specific.
<i>ABW</i>	=	Average body weight (70 kg).
<i>UCF</i>	=	Unit conversion factor (1,000 $\mu\text{g}/\text{mg}$).
<i>BR</i>	=	Indoor breathing rate ($15 \text{ m}^3/\text{day}$).
<i>ABS</i>	=	Absorption percentage (100%).
<i>HQ</i>	=	Hazard quotient (1).
<i>LIFE</i>	=	Lifetime exposure (70 years).
<i>DUR</i>	=	Duration of exposure (30 years).

Values for *inhalation* toxicological reference doses (*RfDi*) and/or cancer potency factors (*CPF_i*) shall be obtained from current data in the U.S. Environmental Protection Agency's (EPA) Integrated Risk Information System (IRIS), the Health Effects Assessment Summary Tables (HEAST), or the EPA Region IX Preliminary Remediation Goals Data Base. Where toxicological data are not listed in these references, the administrator shall establish the appropriate airborne concentration standard.

When an airborne concentration is confirmed in any building that equals or exceeds calculated concentrations and the source of the contaminant airborne concentration is known to be associated with a leaking storage tank release, immediate action shall be implemented. Action shall be taken to eliminate the airborne health hazard to the applicable airborne occupational or indoor air quality action level. Immediate action shall continue until the airborne concentration(s) is below those levels specified in this Section.

Section 43. Default Organic Compound and Total Petroleum Hydrocarbon Soil Cleanup Concentrations. When site-specific geological data/information are not available to calculate soil cleanup concentrations, default remediation standards shall be used. Default remediation standards shall be based on exposure of the most sensitive receptor using both oral ingestion and inhalation pathways and the potential for soil contamination to migrate to groundwater. The default soil condition for organic compounds has been established as a sandy clay formation with a minimal organic carbon content of 0.1% and a depth to the first groundwater table from the bottom of the default contaminated soil zone equal to 1 foot. The default thickness of contaminated soil is 5 feet. The annual precipitation rate is 14 inches per year with a 50% infiltration rate. These conservative default soil conditions indicate residential exposures with protection of groundwater quality to EPA/STP MCLs or DWELs.

PART K

DELIVERY PROHIBITION AT NON-COMPLIANT FACILITIES

Section 44. Delivery Prohibition.

(a) *Reasons for Restricting Delivery.* Regulated substance delivery prohibition to a storage tank system shall be required when the department becomes aware that:

(i) The owner and/or operator has not performed leak detection on the tanks as required in Part D for any period exceeding 60 days;

(ii) The most recently required cathodic protection test has not been done within 90 days of the due date as required by Section 11(b);

(iii) A cathodic protection test done in accordance with Section 11 has failed and has not been repaired and re-tested within 90 days of the date when the original failing result was obtained;

(iv) The most recently required pressure test of the lines has not been done as required by Section 14(g)(i)(B) or Section 14(g)(ii) (as applicable) within 90 days of the date due;

(v) The most recently required functional test of automatic line leak detectors has not been done as required by Section 14(g)(i)(B) or Section 37 within 90 days of the date due;

(vi) The owner and/or operator has failed to report a suspected release under Section 19 when required by Part D and/or Section 19;

(vii) The owner and/or operator has reported a suspected release under Section 19 but has failed to initiate the release investigation required under Section 20 or 21;

(viii) The owner and/or operator has reported a confirmed release, but repairs have not been made to the storage tank system;

(ix) The owner and/or operator has failed to pay the storage tank registration fee, which is due on January 1 of each year, by April 1 of the year when due;

(x) The owner and/or operator has failed to follow any Order issued by the department, unless that Order is under appeal to the Environmental Quality Council;

(xi) Any required monitoring device has been purposely tampered with or turned off (unless it is being repaired);

- (xii) Any record required to be kept under this Chapter has been falsified;
- (xiii) Any regulated tank is discovered without overfill and spill prevention devices in place as required by Sections 6(c) or 35(f);
- (xiv) Any regulated tank, or any piping or ancillary equipment that routinely contains product and is not isolated from ground contact, is discovered without corrosion protection or cathodic protection systems in place as required by Sections 6(a)(ii), 6(b)(ii), or 35(d);
- (xv) Any regulated AST has not been fully upgraded in accordance with Part I;
- (xvi) The operator's annual inspection has not been performed within 90 days of the due date as required by Section 13(g) or Section 36(f);
- (xvii) The department becomes aware that there has been no licensed Class A or B Operator for a facility for 90 days or more; or the Class B Operator has not been retrained per Section 46(i) within 90 days of a Notice of Violation being issued.
- (xviii) Repaired tanks and piping have not been tightness tested within 30 days of repair completion;
- (ixx) Cathodic protection impressed current systems have not been inspected at least every 60 days;
- (xx) A storage tank system has been installed or substantially modified and is being operated without written authorization by the department; or
- (xxi) Spill prevention equipment, containment sumps, or overfill prevention device testing has not been completed within 60 days of the due date as required in Section 10(d); or
- (xxii) Pressurized piping is being operated without an automatic line leak detector in accordance with Section 14(g)(i)(B).

(b) *Delivery Prohibition Procedures.* When any of the delivery prohibition reasons in Section 44(a) exist, the department shall issue an Administrative Order to prohibit deliveries of the regulated substance.

(i) The department shall obtain, from the Wyoming Fuel Tax Administration, the names of suppliers of record for any facility that is the subject of an Administrative Order under this subsection. Those suppliers shall also be ordered not to deliver regulated substances in the Administrative Order.

