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**CHAPTER 1**  
**STORAGE TANKS**

February 12, 2018 - EQC

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.

- 48 (i) A4A Airport Fuel Facilities Operations and Maintenance Guidance  
49 Manual, 2004.  
50
- 51 (ii) American Petroleum Institute (API)  
52
- 53 (A) API Recommended Practice 1007, “Loading and Unloading of MC  
54 306/DOT 406 Cargo Tank Motor Vehicles, 2001.”  
55
- 56 (B) API Recommended Practice 1604, “Closure of Underground  
57 Petroleum Storage Tanks, Third Edition, March 1996; Reaffirmed December 2010.”  
58
- 59 (C) API Recommended Practice 1615, “Installation of Underground  
60 Petroleum Storage Systems, Fifth Edition, March 1996; Reaffirmed November 2011.”  
61
- 62 (D) API Recommended Practice 1626, “Storing and Handling Ethanol  
63 and Gasoline-Ethanol Blends at Distribution Terminals and Filling Stations, Second Edition,  
64 2010.”  
65
- 66 (E) API Recommended Practice 2016, “Guidelines and Procedures for  
67 Entering and Cleaning Petroleum Storage Tanks, First Edition, August 2001.”  
68
- 69 (F) API Recommended Practice 2200, “Repairing Crude Oil, Liquefied  
70 Petroleum Gas, and Product Pipelines, Fifth Edition, 2015.”  
71
- 72 (G) API Specification 12D, “Specification for Field Welded Tanks for  
73 Storage of Production Liquids, Eleventh Edition, 2008.”  
74
- 75 (H) API Standard 620, “Design and Construction of Large, Welded  
76 Low-Pressure Storage Tanks, Twelfth Edition, 2013.”  
77
- 78 (I) API Standard 650, “Welded Steel Tank for Oil Storage, Twelfth  
79 Edition, 2013.”  
80
- 81 (J) API Standard 651, “Cathodic Protection of Aboveground Storage  
82 Tanks, Fourth Edition, 2014.”  
83
- 84 (K) API Standard 653, “Tank Inspection, Repair, Alteration, and  
85 Reconstruction, Fifth Edition, 2014.”  
86
- 87 (L) API Standard 1631, “Interior Lining and Periodic Inspection of  
88 Underground Storage Tanks, Fifth Edition, 2001.”  
89
- 90 (M) API Standard 2000, “Venting Atmospheric and Low-Pressure  
91 Storage Tanks, Seventh Edition, 2014.”  
92  
93

- 94 (N) API Standard 2015, “Safe Entry and Cleaning of Petroleum  
95 Storage Tanks, Planning and Managing Tank Entry From Decommissioning Through  
96 Recommissioning, Seventh Edition, 2014.”  
97
- 98 (iii) American Society for Testing and Materials (ASTM)  
99
- 100 (A) ASTM D6751, “Standard Specification for Biodiesel Fuel Blend  
101 Stock (B100) for Middle Distillate Fuels, 2015.”  
102
- 103 (B) ASTM G158, “Standard Guide for Three Methods of Assessing  
104 Buried Steel Tanks, 2016.”  
105
- 106 (iv) Code of Federal Regulations (CFR)  
107
- 108 (A) 10 CFR Part 50, as published on January 1, 2016.  
109
- 110 (B) 29 CFR Part 1910, as published on July 1, 2016.  
111
- 112 (C) 40 CFR Part 112, as published on July 1, 2016.  
113
- 114 (D) 40 CFR Part 136, as published on July 1, 2016.  
115
- 116 (E) 40 CFR Part 141, as published on July 1, 2016.  
117
- 118 (F) 40 CFR Part 261, as published on July 1, 2016.  
119
- 120 (G) 40 CFR Part 280, as published on July 1, 2016.  
121
- 122 (H) 40 CFR Part 302, as published on July 1, 2016.  
123
- 124 (v) Fiberglass Tank and Pipe Institute  
125
- 126 (A) Recommended Practice T-95-02, “Remanufacturing of Fiberglass  
127 Reinforced Plastic (FRP) Underground Storage Tanks, 1995.”  
128
- 129 (B) Recommended Practice 2007-2, “Field Test Protocol for Testing  
130 the Annular Space of Installed Underground Fiberglass Double and Triple-Wall Tanks with Dry  
131 Annular Space, 2007.”  
132
- 133 (vi) International Fire Code (IFC), 5704.2.7.3, 5704.2.3.1, 5704.2.3.2, and  
134 5703.5, 2015.  
135
- 136 (vii) National Association of Corrosion Engineers (NACE)  
137
- 138 (A) NACE International Standard Practice SP0169-2013, “Control of  
139 External Corrosion on Underground or Submerged Metallic Piping Systems, 2013.”

- 140 (B) NACE International Standard Practice SP0285-2011, “External  
141 Corrosion Control of Underground Storage Tank Systems by Cathodic Protection, 2011.”  
142
- 143 (C) NACE Standard SP0193-2016, “External Cathodic Protection of  
144 On-Grade Carbon Steel Storage Tank Bottoms, 2016.”  
145
- 146 (D) NACE International Test Method TM0101-2012, “Measurement  
147 Techniques Related to Criteria for Cathodic Protection of Underground Storage Tank Systems,  
148 2012.”  
149
- 150 (E) NACE International Test Method TM0497-2012, “Measurement  
151 Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic  
152 Piping Systems, 2012.”  
153
- 154 (viii) National Fire Protection Association (NFPA)  
155
- 156 (A) NFPA Standard 30, “Flammable and Combustible Liquids Code,  
157 2015 Edition.”  
158
- 159 (B) NFPA Standard 30A, “Code for Motor Fuel Dispensing Facilities  
160 and Repair Garages, 2015 Edition.”  
161
- 162 (C) NFPA Standard 326, “Standard for the Safeguarding of Tanks and  
163 Containers for Entry, Cleaning, or Repair, 2015 Edition.”  
164
- 165 (D) NFPA Standard 385, “Standard for Tank Vehicles for Flammable  
166 and Combustible Liquids, 2017 Edition.”  
167
- 168 (ix) National Leak Prevention Association  
169
- 170 (A) Standard 631, Chapter A, “Entry, Cleaning, Interior Inspection,  
171 Repair, and Lining of Underground Storage Tanks, 2009.”  
172
- 173 (B) Standard 631, Chapter C, “Internal Inspection of Steel Tanks for  
174 Retrofit of Cathodic Protection, 2009.”  
175
- 176 (x) Petroleum Equipment Institute (PEI)  
177
- 178 (A) PEI RP100, “Recommended Practices for Installation of  
179 Underground Liquid Storage Systems, 2011.”  
180
- 181 (B) PEI RP200, “Recommended Practices for Installation of  
182 Aboveground Storage Systems for Motor Vehicle Fueling, 2013.”  
183
- 184 (C) PEI RP900, “Recommended Practices for the Inspection and  
185 Maintenance of UST Systems, 2008.”

186 (D) PEI RP1200, “Recommended Practices for the Testing and  
187 Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST  
188 Facilities, 2017.”  
189  
190 (xi) Steel Tank Institute (STI)  
191  
192 (A) Association for Composite Tanks ACT-100-U®, Specification  
193 F894, “Specification for External Corrosion Protection of FRP Composite Steel Underground  
194 Storage Tanks, 2015.”  
195  
196 (B) Association for Composite Tanks ACT-100-U®, Specification  
197 F961, “Specification for External Corrosion Protection of Composite Steel Underground Storage  
198 Tanks, 2015.”  
199  
200 (C) STI Recommended Practice R012, “Recommended Practice for  
201 Interstitial Tightness Testing of Existing Underground Double Wall Steel Tanks, 2007.”  
202  
203 (D) STI Recommended Practice R051, Cathodic Protection Testing  
204 Procedures for STI-P3® USTs, 2006.”  
205  
206 (E) STI Recommended Practice R892, “Recommended Practice for  
207 Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and  
208 Dispensing Systems, 2006.”  
209  
210 (F) STI Recommended Practice R972, “Recommended Practice for the  
211 Addition of Supplemental Anodes to STI-P3® Tanks, 2010.”  
212  
213 (G) STI-P3® Specification and Manual for External Corrosion  
214 Protection of Underground Steel Storage Tanks, 2015.  
215  
216 (H) STI Specification F922, “Steel Tank Institute Specification for  
217 Permatank®, 2014.”  
218  
219 (I) STI Standard F841, “Standard for Dual Wall Underground Steel  
220 Storage Tanks, 2006.”  
221  
222 (xii) Underwriters Laboratories, Inc. (UL)  
223  
224 (A) UL Standard 58, “Standard for Safety for Steel Underground Tanks  
225 for Flammable and Combustible Liquids, Ninth Edition, 1996.”  
226  
227 (B) UL Standard 142, “Steel Aboveground Tanks for Flammable and  
228 Combustible Liquids, Ninth Edition, 2006.”  
229  
230  
231