(ii) Administrative Orders issued under this Part shall include the following information:

- (A) The name of the owner and/or operator of the storage tank system;
- (B) The street address of the facility where the storage tank system is located;
- (C) The Storage Tank Program facility ID number;
- (D) The specific tanks at the facility that are affected; and
- (E) The reason for the delivery prohibition.

(iii) An Administrative Order issued under this Section is final as soon as it is signed by the Director. Administrative Orders may be appealed to the Environmental Quality Council.

(iv) The department shall immediately issue a Notice of Compliance to all entities covered by the Administrative Order that lifts the prohibition when the facility has been returned to compliance. Such notice shall include the same information required in Section 44(b)(ii)(A) through (D).

(c) *Posting on the Internet.* The department shall immediately post a copy of the Administrative Order on its website whenever a facility is prohibited from accepting deliveries of regulated substances. The department shall also post a Notice of Compliance on its website when the prohibition has been lifted. The notice shall state which tanks at the facility are affected.

(d) *Red Tagging.* The department may, at any time after issuing an Administrative Order under this Part, place a tag on the affected tanks stating:

“DELIVERY PROHIBITION

Deliveries of any regulated substance to this tank have been prohibited by the State of Wyoming, Storage Tank Program. Delivery of any regulated substance to this tank while the delivery prohibition exists is a violation of Chapter 1, Storage Tank Program, Solid and Hazardous Waste Division Rules and Regulations, Storage Tanks, Part K.”

(e) *Violation of this Part.* It is a violation of this Part for any person to purchase a regulated substance for delivery to, or to deliver a regulated substance to, any storage tank that is the subject of any Administrative Order issued under this Part.

(f) *One-Time Fuel Delivery Allowance.* The department may issue a one-time fuel delivery allowance to a tank prohibited from receiving a delivery so the owner and/or operator

can perform tank and line tightness testing. This delivery shall be for the minimum amount of fuel needed to perform the required test.

PART L

STORAGE TANK OPERATORS, INSTALLERS, AND TESTERS LICENSING

Section 45. Installer Licensing.

(a) *License Required.* During the installation or modification of any UST or AST regulated by this Chapter, at least one person, present on the job site, shall be licensed by the department to install or modify fuel tanks. To obtain an installer's license, the installer shall submit documentary evidence that he or she has passed the following tests, as applicable, within the 5 years preceding the application date:

(i) All Licensed Installers:

(A) The International Code Council test on Wyoming State Specific Storage Tank Laws; and

(B) A current certificate for Hazardous Waste Operations and Emergency Response as required by the Wyoming Department of Employment, Occupational Health and Safety, Chapter 7, Section 1910.120.

(ii) Licensed UST Installers. UST installers shall pass the International Code Council UST Installation and Retrofitting test.

(iii) Licensed AST Installers. AST installers shall pass the International Code Council AST Installation and Retrofitting test.

(b) *License Renewal.* Persons who are licensed as UST or AST installers shall renew their license every 5 years.

(c) *Reciprocity with Other States and Cities.* The department may accept a license from another state or a city after review and approval of the licensing requirement for that state or city. The license shall be accepted in lieu of taking the International Code Council tests required in Sections 45(a)(ii) and (iii). However, the licensee shall meet the requirements in Section 45(a)(i). A license from another state or city that does not require passing an exam, but only requires continuing education units, will not be accepted.

Section 46. Storage Tank Operator Licensing.

(a) *Class A Operator.* Each facility, whether active or temporarily out-of-use (TOU), shall be under the supervision of a person who has obtained a Class A Storage Tank Operator's License. The Class A Operator shall be an employee of the facility owner and/or operator. To obtain a Class A Storage Tank Operator's License, the operator shall submit documentary proof that he/she has passed the International Code Council test on "Wyoming State Specific Storage

Tank Laws - ICC Test W-6.” A Class A Operator is generally the area manager for a company with multiple locations.

(b) *Class B Operator.* All storage tank owners and/or operators shall ensure that the person in responsible charge of the day-to-day operation of the storage tanks obtains a Class B Operator license from the department. For facilities used to fuel vehicles, the person in responsible charge cannot be in responsible charge of more than 15 facilities at the same time. The Class B Operator shall be an employee of the facility owner and/or operator.

(c) *Timing.* Within 30 days of assuming duties, the Class A and Class B Operators shall obtain a Class A or B Storage Tank Operator’s license from the department. To obtain this license, the operator(s) shall submit documentary evidence that he or she has passed the following tests within the 5 years preceding the application date:

(i) UST Operators. The International Code Council test “ICC BU Class B UST System Operator Exam” (Class B for UST operators); and/or

(ii) AST Operators. The International Code Council test “Wyoming AST System Operators – ICC Test W-5” (Class B for AST operators); or

(iii) In lieu of both of the above tests, the International Code Council test “Wyoming State Specific Storage Tank Laws – ICC Test W-6” (Class A operators).

(d) *Class C Operators (Service Station Clerks).* The Class C Operator shall be trained prior to assuming responsibility for responding to emergencies or alarms. Class C Operator training shall include when and how to notify appropriate authorities and the Class A or B Operator for the facility. Managers and fuel clerks who work at a service station or convenience store, but who are not in responsible charge of the location, shall be trained onsite by the Class A or B Operator for that location in all of the following areas:

(i) Proper procedures to follow in the event of an accident that damages the dispensers or any part of the fuel system, including but not limited to, exposed piping and vent lines;

(ii) The location and operation of all emergency shutoff switches, breakers, and other controls necessary to completely control all pumps installed on the system;

(iii) The limits of maintenance items that can be performed by the Class C Operator and what items shall be referred to more qualified individuals;

(iv) Procedures to be followed in the event of a fuel release, regardless of the reason for that release;

(v) Records that shall be kept (if any) on each shift to ensure that release detection is properly done;

- (vi) Delivery procedures and hazards;
- (vii) Alarm recognition with emphasis on the significance and proper response to each and every alarm on the storage tank system; and
- (viii) The location and function of all leak detection and CP devices and systems.

(e) *Spill Reporting.* The Class C Operator shall notify the Class A or Class B Operator for his or her facility whenever there has been a release of regulated substances.

(f) *License Renewal.* Persons who are licensed as UST or AST Operators shall renew their license every 5 years.

(g) *Reciprocity with Other States and Cities.* The department may accept a license from another state or a city after review and approval of the licensing requirement for that state or city. The license shall be accepted in lieu of taking the International Code Council tests required in Section 46(c)(i) for Class B UST Operators only. A license from another state or a city that does not require passing an exam, but only requires continuing education units, will not be accepted.

(h) *Documentation.* Owners and/or operators shall maintain a list of designated Class A, Class B, and Class C Operators and maintain records verifying that training and retraining, as applicable, have been completed. Training records shall be kept on site and available for inspection.

(i) The list shall identify all Class A, Class B, and Class C Operators currently designated for the facility. The list shall include names, class of operator trained, date the operator assumed duties, date each completed initial training, and date of any retraining.

(ii) Records verifying completion of training or retraining shall be a paper or electronic record for each operator class. The records, at a minimum, shall identify the name of the trainee, the date the Class C Operators were trained, the expiration date on the license for Class A or B Operators, and the name of the Class A or B Operator that trained each Class C Operator. Owners and/or operators shall maintain these records for as long as the Class A, Class B, or Class C Operators are designated.

(i) *Retraining Required.* When a Notice of Violation is issued to a facility for any of the reasons listed in Section 44(a)(i) through (xxii), the Class B Operator shall be retrained. Retraining shall be in the form of retaking (if previously taken) or taking (if not previously taken) and passing the “Wyoming State Specific Storage Tank Laws – ICC Test W-6” exam. The Class B Operator shall take this test within 30 days of the Notice of Violation date. If there is more than one Class B Operator for the facility, at a minimum one of the Class B Operators shall take the exam.

(j) *Notification.* When a licensed operator is no longer responsible for the facility, the facility owner and/or operator shall notify the department in writing within 30 days of the date the operator is no longer responsible for the facility.

Section 47. Cathodic Protection Tester and Corrosion Expert Licensing.

(a) *Cathodic Protection Testers.* Persons performing cathodic protection testing shall obtain a license from the department. To obtain this license, the tester shall submit documentary evidence that he or she is:

(i) Certified by NACE as a cathodic protection tester within the 3 years preceding the application date; or

(ii) Certified by the Steel Tank Institute as a cathodic protection tester within 3 years preceding the application date.

(b) *Corrosion Experts.* Persons designing impressed current systems, sacrificial/galvanic anode systems, or repairs to these systems shall be licensed by the department. To obtain a license, the designer shall submit documentary evidence that he or she:

(i) Is certified as a corrosion expert by NACE; or

(ii) Possesses a current Professional Engineer's license issued by the Wyoming Board of Registration for Professional Engineers and Land Surveyors and has 3 years' experience in the field of cathodic protection.

(c) *License Renewal.* Licenses issued for Cathodic Protection Testers and Corrosion Experts shall expire on the date when the underlying certification by NACE or STI expires, or on the date an underlying license issued by another state or city expires, or on the date the underlying P.E. license expires. Persons holding those licenses shall renew their license prior to the date when the license expires.

(d) *Reciprocity with Other States and Cities.* The department may accept a license from another state or a city after review and approval of the licensing requirement for that state or city. The license shall be accepted in lieu of the NACE certification or STI certification required in Section 47(a) and/or (b). A license from another state or a city that does not require passing an exam, but only requires continuing education units, will not be accepted.

Section 48. Tank and Line Tester Licensing.

(a) *License Required.* Before performing tank and line tests, testers shall obtain a license from the department. To obtain a license, the tester shall submit documentary evidence that he or she has passed:

(i) The International Code Council test entitled “Tank Tightness Testing – ICC Test U-3” within the preceding 5 years; and

(ii) The manufacturers’ training for the type of tank and line tests performed.

(b) *License Renewal.* Persons who are licensed as tank and line testers shall renew their license every 5 years.

(c) *Reciprocity with Other States and Cities.* The department may accept a license from another state or a city after review and approval of the licensing requirement for that state or city. The license shall be accepted in lieu of the International Code Council test required in Section 48(a)(i). A license from another state or a city that does not require passing an exam, but only requires continuing education units, will not be accepted.

Section 49. License Revocation.

(a) *Reasons.* The department may revoke or refuse to issue any of the licenses required under Sections 45 through 48 for the following reasons:

(i) *Submission of Falsified Data.* The department has documentary proof that information submitted to the department for the purpose of obtaining a license was falsified or misrepresented;

(ii) *False Reporting.* Submission of any report to the department that is shown by the tester as passing when the test actually shows a failing result; or

(iii) *License Revoked.* Any issuing agency (ICC, NACE, the Wyoming Board of Registration for Professional Engineers and Land Surveyors, or the manufacturer of test equipment) revokes the certifications required for a license.