232 (C) UL Standard 567, “Standard for Emergency Breakaway Fittings,  
233 Swivel Connectors and Pipe-Connection Fittings for Petroleum Products and LP-Gas, Tenth  
234 Edition, 2014.”  
235

236 (D) UL Standard 971, “Standard for Nonmetallic Underground Piping  
237 for Flammable Liquids, First Edition, 1995.”  
238

239 (E) UL Standard 1316, “Glass-Fiber-Reinforced Plastic Underground  
240 Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures, Second  
241 Edition, 1994.”  
242

243 (F) UL Standard 1746, “Standard for External Corrosion Protection  
244 Systems for Steel Underground Storage Tanks, Third Edition, 2007.”  
245

246 (G) UL Standard 2085, “Protected Aboveground Tanks for Flammable  
247 and Combustible Liquids, Second Edition, 1997.”  
248

249 (H) UL Subject 971A, “Outline of Investigation for Metallic  
250 Underground Fuel Pipe, First Edition, 2006.”  
251

252 (xiii) Underwriters Laboratories of Canada (UL of Canada)  
253

254 (A) UL of Canada S603, “Standard for Steel Underground Tanks for  
255 Flammable and Combustible Liquids, 2014.”  
256

257 (B) UL of Canada S603.1, “Standard for External Corrosion Protection  
258 Systems for Steel Underground Tanks for Flammable and Combustible Liquids, 2014.”  
259

260 (C) UL of Canada S615, “Standard for Reinforced Plastic Underground  
261 Tanks for Flammable and Combustible Liquids, 2014.”  
262

263 (D) UL of Canada S631, “Standard for Isolating Bushings for Steel  
264 Underground Tanks Protected with External Corrosion Protection Systems, 2005.”  
265

266 (E) UL of Canada S660, “Standard for Nonmetallic Underground  
267 Piping for Flammable and Combustible Liquids, 2008.”  
268

269 (xiv) U.S. Department of Defense  
270

271 (A) Directive 4140.25, “DoD Management Policy for Energy  
272 Commodities and Related Services, 2015.”  
273

274 (B) Unified Facilities Criteria (UFC) 3-460-01, “Petroleum Fuel  
275 Facilities, 2010.”  
276  
277

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

280  
281 **Section 3. Purpose.** The purpose of these rules and regulations is to:

282  
283 (a) Establish a storage tank leak prevention program to prevent releases and to  
284 minimize health hazards and environmental damage should a release occur;

285  
286 (b) Allow Wyoming to assume primacy of the U.S. Environmental Protection  
287 Agency's (EPA) underground storage tank (UST) program;

288  
289 (c) Establish priorities for cleaning up releases from storage tank systems;

290  
291 (d) Establish a procedure to determine environmental restoration standards;

292  
293 (e) Provide underground storage tank system owners and/or operators with the option  
294 of financial responsibility coverage to help meet the federal requirements; and

295  
296 (f) Provide aboveground storage tank system owners and/or operators with the option  
297 of financial responsibility coverage.

298  
299 **Section 4. Applicability.** The requirements of this Chapter apply to all owners  
300 and/or operators of aboveground storage tank systems as defined in W.S. 35-11-1415(xi). Only  
301 aboveground tank systems used by a dealer to dispense gasoline or diesel to the public are  
302 regulated by these regulations. The requirements of this Chapter apply to all owners and/or  
303 operators of underground storage tank systems as defined in W.S. 35-11-1415 except:

304  
305 (a) Airport hydrant fuel distribution systems and UST systems with field-constructed  
306 tanks shall meet the requirements in Part M.

307  
308 (b) Parts B, C, D, E, G, L, and M do not apply to:

309  
310 (i) Wastewater treatment tank systems (not excluded in W.S. 35-11-1415);

311  
312 (ii) Aboveground storage tanks associated with airport hydrant fuel  
313 distribution systems regulated under Part M or UST systems with field-constructed tanks  
314 regulated under Part M;

315  
316 (iii) Any UST system containing radioactive materials that are regulated under  
317 the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 and following); and

318  
319 (iv) Any UST system that is part of an emergency generator system at nuclear  
320 power generation facilities licensed by the Nuclear Regulatory Commission and subject to  
321 Nuclear Regulatory Commission requirements regarding design and quality criteria, including  
322 but not limited to 10 CFR Part 50.

323

324 (c) Part N does not apply to state or federal government entities whose debts and  
325 liabilities are the debts and liabilities of a state or the United States.  
326

327 **Section 5. Definitions.** The following definitions supplement those found in the  
328 Environmental Quality Act W.S. 35-11-103 and W.S. 35-11-1415, and federal regulations 40  
329 CFR Part 280.12.  
330

331 (a) "A4A" means Airlines for America, 1275 Pennsylvania Avenue, NW, Suite 1300,  
332 Washington, DC 20004; (202) 626-4000.  
333

334 (b) "Aboveground release" means any release to the ground surface or to surface  
335 water. This includes, but is not limited to, releases from the aboveground portion of any  
336 regulated storage tank system and aboveground releases associated with overfills and transfer  
337 operations as the regulated substance moves to or from any regulated storage tank system.  
338

339 (c) "Airport hydrant fuel distribution system" (also called airport hydrant system)  
340 means a UST system that fuels aircraft and operates under high pressure with large diameter  
341 piping that typically terminates into one or more hydrants (fill stands). The airport hydrant  
342 system begins where fuel enters one or more tanks from an external source such as a pipeline,  
343 barge, rail car, or other motor fuel carrier.  
344

345 (d) "ALLD" means an automatic line leak detector. This is a device that either  
346 restricts the flow through a line or sounds an audible or visible alarm if there is a leak in the  
347 connected piping. ALLDs may include mechanical line leak detectors, electronic line leak  
348 detectors, or sump sensors.  
349

350 (e) "Ancillary equipment" means any devices including, but not limited to, piping,  
351 fittings, flanges, valves, and pumps, used to distribute, meter, or control the flow of regulated  
352 substances to and from a storage tank.  
353

354 (f) "API" means the American Petroleum Institute, 1220 L Street NW, Washington,  
355 DC 20005; (202) 682-8000.  
356

357 (g) "AST" means an aboveground storage tank as defined by W.S. 35-11-1415 that is  
358 used by a fuel dealer to dispense gasoline or diesel to the public.  
359

360 (h) "AST system" means an aboveground storage tank and all connected piping.  
361

362 (i) "ASTM" means the American Society for Testing and Materials, 100 Barr Harbor  
363 Drive, P.O. Box C700, West Conshohocken, PA 19428-2959; (610) 832-9500.  
364

365 (j) "Below ground release" means any release to the subsurface of the land and to  
366 groundwater. This includes, but is not limited to, releases from the below ground portions of a  
367 storage tank system and below ground releases associated with overfills and transfer operations  
368 as the regulated substance moves to or from a storage tank.  
369



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

374  
375 (l) "Biofuel blend" means any regulated substance containing greater than 10 percent  
376 ethanol or greater than 20 percent biodiesel.

377  
378 (m) "CAP" means a "corrective action plan" designed to restore a site contaminated  
379 by regulated substances from a storage tank release to a condition that is protective of the public  
380 health and safety and consistent with published standards found in this Chapter.

381  
382 (n) "CERCLA" means the Comprehensive Environmental Response, Compensation,  
383 and Liability Act of 1980, as amended.

384  
385 (o) "CFR" means Code of Federal Regulations, as revised and published on the dates  
386 provided in Section 2, and not including any later amendments or editions. Copies of the CFR  
387 can be purchased at cost from the publisher: the U.S. Government Printing Office, 732 N. Capitol  
388 St., NW, Washington, DC 20401, or viewed on the Government Printing Office website.

389  
390 (p) "Class A Operator" means the individual who has primary responsibility to  
391 operate and maintain the tank system in accordance with applicable requirements established by  
392 the department. The Class A Operator typically manages resources and personnel, such as  
393 establishing work assignments, to achieve and maintain compliance with regulatory  
394 requirements. The Class A Operator shall obtain a Class A Operator's license from the  
395 department in accordance with requirements established by the department.

396  
397 (q) "Class B Operator" means the individual who has day-to-day responsibility for  
398 implementing applicable regulatory requirements. The Class B Operator typically implements  
399 in-field aspects of operation, maintenance, and associated recordkeeping for the tank system. The  
400 Class B Operator shall obtain a Class B Operator's license from the department in accordance  
401 with requirements established by the department.

402  
403 (r) "Class C Operator" means the individual responsible for initially addressing  
404 emergencies presented by a spill or release from a tank system. The Class C Operator typically  
405 controls or monitors the dispensing or sale of regulated substances, e.g., gas station attendants.  
406 The Class C Operator shall be trained by the Class A or B Operator for the facility in accordance  
407 with requirements established by the department.

408  
409 (s) "Compatible" means the ability of two or more substances to maintain their  
410 respective physical and chemical properties upon contact with one another for the design life of  
411 the tank system under conditions likely to be encountered in the storage tank system.

412  
413 (t) "Connected piping" means all piping including valves, elbows, joints, unions,  
414 flanges, and flexible connectors attached to a storage tank system through which regulated  
415 substances flow and which routinely contains the regulated substance. The piping that joins two

416 storage tank systems shall be allocated equally between them for purposes of determining how  
417 much piping is connected to any individual storage tank system.

418  
419 (u) “Containment sump” means a liquid-tight container that protects the environment  
420 by containing leaks and spills of regulated substances from piping, dispensers, pumps, and  
421 related components in the containment area. Containment sumps may be single-wall or  
422 secondarily contained and located at the top of the tank (tank top or submersible turbine pump  
423 sump), underneath the dispenser (under-dispenser containment sump), or at other points in the  
424 piping run (transition or intermediate sump).

425  
426 (v) “Contaminated site” means a site where release(s) from storage tank systems have  
427 resulted in concentrations of regulated substances in environmental media that exceed criteria for  
428 the protection of human health or the environment.

429  
430 (w) "Corrosion expert" means a person who, by reason of thorough knowledge of the  
431 physical sciences and the principles of engineering and mathematics acquired by a professional  
432 education and related practical experience, is qualified to engage in the practice of corrosion  
433 control on buried or submerged metal piping systems and metal tanks. Such a person shall be  
434 accredited or certified as being qualified by the NACE or be a registered professional engineer  
435 who has certification or licensing that includes education and experience in corrosion control of  
436 buried or submerged metal piping systems and metal tanks.

437  
438 (x) “Corrosion protection” is a technique to prevent corrosion of a metal surface.  
439 Corrosion protection may be provided by sacrificial/galvanic anode cathodic protection systems,  
440 impressed current cathodic protection systems, isolation from ground contact, or dielectric  
441 materials.

442  
443 (y) “CP” means cathodic protection, which is a technique to prevent corrosion of a  
444 metal surface by making that surface the cathode of an electrochemical cell. CP may be provided  
445 by sacrificial/galvanic anodes or impressed current.

446  
447 (z) “CP tester” means a person who can demonstrate an understanding of the  
448 principles and measurements of all common types of CP systems as applied to buried or  
449 submerged metal piping and tank systems. At a minimum, such persons shall have education and  
450 experience in soil resistivity, stray current, structure-to-soil potential, and component electrical  
451 isolation measurements of buried metal piping and storage tank systems.

452  
453 (aa) “Drinking Water Equivalent Level or DWEL” means the maximum concentration  
454 of a contaminant established by the Wyoming Department of Environmental Quality, pursuant to  
455 this Chapter or Chapter 8, Water Quality Rules and Regulations, Quality Standards for Wyoming  
456 Groundwaters, for which no known or anticipated adverse effects on human health will occur.

457  
458 (bb) “Emergency” means a situation where replacement or retrofit of ancillary  
459 equipment to an existing storage tank system because of a sudden release or existing ancillary  
460 equipment failure is essential to continued operation of any facility, and the owner and/or  
461 operator can easily and quickly replace or retrofit the equipment to remain in operation.

462 (cc) "Ethanol" means an alcohol derived from the fermentation of sugar, grain, or  
463 other biomass and used as fuel for internal combustion engines. Ethanol is usually denatured  
464 using gasoline, petroleum condensate, or some other petroleum product prior to being marketed  
465 for fuel. For purposes of this Chapter, "ethanol" will be treated interchangeably with "gasoline."  
466

467 (dd) "Fiberglass Tank and Pipe Institute," 14323 Heatherfield, Houston, TX 77079-  
468 7407; (281) 568-4100.  
469

470 (ee) "Field-constructed tank" means a tank constructed in the field (i.e., constructed at  
471 the site of use). For example, a tank constructed of concrete that is poured in the field, or a steel  
472 or fiberglass tank primarily fabricated in the field.  
473

474 (ff) "Financial responsibility" terms are as defined in 40 CFR 280.92.  
475

476 (gg) "Hazardous substance UST system" means an UST system that contains a  
477 hazardous substance defined in section 101(14) of the Comprehensive Environmental Response,  
478 Compensation and Liability Act of 1980 (but not including any substance regulated as a  
479 hazardous waste under Subtitle C of the Resource Conservation and Recovery Act of 1984) or  
480 any mixture of such substances and petroleum, and which is not a petroleum UST system.  
481

482 (hh) "Heating oil" means petroleum that is No. 1, No. 2, No. 4-light, No. 4-heavy, No.  
483 5-light, No. 5-heavy, and No. 6 technical grades of fuel oil; other residual fuel oils (including  
484 Navy Special Fuel Oil and Bunker C); and other fuels when used as substitutes for one of these  
485 fuel oils. Heating oil is typically used in the operation of heating equipment, boilers, or furnaces.  
486

487 (ii) "Hydraulic lift tank" means a tank holding hydraulic fluid for a closed loop  
488 mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, or other  
489 similar devices.  
490

491 (jj) "Implementing agency" means Wyoming Department of Environmental Quality's  
492 Storage Tank Program pursuant to the memorandum of agreement with EPA dated August 3,  
493 1989.  
494

495 (kk) "Licensed operator" means a person, employed by the facility owner and or  
496 operator, who is in responsible charge of the storage tanks at one or more locations. "Licensed  
497 operator" refers to the holder of any of the licenses referred to in Section 46 of this Chapter.  
498

499 (ll) "Maintenance" means the normal operational upkeep to prevent a storage tank  
500 system from releasing a regulated substance.  
501

502 (mm) "Maximum Contaminant Level or MCL" means the maximum allowed  
503 concentration of a contaminant established by the U.S. Environmental Protection Agency under  
504 the Safe Drinking Water Act and published in 40 CFR Part 141.  
505

506 (nn) "Minimum Site Assessment or MSA" means a limited subsurface investigation  
507 performed at a storage tank facility to determine if a regulated substance has been released from

508 a storage tank system(s) and has caused, or is causing, soil and/or groundwater contamination  
509 that exceeds applicable standards.

510  
511 (oo) "NACE" means the National Association of Corrosion Engineers, 15835 Park Ten  
512 Place, Houston, TX 77084; (281) 228-6200.

513  
514 (pp) "National Leak Prevention Association," 75-4 Main Street, Suite 300, Plymouth,  
515 NH 03264; (815) 301-2785.

516  
517 (qq) "NFPA" means the National Fire Protection Association, Batterymarch Park,  
518 Quincy, MA 02269; (800) 344-3555.

519  
520 (rr) "Operating facility" means a gas station actively selling fuel to the public, a fleet  
521 fueling facility used to actively fuel fleet vehicles, or a facility where emergency power  
522 generators are being used. "Operating facility" does not include any other type of facility, such as  
523 a car wash or other business that does not routinely sell fuel to the public, or is not routinely used  
524 for fleet fueling, or is not routinely used for emergency power generation. A facility that has not  
525 been used to sell fuel to the public, or fuel fleet vehicles, or power emergency generators for a  
526 period of 12 months or more is not considered an "operating facility."

527  
528 (ss) "Operational life" means the period beginning when installation of the storage  
529 tank system has commenced until the time the storage tank system is properly closed under Part  
530 G.

531  
532 (tt) "Overfill release" means a release that occurs when a storage tank system is filled  
533 beyond its capacity resulting in a discharge of the regulated substance to the environment.

534  
535 (uu) "PEI" means the Petroleum Equipment Institute, P.O. Box 2380, Tulsa, OK  
536 74101; (918) 494-9696.