(b) *Continuation of Expiring Licenses.* When a licensee has made timely and sufficient application for renewal of a license or a new license, the existing license does not expire until the application has been reviewed by the department. If the application is denied or the terms of a new license are limited, the license does not expire until the last day the licensee seeks review by the department or a later date fixed by order of the reviewing court.

(c) *Notification.* Whenever the department intends to revoke any license issued under this Part, the department shall notify the licensee by certified mail (return receipt requested) or by process server, stating the facts or conduct that warrants the intended action. The notice shall also provide evidence that the licensee was given an opportunity to show compliance with all lawful requirements for the retention of the license. The licensee shall have 15 days from the date of his/her receipt of the notice to provide additional evidence or information with respect to the revocation of the license. Revocation of licenses is a final department action subject to appeal to the Environmental Quality Council under Department of Environmental Quality, Rules of Practice and Procedure, Chapter 1, General Rules.

PART M

FIELD-CONSTRUCTED TANKS AND
AIRPORT HYDRANT FUEL DISTRIBUTION SYSTEMS

Section 50. General Requirements.

(a) *Implementation of Requirements.* Owners and/or operators shall comply with the requirement of this Part for UST systems with field-constructed tanks and airport hydrant systems as follows:

(i) For UST systems installed on or before October 13, 2015, the requirements are effective according to the following schedule:

Requirement	Effective Date
Upgrading UST systems; general operating requirements; and operator training	October 13, 2018
Release detection	October 13, 2018
Release reporting, response, and investigation; closure; financial responsibility and notification (except as provide in paragraph (b) of this Section)	October 13, 2015

(ii) For UST systems installed after October 13, 2015, the requirements apply at installation.

(b) Not later than October 13, 2018, all owners and/or operators of previously deferred UST systems shall submit a one-time notice of tank system existence to the department using a form developed by the department. Owners and/or operators of UST systems in use as of October 13, 2015, shall demonstrate financial responsibility at the time of submission of the notification form.

(c) Except as provided in Section 51, owners and/or operators shall comply with the requirements of Parts A through E, G, L, and N.

(d) In addition to the codes of practice listed in Section 6, owners and/or operators may use military construction criteria, such as the UFC 3-460-01 as referenced in Section 2, when designing, constructing, and installing airport hydrant systems and UST systems with field-constructed tanks.

Section 51. Additions, Exceptions, and Alterations for UST Systems with Field-Constructed Tanks and Airport Hydrant Systems.

(a) *Exception to Piping Secondary Containment Requirement.* Owners and/or operators may use single-wall piping when installing or replacing piping associated with UST

systems with field-constructed tanks greater than 50,000 gallons and piping associated with airport hydrant systems. Piping associated with UST systems with field-constructed tanks less than or equal to 50,000 gallons not part of an airport hydrant system shall meet the secondary containment requirement when installed or replaced.

(b) *Upgrade Requirements.* Not later than October 13, 2018, airport hydrant systems and UST systems with field-constructed tanks where installation commenced on or before October 13, 2015, shall meet the following requirements or be permanently closed pursuant to Part G.

(i) *Corrosion Protection.* UST system components in contact with the ground that routinely contain regulated substances shall meet one of the following:

(A) Except as provided in paragraph (a) of this Section, the new UST system performance standards for tanks and piping found in Section 6; or

(B) Be constructed of metal and cathodically protected according to NACE International Standard Practice SP0285 as referenced in Section 2, or NACE International Standard Practice SP0169 as referenced in Section 2, or National Leak Prevention Association Standard 631 as referenced in Section 2, or ASTM Standard G158 as referenced in Section 2; and shall meet the following:

(I) Cathodic protection shall meet the requirements found in Section 6 for tanks and piping.

(II) Tanks over 10 years old without cathodic protection shall be assessed to ensure the tank is structurally sound and free of corrosion holes prior to adding cathodic protection. The assessment shall be by internal inspection or another method determined by the department to adequately assess the tank for structural soundness and corrosion holes.

(ii) *Spill and Overfill Prevention Equipment.* To prevent spilling and overfilling associated with product transfer to the UST system, all UST systems with field-constructed tanks and airport hydrant systems shall comply with new UST system spill and overfill prevention equipment requirements specified in Section 6.

(c) *Walkthrough Inspections.* In addition to the walkthrough inspection requirements in Section 13(d), owners and/or operators shall inspect the following additional areas for airport hydrant systems at least once every 30 days if confined space entry according to the Occupational Safety and Health Administration (29 CFR Part 1910) is not required or at least annually if confined space entry is required. Walkthrough inspection records shall be maintained in accordance with Section 13(f).

(i) *Hydrant pits.* Visually check for any damage, remove any liquid or debris, and check for any leaks; and

(ii) Hydrant piping vaults. Check for any hydrant piping leaks.

(d) *Release Detection.* Owners and/or operators of UST systems with field-constructed tanks and airport hydrant systems shall begin meeting the release detection requirements described in this subpart not later than October 13, 2018.