537  
538 (vv) "Regulated substance" means any substance defined in Section 101(14) of the  
539 Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980  
540 (but not including any substance regulated as a hazardous waste under Subtitle C). Further,  
541 petroleum, including crude oil or any fraction thereof that is liquid at standard conditions of  
542 temperature and pressure (60 degrees F and 14.7 psi absolute) is a regulated substance. The term  
543 "regulated substance" includes, but is not limited to, petroleum and petroleum-based substances  
544 comprised of a complex blend of hydrocarbons, such as motor fuels, jet fuels, distillate fuel oils,  
545 residual fuel oils, lubricants, petroleum solvents, and used oils.

546  
547 (ww) "RCRA" means the Resource Conservation and Recovery Act of 1984, as  
548 amended.

549  
550 (xx) "Repair" means to restore to proper operating condition a tank, pipe, spill  
551 prevention equipment, overfill prevention equipment, corrosion protection equipment, release  
552 detection equipment, or other storage tank system component that has caused a release of a  
553 regulated substance from the storage tank system or has failed to function properly.

554 (yy) “Replaced” means:

555

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

557

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

567

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

572

573 (aaa) “STI” means the Steel Tank Institute, 944 Donata Court, Lake Zurich, IL 60047;  
574 (847) 438-8265.

575

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

578

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

588

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

592

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

596

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

599

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

602  
603 (hhh) “U.S. Department of Defense,” 1000 Defense Pentagon, Washington, D.C. 20301-  
604 1000.

605  
606 (iii) “UST” means underground storage tank.

607  
608 (jjj) “UST system” means an underground storage tank, connected underground  
609 piping, underground ancillary equipment, and a containment system, if any. A UST system  
610 includes multiple tanks connected with common piping (e.g., manifold systems or siphon  
611 systems).

612  
613 (kkk) “Wastewater treatment tank” means a tank that is designed to receive and treat an  
614 influent wastewater through physical, chemical, or biological methods.

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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) Cathodically protected steel USTs shall be 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

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

666  
667 (IV) NACE Standard SP0285 and UL Standard 58, both as  
668 referenced in Section 2; or

669  
670 (V) STI Standard F841, as referenced in Section 2.

671  
672 (iii) Tanks constructed of steel and clad or jacketed with a non-corrodible  
673 material shall be manufactured and installed in accordance with one or more of the following  
674 industry standards or practices:

675  
676 (A) UL Standard 1746, as referenced in Section 2; or

677  
678 (B) STI ACT-100-U® Specification F894, as referenced in Section 2;

679 or

680  
681 (C) STI ACT-100-U® Specification F961, as referenced in Section 2;

682 or

683  
684 (D) STI Specification F922, as referenced in Section 2.

685  
686 (iv) Owners and/or operators may continue to operate tanks upgraded with an  
687 internal lining as long as CP is in place that meets all requirements of this Chapter.

688  
689 (v) New steel tanks shall not be installed with a liner without the addition of  
690 CP. No existing steel tank with a liner and added CP shall be modified to remove the CP.

691  
692 (vi) After the effective date of these regulations, no UST may be installed for  
693 any purpose regulated under this Chapter with any penetration into the UST except in the top.

694  
695 (vii) All USTs installed after the effective date of these regulations shall be  
696 anchored using deadmen to prevent flotation. No tank shall be installed without providing for  
697 the maximum possible buoyancy force assuming that the tank is completely under the local  
698 groundwater table. No tank shall be installed using a concrete slab above the tank as the primary  
699 method of resisting buoyancy forces.

700  
701 (b) *Piping.* Piping that routinely contains regulated substances and is in contact with  
702 the ground shall be properly designed, constructed, installed, and protected from corrosion in  
703 accordance with the following applicable industry standards or practices:

704  
705 (i) Piping constructed of a non-corrodible material shall be manufactured and  
706 installed in accordance with UL Standard 971 or UL of Canada S660, both as referenced in  
707 Section 2.

708  
709 (ii) Steel piping shall be cathodically protected in the following manner:



- 710 (A) The piping shall be coated with a suitable dielectric material;  
711  
712 (B) Field-installed CP systems shall be designed by a corrosion expert;  
713  
714 (C) Impressed current CP systems shall be designed to allow  
715 determination of current operating status as required in Section 11; and  
716  
717 (D) CP systems shall be operated and maintained in accordance with  
718 Section 11.  
719  
720 (E) In addition to the above, cathodically protected steel pipe shall be  
721 manufactured and installed in accordance with one or more of the following industry standards or  
722 practices:  
723  
724 (I) UL Subject 971A, as referenced in Section 2;  
725  
726 (II) STI Recommended Practice R892, as referenced in Section  
727 2;  
728  
729 (III) NACE International Standard Practice SP0169, as  
730 referenced in Section 2; or  
731  
732 (IV) NACE International Standard Practice SP0285, as  
733 referenced in Section 2.  
734  
735 (iii) Other piping systems will be allowed if they are determined by the  
736 department, pursuant to Section 33, to be designed to prevent the release of any regulated  
737 substance in a manner that is no less protective than the requirements in Section 6(b).  
738  
739 (c) *Spill and Overfill Prevention Equipment.*  
740  
741 (i) Except as provided in Sections 6(c)(ii) and 6(c)(iii), to prevent spilling  
742 and overfilling associated with regulated substance transfer to the UST system, owners and/or  
743 operators shall use the following spill and overfill prevention equipment:  
744  
745 (A) Spill prevention equipment that will prevent release of regulated  
746 substances to the environment when the transfer hose is detached from the fill pipe; and  
747  
748 (B) Overfill prevention equipment that will:  
749  
750 (I) Automatically shut off flow into the tank when the tank is  
751 no more than 95% full; or  
752  
753 (II) Alert the transfer operator when the tank is no more than  
754 90% full by restricting the flow into the tank or triggering a high-level alarm. The high-level  
755 alarm shall be audible and visible to the transfer operator; or

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

760  
761 (ii) Owners and/or operators are not required to use the spill and overflow  
762 prevention equipment specified in Section 6(c)(i) if the UST system is filled by transfers of no  
763 more than 25 gallons at one time.

764  
765 (iii) Flow restrictors (ball valves) used in vent lines may not be used to comply  
766 with Section 6(c)(i)(B) when overflow prevention is installed or replaced after April 11, 2016.  
767 Flow restrictors may continue to be used for reasons other than meeting the overflow prevention  
768 requirement so long as the flow restrictor does not interfere with the operation of the overflow  
769 prevention equipment being used.

770  
771 (iv) Spill and overflow prevention equipment shall be periodically tested or  
772 inspected in accordance with Section 10(d).

773  
774 (d) *Installation.* The tank system shall be properly installed in accordance with one  
775 of the following industry standards or practices (as long as the standard or practice does not  
776 conflict with the manufacturer's instructions and recommendations) and in accordance with the  
777 manufacturer's instructions and recommendations:

778  
779 (i) API Publication 1615, as referenced in Section 2; or

780  
781 (ii) PEI RP100, as referenced in Section 2; or

782  
783 (iii) NFPA Standard 30 and Standard 30A, both as referenced in Section 2.

784  
785 (e) *Installation Certification.* No storage tank system shall be operated until the  
786 department determines the installation or substantial modification meets the applicable standards  
787 of this Part. The department shall not issue any such determination until all construction on the  
788 site of the storage tank system is complete. Owners and/or operators shall:

789  
790 (i) Notify the department by telephone or in writing at least 30 days prior to  
791 the installation, repair or substantial modification of any storage tank system. Installations,  
792 repairs, or substantial modifications shall be scheduled at mutually acceptable times so the  
793 department can ensure a representative is on site at various phases of installation or substantial  
794 modification. Inspections shall be completed within 10 days of the date the department is  
795 notified that the installation, repair or substantial modification is complete; and

796  
797 (ii) Pay the department a fee for each storage tank system or multiple storage  
798 tank systems installed, repaired or substantially modified at the same time and at the same site  
799 pursuant to W.S. 35-11-1420(c). The department will invoice the owner and/or operator upon  
800 completion of the final installation, repair or substantial modification inspection. The owner

801 and/or operator shall remit payment to the department within 30 days of receipt of the  
802 department's invoice; and

803  
804 (iii) Ensure that the installation, repair, or substantial modification of all USTs  
805 meets the performance standards of this Chapter; and

806  
807 (iv) Obtain a certification from the licensed installer certifying that the tank  
808 system was installed or modified to meet the requirements of this Chapter. Such certification  
809 shall be provided on the UST notification form required under Section 9; and

810  
811 (v) In the case of an emergency where the owner and/or operator cannot  
812 comply with the notification requirement of Section 6(e)(i), notify the department by telephone  
813 as soon as the emergency is found. Before proceeding with any substantial modification or  
814 installation:

815  
816 (A) The department shall determine if an inspection can be made  
817 within the owner and/or operator's work schedule; or

818  
819 (B) If the department cannot make the inspection, the owner and/or  
820 operator shall provide by mail, the specifications of materials and industry standards or practices  
821 used to accomplish the installation or substantial modification and documentation of any tests  
822 required within 5 days of completion.