(i) **Methods of Release Detection for Field-Constructed Tanks.** Owners and/or operators of field-constructed tanks with a capacity less than or equal to 50,000 gallons shall meet the release detection requirements in Part D. Owners and/or operators of field-constructed tanks with a capacity greater than 50,000 gallons shall meet either the requirements in Part D (except Sections 16(d) or (e) shall be combined with inventory control) or use one or a combination of the following alternative methods of release detection:

(A) Conduct an annual tank tightness test that can detect a 0.5 gallon per hour leak rate;

(B) Use an automatic tank gauging system to perform release detection at least every 30 days that can detect a leak rate less than or equal to 1 gallon per hour. This method shall be combined with a tank tightness test that can detect a 0.2 gallon per hour leak rate performed at least every 3 years;

(C) Use an automatic tank gauging system to perform release detection at least every 30 days that can detect a leak rate less than or equal to 2 gallons per hour. This method shall be combined with a tank tightness test that can detect a 0.2 gallon per hour leak rate performed at least every 2 years;

(D) Perform vapor monitoring (conducted in accordance with Section 16(d) for a tracer compound placed in the tank system) capable of detecting a 0.1 gallon per hour leak rate at least every 2 years.

(E) Perform inventory control (conducted in accordance with Department of Defense Directive 4140.25, or A4A Airport Fuel Facilities Operations and Maintenance Guidance Manual (both as referenced in Section 2), or equivalent procedures) at least every 30 days that can detect a leak equal to or less than 0.5 percent of flow-through; and

(I) Perform a tank tightness test that can detect a 0.5 gallon per hour leak rate at least every 2 years; or

(II) Perform vapor monitoring or groundwater monitoring (conducted in accordance with Sections 16(d) or (e), for the stored regulated substance) at least every 30 days; or

(F) Another method approved by the department if the owner and/or operator can demonstrate that the method can detect a release as effectively as any of the

methods allowed in this Section. In comparing methods, the department shall consider the size of release that the method can detect and the frequency and reliability of the detection.

(ii) **Methods of Release Detection for Piping.** Owners and/or operators of underground piping associated with field-constructed tanks less than or equal to 50,000 gallons shall meet the release detection requirements in Part D. Owners and/or operators of underground piping associated with airport hydrant systems and field-constructed tanks greater than 50,000 gallons shall follow either the requirements in Part D (except Sections 16(d) or (e) shall be combined with inventory control) or use one or a combination of the following alternative methods of release detection:

(A) Perform a semiannual or annual line tightness test at or above the piping operating pressure in accordance with the following table:

Maximum Leak Detection Rate Per Test Section Volume		
Test Section Volume (Gallons)	Semiannual Test – Leak Detection Rate Not to Exceed (Gallons/Hour)	Annual Test – Leak Detection Rate Not to Exceed (Gallons/Hour)
<50,000	1.0	0.5
≥ 50,000 to <75,000	1.5	0.75
≥75,000 to <100,000	2.0	1.0
≥100,000	3.0	1.5

Piping segment volumes ≥ 100,000 gallons not capable of meeting the maximum 3.0 gallon per hour leak rate for the semiannual test may be tested at a leak rate up to 6.0 gallons per hour according to the following schedule:

Phase-In For Piping Segments ≥ 100,000 Gallons in Volume	
First Test	Not later than October 13, 2018, may use up to 6.0 gallon/hour leak rate.
Second Test	Between October 13, 2018, and October 13, 2021, may use up to 6.0 gallon/hour leak rate.
Third Test	Between October 13, 2021, and October 13, 2022, shall use 3.0 gallon/hour leak rate.
Subsequent Tests	After October 13, 2022, begin using semiannual or annual line testing according to the Maximum Leak Detection Rate Per Test Section Volume in Table above.

(B) Perform vapor monitoring (conducted in accordance with Section 16(d) for a tracer compound placed in the tank system) capable of detecting a 0.1 gallon per hour leak rate at least every 2 years.

(C) Perform inventory control (conducted in accordance with Department of Defense Directive 4140.25, or A4A Airport Fuel Facilities Operations and

Maintenance Guidance Manual (both as referenced in Section 2), or an equivalent procedure) at least every 30 days that can detect a leak equal to or less than 0.5 percent of flow-through; and

(I) Perform a line tightness test (conducted in accordance with this Section using the leak rates for the semiannual test) at least every 2 years; or

(II) Perform vapor monitoring or groundwater monitoring conducted in accordance with Sections 16(d) or (e) for the stored regulated substance at least every 30 days; or

(D) Another method approved by the department if the owner and/or operator can demonstrate that the method can detect a release as effectively as any of the methods allowed in this Section. In comparing methods, the department shall consider the size of release that the method can detect and the frequency and reliability of detection.

(iii) Records for Release Detection. Owners and/or operators shall maintain release detection records according to the recordkeeping requirements in Section 18.

(e) *Applicability of Closure Requirements to Previously Closed UST Systems.* When directed by the department, the owner and/or operator of an UST system with field-constructed tanks or airport hydrant systems permanently closed before October 13, 2015, shall assess the excavation zone. The UST system shall be closed in accordance with Part G if releases from the UST may, in the judgment of the department, pose a current or potential threat to human health and the environment.

PART N

FINANCIAL ASSURANCE FOR UNDERGROUND STORAGE TANKS

Section 52. Applicability.

(a) All owners and/or operators of petroleum underground storage tank (UST) systems as defined in W.S. § 35-11-1415 are subject to Part N requirements. UST systems with field-constructed tanks and airport hydrant fuel distribution systems are also subject to Part N requirements in accordance with the schedule in Part M.

(b) If the owner and/or operator of a petroleum UST are not the same person, only one person is required to demonstrate financial responsibility. However, both parties are liable in the event of noncompliance.

(c) When determining compliance with this Part, the total number of owned and/or operated USTs includes not only those located in Wyoming, but also those located at all locations throughout the United States.

Section 53. Financial Responsibility Amount and Scope.