823  
824 (f) *Compatibility.* In accordance with Section 12, owners and/or operators shall  
825 demonstrate that all components of a new UST system are compatible with the substance to be  
826 stored in the UST system.

827  
828 (g) *Dispenser Systems.* Any new dispenser system installed after April 11, 2016,  
829 shall be equipped with under-dispenser containment.

830  
831 (i) A dispenser system is considered new when both the dispenser and the  
832 equipment needed to connect the dispenser to the storage tank system are installed. The  
833 equipment necessary to connect the dispenser to the tank system includes check valves, shear  
834 valves, unburied risers or flexible connectors, or other transitional components that are  
835 underneath the dispenser and connect the dispenser to the underground piping. Sensors are not  
836 required for monitoring under-dispenser containment. However, sensors may need to be added  
837 to meet the periodic monitoring requirement for sumps that cannot be visually inspected or to  
838 meet the piping interstitial monitoring requirement.

839  
840 (ii) Under-dispenser containment shall be liquid-tight on its sides, bottom, and  
841 at all penetrations. Under-dispenser containment shall allow for visual inspection and access to  
842 the components in the containment system or be periodically monitored for leaks from the  
843 dispenser system.

844  
845  
846

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

850  
851 (i) Will prevent releases due to corrosion or structural failure for the  
852 operational life of the UST system;

853  
854 (ii) Is cathodically protected against corrosion, constructed of non-corrodible  
855 material, steel clad with a non-corrodible material, or designed in a manner to prevent the release  
856 or threatened release of any stored substance; and

857  
858 (iii) Is constructed or lined with material that is compatible with the stored  
859 substance.

860  
861 **Section 7. Substandard USTs.** UST systems that do not meet the standards of  
862 Section 6 shall not be placed back into service if they have been temporarily closed for more than  
863 1 year. Substandard USTs shall be permanently closed or removed from the ground in  
864 accordance with Part G. A tank that has been permanently closed or that has gone through a  
865 change in service shall not be brought back into service unless the tank meets the requirements in  
866 Section 6 and the double-wall requirements in Section 14(h). This Section does not apply to  
867 previously deferred UST systems described in Part M.

868  
869 **Section 8. Repairs Allowed.**

870  
871 (a) Owners and/or operators of storage tank systems shall ensure that repairs will  
872 prevent releases due to structural failure or corrosion as long as the storage tank system is used to  
873 store regulated substances. The repairs shall meet the following requirements:

874  
875 (i) Repairs to UST systems shall be properly conducted in accordance with  
876 one or more of the following industry standards or practices:

877  
878 (A) NFPA Standard 30, as referenced in Section 2;

879  
880 (B) API Recommended Practice 2200, as referenced in Section 2;

881  
882 (C) API Standard 1631, as referenced in Section 2;

883  
884 (D) NFPA Standard 326, as referenced in Section 2;

885  
886 (E) National Leak Prevention Association Standard 631, as referenced  
887 in Section 2;

888  
889 (F) STI Recommended Practice R972, as referenced in Section 2;

890  
891 (G) NACE International Standard Practice SP0285, as referenced in  
892 Section 2; or

893 (H) Fiberglass Tank and Pipe Institute Recommended Practice T-95-  
894 02, as referenced in Section 2.

895  
896 (ii) Repairs to aboveground storage tank systems shall be properly conducted  
897 in accordance with one or more of the following industry standards or practices:

898  
899 (A) NFPA Standard 30, as referenced in Section 2;

900  
901 (B) API Standard 620, as referenced in Section 2;

902  
903 (C) API Standard 650, as referenced in Section 2;

904  
905 (D) API Standard 653, as referenced in Section 2; or

906  
907 (E) PEI RP200, as referenced in Section 2.

908  
909 (iii) Repairs to fiberglass-reinforced plastic USTs may be made by the  
910 manufacturer's authorized representatives or in accordance with a code of practice developed by  
911 a nationally recognized association or an independent testing laboratory.

912  
913 (iv) Metal pipe sections and fittings that have released regulated substances as  
914 a result of corrosion or other damage shall be replaced. Non-corrodible pipes and fittings may be  
915 repaired in accordance with the manufacturer's specifications.

916  
917 (v) Repairs to secondary containment areas of tanks and piping used for  
918 interstitial monitoring and to containment sumps used for interstitial monitoring of piping shall  
919 have the secondary containment tested for tightness according to the manufacturer's instructions  
920 or a code of practice developed by a nationally recognized association or independent testing  
921 laboratory within 30 days following the date of completion of the repair. All other repairs to  
922 storage tank systems shall be tightness tested in accordance with Sections 14(g) and 16(b) within  
923 30 days following the date of the completion of the repair unless:

924  
925 (A) The repaired storage tank system is internally inspected in  
926 accordance with a code of practice listed in this Section; or

927  
928 (B) The repaired portion of any UST system is monitored monthly for  
929 releases in accordance with a method specified in Section 16(c) through (j); or

930  
931 (C) Another test method is used that is determined by the department,  
932 pursuant to Section 33, to be no less protective of human health and the environment than those  
933 listed above.

934  
935 (D) The following codes of practice may be used to comply with  
936 paragraph (a)(v) of this Section:

937  
938

939 (I) STI Recommended Practice R012, as referenced in Section  
940 2; or

941  
942 (II) Fiberglass Tank and Pipe Institute Recommended Practice  
943 2007-2, as referenced in Section 2.

944  
945 (III) PEI RP1200, as referenced in Section 2.

946  
947 (vi) Storage tank system owners and/or operators shall maintain records of  
948 each repair until the UST system is permanently closed or undergoes a change-in-service  
949 pursuant to Part G of this Chapter.

950  
951 (b) All owners and/or operators of repaired UST systems shall ensure the  
952 modifications meet the performance standards for design and repair as set forth in Section 6.

953  
954 (c) Costs associated with remediation of any release from a storage tank system  
955 during tank installation or repair work by a tank installer, tester, owner and/or operator, etc., are  
956 not eligible for the state's corrective action account funds.

957  
958 (d) Any time steel connected piping is repaired or modified by replacing the pipe with  
959 a non-corrodible pipe, all of the connected piping on that run shall be replaced. Any time steel  
960 piping that is not cathodically protected is repaired or replaced, the entire run of pipe shall be  
961 replaced with a non-corrodible pipe.

962  
963 (e) Whenever the integrity of the primary or secondary wall of a double-wall tank has  
964 been compromised, repairs shall be made immediately in accordance with the tank  
965 manufacturer's recommendations. If the tank cannot be repaired, it shall be permanently closed  
966 in accordance with Section 31.

967  
968 (f) Within 30 days following any repair to spill or overfill prevention equipment, the  
969 repaired spill or overfill prevention equipment shall be tested or inspected, as appropriate, in  
970 accordance with Section 10(d) to ensure it is operating properly.

971  
972 (g) Testing required under this Section shall be conducted by a licensed installer as  
973 defined in Section 45 or a licensed tester as defined in Section 48.