(a) Petroleum USTs or contaminated site owners and/or operators not eligible for the state corrective action account shall demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury or property damage caused by accidental releases arising from the operation of the USTs. Financial responsibility shall be provided in the following per-occurrence amounts:

(i) Owners and/or operators of petroleum USTs located at petroleum marketing facilities, or that handle an average of more than 10,000 gallons of petroleum per month based on annual throughput for the previous calendar year; \$1 million.

(ii) All other owners and/or operators of petroleum USTs; \$500,000.

(b) For the purposes of Sections 53(c) and (f) only, a “petroleum UST” means a single containment unit and does not mean combinations of single containment units.

(c) Owners and/or operators of petroleum USTs not eligible for the state corrective action account shall demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury or property damage caused by accidental releases arising from the operation of petroleum USTs in at least the following annual aggregate amounts:

(i) Owners and/or operators of 1 to 100 petroleum USTs; \$1 million.

(ii) Owners and/or operators of 101 or more petroleum USTs; \$2 million.

(d) Except as provided in Section 53(e), if an owner and/or operator not eligible for the state corrective action account uses separate mechanisms or separate combinations of mechanisms to demonstrate financial responsibility for taking corrective action and compensating third parties for bodily injury or property damage caused by an accidental release, the amount of assurance provided by each mechanism or combination of mechanisms must be in the full amount specified in Sections 53(a) and (c).

(e) If an owner and/or operator not eligible for the state corrective action account uses separate mechanisms or separate combinations of mechanisms to demonstrate financial responsibility for different petroleum USTs, the annual aggregate required shall be based on the number of tanks covered by each such separate mechanism or combination of mechanisms.

(f) Owners and/or operators not eligible for the state corrective action account shall review the amount of aggregate assurance provided whenever additional petroleum USTs are acquired or installed. If the total number of petroleum USTs for which assurance shall be provided exceeds 100, the owner and/or operator shall demonstrate financial responsibility in the amount of at least \$2 million of annual aggregate assurance by the anniversary of the date on which the mechanism demonstrating financial responsibility became effective. If assurance is being demonstrated by a combination of mechanisms, the owner and/or operator shall demonstrate financial responsibility in the amount of at least \$2 million of annual aggregate assurance by the first occurring effective date anniversary of any one of the mechanisms combined (other than a financial test or guarantee) to provide assurance.

(g) The amounts of financial assurance required under this Section exclude legal defense costs.

(h) The required per-occurrence and annual aggregate coverage amounts do not in any way limit the liability of the owner and/or operator.

(i) Owners and/or operators of 101 or more USTs who are eligible for the state corrective action account shall demonstrate financial responsibility for compensating third parties for bodily injury or property damage caused by accidental releases arising from the operation of petroleum USTs. The amount required is \$1 million dollars such that a total aggregate amount of \$2 million is reached when the financial responsibility of \$1 million provided by the state is applied.

Section 54. Allowable Mechanisms and Combinations of Mechanisms.

(a) Petroleum USTs or contaminated site owners and/or operators not eligible for the state corrective action account shall use any one or combination of mechanisms to demonstrate financial responsibility under this Chapter for one or more USTs. Demonstration shall be pursuant to the requirements of 40 CFR 280.95, 280.96, 280.97, 280.98, 280.99, and/or 280.102, and 280.103 when required by the mechanism chosen; and for local governments, 40 CFR 280.104, 280.105, 280.106, and/or 280.107, all as referenced in Section 2. The demonstration shall be executed on forms provided by the department.

(b) An owner and/or operator may use a guarantee under 40 CFR 280.96 or surety bond under 40 CFR 280.98, both as referenced in Section 2, only if the Wyoming Attorney General submits in writing to the department that the guarantee or surety bond is executed as described in the CFR and is a legally valid and enforceable obligation in Wyoming.

(c) An owner and/or operator may use self-insurance in combination with a guarantee only if, for the purpose of meeting the requirements of the financial test under this Part, the financial statements of the owner and/or operator are not consolidated with the financial statements of the guarantor.

(d) The department's trust and agency account will serve as the standby trust fund as described in 40 CFR 280.103, as referenced in Section 2, which is required in conjunction with a guarantee, surety bond, and letter of credit.

Section 55. General Provisions for Allowable Mechanisms.

(a) *Self-Insurance, Guarantee, Local Government Financial Test, or Local Government Guarantee.*

(i) The application and letter from the Chief Financial Officer shall be executed on forms provided by the department.

(ii) Audited financial statements prepared and certified by an independent certified public accountant shall accompany the self-insurance or guarantee financial test to document data submitted.

(iii) In the case of a guarantee, the owner and/or operator shall submit documentation verifying the guarantor's power and authority to enter into guarantee agreements on behalf of the owner and/or operator.

(iv) Within 60 days of owner and/or operator submission of all materials necessary to base a decision, the administrator shall make a determination on the self-insurance or guarantee financial test. The administrator shall approve or reject such application and declare, in writing, the reasons for such action. The decision shall be based on all information submitted to the department.

(b) *Insurance and Risk Retention Group Coverage.*

(i) The certificate of insurance shall be submitted on a form acceptable to the Department.

(ii) The insurance shall be issued by a company licensed to do business in Wyoming.

(iii) Surplus line carriers shall be in compliance with the surplus lines laws under the Wyoming Insurance Code.

(iv) Risk retention groups shall be registered with the Wyoming Department of Insurance.

(c) *Surety Bond.*

(i) The surety bond shall be executed on forms provided by the department.