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985 PART C  
986 GENERAL OPERATING REQUIREMENTS  
987

988 **Section 9. Notification Requirements.**  
989

990 (a) *New Tank Systems.* Any owner and/or operator who brings a storage tank system  
991 regulated under this Chapter into use shall, within 30 days of bringing such tank into use, submit  
992 a notice of the existence of such tank system to the department. The notice shall be submitted on  
993 the form prescribed by the department.  
994

995 (b) *Existing Storage Tank Systems.* Owners and/or operators of an UST that has been  
996 used to store regulated substances since January 1, 1974, and that was in the ground as of May 8,  
997 1986, shall immediately submit to the department, on the form prescribed by the department, a  
998 notice of the existence of such tank(s). Owners and/or operators of any AST that has been used  
999 to sell fuel to the public since July 1, 1994, shall immediately submit to the department, on the  
1000 form prescribed by the department, a notice of the existence of such tank(s). All storage tanks  
1001 located at the same facility shall be registered under the same facility identification number.  
1002

1003 (c) *Fees.* Owners and/or operators of storage tank systems shall pay the annual fees  
1004 specified by W.S. 35-11-1425 no later than January 1 of each year or 30 days after the first  
1005 invoice, whichever is the later date. Fees are not prorated; the fee is assessed based on a calendar  
1006 year. Fees begin on the date when the tank is first filled with a regulated substance and end on  
1007 the date when the tank is placed permanently out of service or converted to a non-regulated use  
1008 under these regulations.  
1009

1010 (d) *UST Certification.* All owners and/or operators of new UST systems shall certify  
1011 on the notification form conformance with the following requirements:  
1012

- 1013 (i) Installation of tanks and piping under Section 6(d);
  - 1014 (ii) CP of steel tanks and piping under Section 6(a) and (b);
  - 1015 (iii) Financial responsibility under Part N;
  - 1016 (iv) Release detection under Sections 14 through 17; and
  - 1017 (v) Overfill and spill prevention under Section 6(c).
- 1018  
1019  
1020

1021 (e) *AST Certification.* All owners and/or operators of new AST systems shall certify  
1022 on the notification form conformance with the requirements in Part I.  
1023

1024 (f) *Installer Certification.* All owners and/or operators of new UST systems shall  
1025 ensure that the installer certifies on the notification form that the methods used to install the tanks  
1026 and piping comply with the requirements in Section 6(d).  
1027  
1028  
1029

1030 (g) *Requirements for Sellers.* Any person who sells a tank intended to be used as a  
1031 regulated storage tank or any person who transfers an existing storage tank system shall notify  
1032 the purchaser of such tank of the owner's notification obligations in accordance with this Section.  
1033 Any person who sells a contaminated site shall notify the purchaser that the site is a  
1034 contaminated site subject to requirements of this Chapter.  
1035

1036 (h) *Transfer of Control.* Prior to the transfer of control of a storage tank system to a  
1037 different owner and/or operator, notification of the transfer shall be provided to the department  
1038 pursuant to W.S. 35-11-1420(a). Upon selling a contaminated site subject to requirements of this  
1039 Chapter, the seller shall notify the department of such sale. Such notifications shall be  
1040 provided on a form developed and provided by the department. Notification shall be made  
1041 within 30 days of the date the transfer becomes effective.  
1042

1043 **Section 10. Spill and Overfill Control.**  
1044

1045 (a) Owners and/or operators of storage tank systems shall ensure that releases due to  
1046 spilling or overfilling do not occur. The owner and/or operator shall ensure that the volume  
1047 available in the tank is greater than the volume of regulated substance to be transferred to the  
1048 tank before the transfer is made. The owner and/or operator shall also ensure that the transfer  
1049 operation is monitored constantly to prevent overfilling and spilling. The transfer procedures  
1050 described in NFPA Standard 385 or API Recommended Practice 1007, both as defined in Section  
1051 2, may be used to comply with this paragraph.  
1052

1053 (b) Owners and/or operators shall report, investigate, and clean up any spills and  
1054 overfills in accordance with Section 22.  
1055

1056 (c) Surface spills that occur at a storage tank facility during the transfer of a regulated  
1057 substance to the tank are required to be reported and cleaned up by any person owning or having  
1058 controlled the regulated substance pursuant to Section 22(a) and Chapter 4, Water Quality Rules  
1059 and Regulations.  
1060

1061 (d) *Periodic Testing of Spill Prevention Equipment and Containment Sumps Used for*  
1062 *Interstitial Monitoring of Piping and Periodic Inspection of Overfill Prevention Equipment.*  
1063

1064 (i) Owners and/or operators of tank systems with spill and overfill prevention  
1065 equipment and containment sumps used for interstitial monitoring of piping shall meet the  
1066 following requirements to ensure the equipment is operating properly and will prevent releases to  
1067 the environment:  
1068

1069 (A) Spill prevention equipment (such as spill buckets or other spill  
1070 containment device) and containment sumps used for interstitial monitoring of piping shall  
1071 prevent releases by meeting one of the following:  
1072

1073 (I) The equipment is double-wall and the integrity of both  
1074 walls is periodically monitored at a frequency not less than the frequency of the walkthrough  
1075 inspections described in Section 13(d). Owners and/or operators shall begin meeting Section



1076 10(i)(A)(II) and conduct a test within 30 days of discontinuing periodic monitoring of this  
1077 equipment; or

1078  
1079 (II) The spill prevention equipment and containment sumps  
1080 used for interstitial monitoring of piping are tested at least once every 3 years to ensure the  
1081 equipment is liquid tight. If water is used, it may be reused for testing at other sites. However,  
1082 when testing is complete, the water becomes a waste and must be evaluated to determine if it is a  
1083 hazardous waste prior to proper disposal. Test water will be a hazardous waste if it exhibits any  
1084 of the hazardous waste characteristics described in 40 CFR 261.21-24. Testing shall be  
1085 conducted by vacuum, pressure, or liquid methods in accordance with:

1086  
1087 (1.) Requirements developed by the manufacturer (only  
1088 if the manufacturer has developed such requirements); or

1089  
1090 (2.) A code of practice developed by a nationally  
1091 recognized association or independent testing laboratory; or

1092  
1093 (3.) PEI RP1200 as referenced in Section 2; or

1094  
1095 (4.) Requirements determined by the department to be  
1096 no less protective of health and the environment than other testing methods listed in Section  
1097 10(d)(i)(A)(II).

1098  
1099 (B) Overfill prevention equipment shall be inspected for functionality  
1100 at least once every 3 years. At a minimum, the inspection shall ensure that overfill prevention  
1101 equipment is set to activate at the correct level specified in Section 6(c) and will activate when  
1102 regulated substance reaches that level. Inspections shall be conducted in accordance with one of  
1103 the criteria in paragraph (d)(i)(A)(II) of this Section.

1104  
1105 (ii) Owners and/or operators shall begin meeting these requirements as  
1106 follows:

1107  
1108 (A) For tank systems in use on or before October 13, 2015, the initial  
1109 spill prevention equipment test, containment sump test and overfill prevention equipment  
1110 inspection shall be conducted not later than October 13, 2018.

1111  
1112 (B) For tank systems brought into use after October 13, 2015, these  
1113 requirements apply at installation.

1114  
1115 (iii) Owners and/or operators shall maintain records in accordance with Section  
1116 18 for spill prevention equipment, containment sumps used for interstitial monitoring of piping,  
1117 and overfill prevention equipment as follows:

1118  
1119 (A) All records of testing or inspection shall be maintained for 3 years;

1120 and

1121

1122 (B) For spill prevention equipment and containment sumps used for  
1123 interstitial monitoring of piping not tested every 3 years, documentation showing that the  
1124 prevention equipment is double-wall and integrity of both walls is periodically monitored shall  
1125 be maintained for as long as the equipment is periodically monitored.  
1126

1127 (iv) Testing required under this Section shall be conducted by a licensed tester  
1128 as defined in Section 48.  
1129

1130 **Section 11. Operation and Maintenance of Cathodic Protection (CP) Systems.** All  
1131 owners and/or operators of metal storage tank systems with CP shall comply with the following  
1132 requirements to ensure that releases due to corrosion are prevented until the storage tank system  
1133 is permanently closed or undergoes a change-in-service pursuant to Part G:  
1134

1135 (a) *Continuous Operation.* All CP systems shall be operated and maintained to  
1136 continuously provide corrosion protection to the metal components of that portion of the tank and  
1137 piping that routinely contain regulated substances and are in contact with the ground. Once  
1138 installed, CP systems shall not be removed, even if the tank has also been internally lined, as  
1139 long as metal tanks or connected piping exist on that site. This does not prevent replacing parts  
1140 of the CP system that have become defective.  
1141

1142 (b) *Periodic Inspections.* All storage tank systems equipped with CP systems shall be  
1143 inspected for proper operation by a qualified CP tester in accordance with the following  
1144 requirements:  
1145

1146 (i) All CP systems shall be tested within 6 months of installation and at least  
1147 once every 3 years thereafter.  
1148

1149 (ii) The criteria that are used to determine that CP is adequate shall be in  
1150 accordance with:  
1151

1152 (A) NACE International Test Method TM0101, as referenced in  
1153 Section 2;  
1154

1155 (B) NACE International Test Method TM0497, as referenced in  
1156 Section 2;  
1157

1158 (C) NACE International Standard Practice SP0285, as referenced in  
1159 Section 2;  
1160

1161 (D) NACE International Standard Practice SP0169, as referenced in  
1162 Section 2; or  
1163

1164 (E) STI Recommended Practice R051, as referenced in Section 2.  
1165

1166 (iii) All CP systems shall be tested within 6 months of any repair or substantial  
1167 modification to the storage tank system, or any other installation on the facility requiring  
1168 excavation, in accordance with NACE Standard SP0285, as referenced in Section 2.  
1169

1170 (c) *Impressed Current Systems.* Storage tank systems with impressed current CP  
1171 systems shall also be inspected by the owner and/or operator every 60 days to ensure the  
1172 equipment is running properly. The owner and/or operator shall make a record of these  
1173 inspections, including the date of the inspection, the voltage reading on the rectifier, the  
1174 amperage reading on the rectifier, and the hour reading on a properly connected hour meter  
1175 showing how long the system has operated since the last inspection. The owner and/or operator  
1176 shall compare those readings to the readings determined to be correct during the last inspection  
1177 required under paragraph (b) of this Section. Large changes in the voltage or amperage readings,  
1178 or zero readings, shall be investigated by the owner and/or operator.  
1179

1180 (d) *Records.* CP system operation records shall be maintained in accordance with  
1181 Section 13(c) to demonstrate compliance with the performance standards in this Section. These  
1182 records shall provide the following:  
1183

1184 (i) The results of testing from the last two CP system inspections required in  
1185 accordance with paragraph (b) of this Section; and (if applicable)  
1186

1187 (ii) The results of the last three CP system inspections required in accordance  
1188 with paragraph (c) of this Section.  
1189

1190 (e) *CP System Repairs.* In the event a CP system fails testing, the owner and/or  
1191 operator shall have a CP expert evaluate and design necessary repairs within 30 days of failure  
1192 and have the repairs completed within 90 days of failure. All repairs shall be made in accordance  
1193 with one or more of the following standards or practices:  
1194

1195 (i) STI-P3® Specification and Manual for External Corrosion Protection of  
1196 Underground Steel Storage Tanks, as referenced in Section 2; or  
1197

1198 (ii) UL Standard 1746, as referenced in Section 2; or  
1199

1200 (iii) NACE Standard SP0285, as referenced in Section 2.  
1201

1202 (f) *Stake-Type Sacrificial Anodes.* Stake-type sacrificial anodes connected to piping  
1203 flex connectors may be replaced by a licensed CP tester without the repairs being designed by a  
1204 CP expert.  
1205

## 1206 **Section 12. Compatibility.**

1207  
1208 (a) Storage tank systems shall be made of, or lined with, materials that are  
1209 compatible with the regulated substance stored.  
1210  
1211

1212 (b) Owners and/or operators shall notify the department at least 30 days prior to  
1213 changing to a regulated substance containing greater than 10 percent ethanol or greater than 20  
1214 percent biodiesel.

1215  
1216 (c) *Biofuel Blends.*

1217  
1218 (i) Prior to storing a biofuel blend in an existing or new tank system, owners  
1219 and/or operators shall demonstrate that all storage tank system components are compatible with  
1220 the biofuel blend to be stored. Compatibility demonstration shall be made by one of the  
1221 following:

1222  
1223 (A) Certification or listing of tank system equipment or components by  
1224 a nationally recognized, independent testing laboratory for use with the regulated substance  
1225 stored; or

1226  
1227 (B) Equipment or component manufacturer certification that the tank  
1228 system components are compatible for use with the biofuel blend to be stored. This certification  
1229 shall be in writing, indicating an affirmative statement of compatibility, including the biofuel  
1230 blend range for which the component is compatible.

1231  
1232 (ii) Compatibility Checklist. The storage tank owner and/or operator shall  
1233 complete the compatibility checklist developed by the department. The completed checklist and  
1234 compatibility demonstration for each component of the tank system shall be submitted to the  
1235 department. The department will issue written authorization to store the biofuel blend after  
1236 review and acceptance of the submittal.

1237  
1238 (iii) Owners and/or operators shall maintain component compatibility  
1239 documentation for as long as the tank system is used to store the regulated substance.

1240  
1241 (iv) API Recommended Practice 1626, as referenced in Section 2, may be used  
1242 to comply with this Section.

1243  
1244 **Section 13. Inspection and Right of Entry, Reporting, and Recordkeeping.**

1245  
1246 (a) *Inspection and Right of Entry.* Any authorized agent of the State of Wyoming has  
1247 the right of entry for inspection, assessments, monitoring, and corrective actions in accordance  
1248 with the provisions of W.S. 35-11-1422. Owners and/or operators shall cooperate fully with  
1249 inspections, including providing access to all manholes, dispenser cabinets, CP rectifiers, and  
1250 tank monitoring equipment. Compliance with this Section requires that owners and/or operators  
1251 open manholes and other access points so department inspectors can see the condition of all  
1252 equipment. If an owner and/or operator is unable to open the access points, requiring department  
1253 personnel to open this equipment, any damages to any equipment or property shall be the  
1254 responsibility of the facility owner and/or operator. Damages include, but are not limited to,  
1255 those resulting from misplacement of covers, lids, or dispenser cabinet doors.

1257 (b) *Reporting.* Owners and/or operators of storage tank systems shall cooperate fully  
1258 with inspections, monitoring, and testing conducted by the department; and requests by the  
1259 department for the following documents, notifications, testing, and monitoring information:  
1260

1261 (i) Notification for all storage tank systems (Section 9), which includes  
1262 certification of installation for new storage tank systems;  
1263

1264 (ii) Notification when any person assumes ownership of a tank system  
1265 (Section 9);  
1266

1267 (iii) Notification for all substantial modifications (Section 6(e) for USTs and  
1268 Section 35(q) for ASTs);  
1269

1270 (iv) Notification prior to changing tank systems to certain regulated substances  
1271 (Section 12);  
1272

1273 (v) Reports of all releases including suspected releases (Section 19), spills and  
1274 overfills (Section 22), and confirmed releases (Sections 23 through 25);  
1275

1276 (vi) Notification before permanent closure, change of status, or change-in-  
1277 service (Part G);  
1278

1279 (vii) Documentation required in Section 25 by owners and/or operators eligible  
1280 for the state corrective action account; and/or  
1281

1282 (viii) Documentation required in Section 24 by owners and/or operators not  
1283 eligible for the state corrective action account.  
1284

1285 (c) *Recordkeeping.* Owners and/or operators shall maintain and submit to the  
1286 department (when requested) the following:  
1287

1288 (i) Documentation of CP systems operation (Section 11);  
1289

1290 (ii) Documentation of storage tank system repairs (Section 8);  
1291

1292 (iii) Documentation of storage tank system compatibility (Section 12);  
1293

1294 (iv) Documentation of compliance for spill and overfill prevention equipment  
1295 and containment sumps used for interstitial monitoring of piping (Section 10);  
1296

1297 (v) Documentation of periodic walkthrough inspections (Section 13);  
1298

1299 (vi) Documentation of compliance with release detection requirements (Part D  
1300 for USTs and Sections 36 and 37 for ASTs);  
1301  
1302

1303 (vii) Results of the site investigation conducted at permanent closure and  
1304 changes in service (Section 31); and

1305  
1306 (viii) Documentation of Class C Operator training.

1307 (d) *Monthly Inspections* To properly operate and maintain tank systems, the Class A  
1308 or B Operator or licensed tank tester shall meet one of the following:

1309 (i) Conduct a walkthrough inspection that, at a minimum, checks the  
1310 following equipment every 30 days (except spill prevention equipment at tank systems receiving  
1311 deliveries at intervals greater than every 30 days may be checked prior to each delivery):

1312 (A) Spill prevention equipment. Visually check for damage, remove  
1313 liquid or debris, check for and remove obstructions in the fill pipe, check the fill cap to ensure it  
1314 is securely on the fill pipe; and for double-wall spill prevention equipment with interstitial  
1315 monitoring, check for a leak in the interstitial area; and

1316 (B) Release detection equipment. Check to ensure the release  
1317 detection equipment is operating with no alarms or other unusual operating conditions present,  
1318 and ensure records of release detection testing are reviewed and current; or

1319 (ii) Conduct operation and maintenance walkthrough inspections according to  
1320 PEI RP900, as referenced in Section 2.

1321 (iii) Owners and/or operators who monitor their release detection system  
1322 remotely may check the release detection equipment and records remotely every 30 days as long  
1323 as the release detection system at the facility is determined to be in communication with the  
1324 remote monitoring equipment.