(ii) The surety company shall be licensed to do business in Wyoming.

(iii) The bond shall be signed by an authorized Wyoming resident agent.

(d) *Letter of Credit.* The letter of credit shall be executed in the format provided by the department.

(e) *Trust Fund.* The trust agreement shall be executed on forms provided by the department.

(f) *Standby Trust Fund* (required in conjunction with guarantee, surety bond, or letter of credit). The department's Trust and Agency Account shall serve as the standby trust fund.

(g) *Bond Rating Test for Local Governments or Local Government Fund.* The letter from the chief financial officer shall be executed on forms provided by the department.

(h) *Local Government Fund.* The letter from the chief financial officer shall be executed on forms provided by the department.

Section 56. Financial Assurance Mechanism Substitutions.

(a) An owner and/or operator may substitute an alternate financial assurance mechanism, provided that at all times an effective financial assurance mechanism or combination of mechanisms that satisfy the requirements of this Part is maintained.

(b) After obtaining alternate financial assurance and concurrence by the administrator, an owner and/or operator may cancel a financial assurance mechanism by providing notice to the financial assurance provider.

Section 57. Cancellation or Nonrenewal by a Financial Assurance Provider.

(a) Except as otherwise provided, a financial assurance provider may cancel or fail to renew an assurance mechanism by sending a notice of termination by certified mail to the owner and/or operator and the department.

(i) A local government guarantee, guarantee, surety bond, or letter of credit may not be terminated until 120 days after the date on which the owner and/or operator and the department receive the notice of termination, as evidenced by the return receipt. Additionally, termination may not occur without the administrator's written consent, which shall be granted only when the conditions of the financial assurance have been met.

(ii) Insurance, risk retention group coverage, or state funded assurance termination may not occur until 60 days after the date on which the owner and/or operator and the department receive the notice of termination, as evidenced by the return receipt.

(b) If a financial responsibility provider cancels or fails to renew for reasons other than provider incapacity as specified in Section 58, the owner and/or operator shall obtain alternate coverage as specified in this Part within 60 days after receipt of the notice of termination. If the owner and/or operator fails to obtain alternate coverage within 60 days after receipt of the notice of termination, the owner and/or operator shall notify the administrator of such failure before the 60-day period ends and submit:

(i) The financial assurance provider's name and address;

(ii) The effective date of termination; and

(iii) Evidence of financial assurance mechanism subject to the termination maintained in accordance with Section 58(b).

(c) The department shall provide notification by mail to owners and/or operators using the state Corrective Action and Financial Responsibility Accounts whenever either account is incapable of paying for assured corrective actions or third-party damages. The owner and/or operator shall have 30 days from the date of notification to provide alternate financial assurance.

(d) Self insurance may be cancelled by the owner and/or operator only after 90 day's notice to the administrator, and upon receipt of the administrator's written consent. Administrator's consent shall be granted only when the requirements of the bond have been fulfilled.

Section 58. Reporting by Owner and/or Operator Not Eligible for the State Corrective Action Account.

(a) An owner and/or operator who receives notification of the following shall notify the department within 5 days of:

(i) Commencement of any proceeding under Title 11 (Bankruptcy), U.S. Code, naming a provider of financial assurance as a debtor;

(ii) Suspension or revocation of the authority of a provider of financial assurance to issue a financial assurance mechanism;

- (iii) Failure of a guarantor to meet the requirements of the financial test;
- (iv) Other incapacity of a provider of financial assurance; or
- (v) As required by 40 CFR 280.95(g), as referenced in Section 2, and Section 57 of this Chapter.

(b) An owner and/or operator shall obtain and submit evidence of financial responsibility as required by Section 59(b) within 30 days of the owner and/or operator receiving any notices under Section 58(a).

(c) An owner and/or operator shall report to the administrator as required by 40 CFR 280.95(g), as referenced in Section 2, concerning self insurance.

(d) Reporting is required under the conditions of Section 57(b).

(e) An owner and/or operator of a new UST installation shall certify compliance with the financial responsibility requirements in accordance with Section 9 and W.S. § 35-11-1419.

Section 59. Recordkeeping.

(a) Owners and/or operators shall maintain evidence of all financial assurance mechanisms used to demonstrate financial responsibility under this Part until released from the requirements under Section 61. An owner and/or operator shall maintain such evidence at the UST site or the owner's and/or operator's place of business. Records maintained off site shall be made available upon request by the department.

(b) The following financial responsibility evidence shall be maintained:

(i) Copy of the instrument worded as specified in the CFR for assurance mechanisms specified in 40 CFR 280.95 through 280.99, 280.102, or 280.104 through 280.107, all as referenced in Section 2.

(ii) Copy of the chief financial officer's letter based on year-end financial statements for the most recently completed financial reporting year for a financial test or guarantee. Such evidence shall be on file no later than 120 days after the close of the financial reporting year.

(iii) Copy of the bond rating published within the last 12 months by Moody's or Standard & Poor's for a local government bond rating test.

(iv) Copy of the guarantor's bond rating published within the last 12 months by Moody's or Standard & Poor's for a local government guarantee where the guarantor's demonstration of financial responsibility relies on the bond rating test.

(v) Copy of the signed insurance policy or risk retention group coverage policy, with the endorsement or certificate of insurance and any amendments to the agreements for an insurance policy or risk retention group coverage.

(vi) The following documents for a local government fund:

(A) A copy of the state constitutional provision or local government statute, charter, ordinance, or order dedicating the fund.

(B) Year-end financial statements for the most recently completed financial reporting year showing the amount in the fund. If the fund is established using incremental funding backed by bonding authority, the financial statements shall show the previous year's balance, the amount of funding during the year, and the closing balance in the fund.

(C) If the fund is established using incremental funding backed by bonding authority, also maintain documentation of the required bonding authority, including either the results of a voter referendum or attestation by the State Attorney General.

(vii) Copy of the guarantor's year-end financial statements for the most recently completed financial reporting year showing the amount of the fund for a local government guarantee supported by the local government fund.

(viii) Updated copy of a certification of financial responsibility for any assurance mechanism specified in 40 CFR 280.95 through 280.99, 280.102, or 280.104 through 280.107, all as referenced in Section 2. The certification shall be worded as follows (except that instructions in brackets are to be replaced with the relevant information):

Certification of Financial Responsibility

[Owner and/or operator name] hereby certifies that it is in compliance with the requirements of the Wyoming Solid and Hazardous Waste Division Rules and Regulations, Storage Tank Program, Chapter 1, Part N.

The financial assurance mechanism(s) used to demonstrate financial responsibility under this Chapter is/are as follows:

[For each mechanism list the type of mechanism, name of issuer, mechanism number (if applicable), amount of coverage, effective period of coverage and if the mechanism covers "taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "non-sudden accidental releases" or "accidental releases."]

[Signature of owner and/or operator, name of owner and/or operator, title, date],
[signature of witness or notary, name of witness or notary, and date].

(ix) The owner and/or operator shall update this certification whenever the financial assurance mechanism(s) used to demonstrate financial responsibility change(s).

Section 60. Drawing on Financial Assurance Mechanisms.

(a) The administrator shall require the guarantor, surety, or institution issuing a letter of credit to place the amount of funds stipulated by the administrator, up to the limit of funds provided by the financial assurance mechanism, into the department's Trust and Agency Account, which operates as a standby trust if:

(i) The owner and/or operator fails to establish alternate financial assurance within 60 days after receiving notice of cancellation of the guarantee, surety bond, letter of credit, or, as applicable, other financial assurance mechanism; and the administrator determines or suspects that a release from a UST covered by the mechanism has occurred and so notifies the owner and/or operator, or the owner and/or operator has notified the administrator pursuant to Part E of a release from a UST covered by the mechanism; or

(ii) The conditions of Section 60(b)(i) or 60(b)(ii)(A) or (B) are satisfied.

(b) The administrator may draw on a standby trust fund when:

(i) The administrator makes a final determination that a release has occurred and immediate or long-term corrective action for the release is needed, and the owner and/or operator, after appropriate notice and opportunity to comply, has not conducted corrective action as required under Part E.

(ii) The administrator has received either:

(A) Certification from the owner and/or operator, the third-party liability claimant(s), and both party's attorneys that a third-party liability claim should be paid. The certification shall be worded as specified in 40 CFR 280.112, as referenced in Section 2, or

(B) A valid final court order establishing a judgment against the owner and/or operator for bodily injury or property damage caused by an accidental release from a UST covered by financial assurance under this Part and the administrator determines that the owner and/or operator has not satisfied the judgment.

(c) If the administrator determines that the corrective action costs and third-party liability claims eligible for payment under Section 60(b) may exceed the balance of the standby trust fund and the obligation of the financial assurance provider, the first priority for payment shall be corrective action costs necessary to protect human health and the environment. The administrator shall pay third-party liability claims in the order in which the administrator receives certifications under Section 60(b)(ii)(A) and valid court orders under Section 60(b)(ii)(B).

Section 61. Release from the Requirements. An owner and/or operator is no longer required to maintain financial responsibility under this Part for a UST after the tank has been permanently closed or undergoes a change-in-service or, if corrective action is required, after corrective action has been completed and the tank has been properly closed in accordance with Part G.

Section 62. Bankruptcy or Other Incapacity of Owner and/or Operator or Financial Assurance Guarantor. Within 10 days after commencement of any proceeding under Title 11 (Bankruptcy), U.S. Code, naming a guarantor providing financial assurance as debtor, such guarantor shall notify the owner and/or operator by certified mail of such commencement as required under the terms of the guarantee specified in 40 CFR 280.96, as referenced in Section 2.

Section 63. Replenish Guarantee, Letter of Credit, or Surety Bonds.

(a) Any time after a financial assurance mechanism is drawn on by the administrator below the full amount of required coverage, the owner and/or operator shall:

(i) By the anniversary date of the financial mechanism, replenish the value of financial assurance to equal the full amount of required coverage; or

(ii) By the anniversary date of the financial mechanism, acquire another financial assurance mechanism for the amount by which funds have been reduced; or

(iii) Within 30 days of the withdrawal of the deductible amount required under the state fund mechanism, replenish the value of the required deductible coverage.

(b) If at any time after a standby trust fund is funded upon the instruction of the administrator with funds drawn from a guarantee, letter of credit, or surety bond, and the amount in the standby trust is reduced below the full amount of coverage required, the owner and/or operator shall by the anniversary date of the financial mechanism from which the funds were drawn:

(i) Replenish the value of financial assurance to equal the full amount of coverage required; or

(ii) Acquire another financial assurance mechanism for the amount by which funds in the standby trust have been reduced.

(c) For purposes of this Section, the full amount of coverage required is the amount of coverage to be provided by Section 53. If a combination of mechanisms is used to provide the assurance funds which are drawn upon, replenishment shall occur by the date of the mechanism with the earliest anniversary date.