1325  
1326 (e) *Monthly Inspection Documentation.* The Class A or B Operator or licensed tank  
1327 tester shall provide the facility owner and/or operator with a copy of each monthly inspection  
1328 documentation and alert the owner and/or operator of any condition discovered during the  
1329 monthly visual inspection that may require follow-up actions.

1330 (f) *Monthly Inspection Records.* The owner and/or operator shall maintain a copy of  
1331 the monthly inspection documentation and all attachments for the previous 12 months. Records  
1332 shall include a list of each area checked, whether or not each area checked was acceptable or  
1333 needed action taken, a description of actions taken to correct an issue, and delivery records if  
1334 spill prevention equipment is checked less frequently than every 30 days due to infrequent  
1335 deliveries. The records shall be maintained on-site, off-site at a readily available location within  
1336 the State of Wyoming, or electronically in accordance with Section 13(i).

1337  
1338 (g) *Operator's Annual Inspection.* Storage tank system owners and/or operators shall  
1339 provide an annual inspection report to the department for the entire facility within 60 days of the  
1340 inspection. This annual inspection shall be conducted by the owner, the operator, or a licensed  
1341 tester within 1 year of the previous inspection. The inspector shall meet all qualifications of a CP  
1342 tester if he or she inspects a CP system. The results of the operator's annual inspection and all

1343 associated documentation shall be maintained by the facility for at least 3 years. Records shall  
1344 include a list of each area checked and each component tested, whether each area checked and  
1345 each component tested was acceptable or needed action taken, a description of actions taken to  
1346 correct an issue, and delivery records if spill prevention equipment is checked less frequently  
1347 than every 30 days due to infrequent deliveries. This inspection shall:

1348  
1349 (i) Test all CP systems on site that are due for testing in accordance with  
1350 Section 11.

1351  
1352 (ii) Provide pressure tests of pressurized piping or U.S. suction piping in  
1353 accordance with Section 14(g).

1354  
1355 (iii) Test all automatic line leak detectors as follows:

1356  
1357 (A) Provide a simulated leak test for mechanical line leak detectors that  
1358 demonstrates the leak detector meets the requirements of Section 14(g).

1359  
1360 (B) Provide a simulated leak test for electronic line leak detectors that  
1361 demonstrates the leak detector meets the requirements of Section 14(g). An internal electrical  
1362 test of the system is not sufficient to meet this requirement.

1363  
1364 (C) Function-test sump sensors to demonstrate that they meet the  
1365 requirements of Section 14(g) when sump sensors are used to meet the requirement for an  
1366 automatic line leak detector. The annual inspection shall include a manual tripping of each sump  
1367 sensor. A record shall be made showing the date when the test was done, the facility number,  
1368 and recording whether or not the sensor operated as required. After the sump sensors have been  
1369 function tested, they shall be placed in the sump at a location that allows the detection of 3  
1370 gallons of liquid if the sensor is being used as an automatic line leak detector. If the sensor is  
1371 used solely for interstitial monitoring, the sensor shall be placed in accordance with Section  
1372 14(h)(v).

1373  
1374 (iv) Document that all automatic tank gauges (ATGs), interstitial monitoring  
1375 systems, vapor monitoring systems, or other automatic systems are properly calibrated and  
1376 functioning. Test alarms, verify system configurations, and test battery backup. This  
1377 documentation includes a check to determine if probes are clean and are the proper ones for the  
1378 regulated substance being stored.

1379  
1380 (v) Provide copies of all inventory control calculations, statistical inventory  
1381 reconciliation reports, automatic tank gauging test results, or results from other leak detection  
1382 methods that indicate compliance for each month of the year preceding the inspection.

1383  
1384 (vi) Include a physical inspection of all sumps, manholes, dispensers, under-  
1385 dispenser containment, and other openings on the storage tank system. Visually check for  
1386 damage and leaks. Any leaks found shall be immediately eliminated. Any liquid or debris found  
1387 in spill prevention equipment such as spill buckets, sumps, or under-dispenser containment shall  
1388

1389 be removed at the time of inspection. Check for leaks in the interstitial area of double-wall  
1390 sumps with interstitial monitoring.

1391  
1392 (vii) Inspect probes and sensors for residual buildup, ensure floats move freely,  
1393 ensure shaft is not damaged, ensure cables are free of kinks and breaks, and test alarm operability  
1394 and communication with controller.

1395  
1396 (viii) Ensure proper communication between vacuum pumps, pressure gauges,  
1397 sensors, and controller.

1398  
1399 (ix) Include documentation of Class A or B Operator's monthly inspections.

1400  
1401 (x) Check hand-held release detection equipment such as tank gauge sticks or  
1402 groundwater bailers for operability and serviceability.

1403  
1404 (xi) Be documented on forms approved by the department. The forms shall  
1405 include the name(s) and license number(s) of the person(s) performing the inspection.

1406  
1407 (h) *Results.* The results of the operator's annual inspection shall be reviewed by the  
1408 licensed facility operator. The name of the reviewing operator and operator's license number  
1409 shall be included on the inspection form.

1410  
1411 (i) *Availability and Records Maintenance.* Owners and/or operators of storage tank  
1412 systems shall keep required records:

1413  
1414 (i) At the storage tank site and immediately available for inspection by the  
1415 department;

1416  
1417 (ii) At a readily available alternate site. Records shall be provided to the  
1418 department for inspection upon request. The readily available alternate site shall be within the  
1419 boundaries of the State of Wyoming. If records are kept at an alternate site, the department shall  
1420 be notified in writing of the name, address and telephone number for the alternate site; or

1421  
1422 (iii) Electronically, but only if electronic records can be easily accessed at the  
1423 facility during an inspection. Electronic records shall be accessed by the operator on a computer  
1424 at the facility at the time of an inspection by the department. Due to size limitations, records  
1425 accessed by cell phone do not meet the requirements of this Section.

1426  
1427 (iv) Owners/operators may submit records electronically to the department  
1428 prior to an inspection. Electronic records submitted to the department prior to an inspection must  
1429 be received by the Storage Tank Program (STP) not less than 7 working days prior to the date of  
1430 the inspection. It is the owner's/operator's responsibility to ensure the records were received by  
1431 the STP. If records are not received by the STP at least 7 working days prior to the date of the  
1432 inspection, the owner/operator shall ensure records are available on site at the time of the  
1433 inspection using another method in this Section.

1434



1435 (v) In the case of permanent closure records, owners and/or operators may  
1436 mail closure records to the department if they cannot be kept at the site or an alternate site as  
1437 indicated above.

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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

1527 throughput of less than 15,000 gallons per month may use inventory control as a monthly  
1528 monitoring technique provided that:

1529  
1530 (i) The inventory control balances within 150 gallons per month. In the event  
1531 that a single month fails to balance within 150 gallons, the operator shall immediately submit that  
1532 month's data to an outside vendor for Statistical Inventory Reconciliation;

1533  
1534 (ii) The USTs are secured against theft in such a way that any theft is readily  
1535 obvious; and

1536  
1537 (iii) All requirements listed under Section 16(a) are met.

1538  
1539 (g) *Piping.* Connected piping that routinely contains regulated substances shall be  
1540 monitored for releases in a manner that meets one of the following requirements:

1541  
1542 (i) Pressurized piping systems shall:

1543  
1544 (A) Be monitored in accordance with Section 14(g)(i)(B). Whenever  
1545 pressure systems have multiple dispensers hooked up to dispense product through a single meter,  
1546 the pressurized piping between the first dispenser and the slave dispenser shall also be monitored  
1547 and tested; and

1548  
1549 (B) Be equipped with an automatic line leak detector. Automatic line  
1550 leak detector methods, including sump sensors that alert the owner and/or operator to the  
1551 presence of a leak by restricting or shutting off the flow of regulated substances through piping  
1552 or triggering an audible or visual alarm may be used only if they detect leaks of 3 gallons per  
1553 hour at 10 pounds per square inch line pressure within 1 hour. If sump sensors are used as an  
1554 automatic line leak detector, the sensor shall be placed in the sump such that it can detect 3  
1555 gallons of liquid in the sump regardless of the sump size or shape, and whether or not the sump is  
1556 level. If sump sensors cannot detect 3 gallons of liquid, the sensors shall be relocated in the  
1557 sump such that 3 gallons of liquid can be detected or another type of automatic line leak detector  
1558 shall be installed. An annual test of the operation of the leak detector shall be conducted.  
1559 Manufacturers are required to recommend procedures to be used for testing their equipment, but  
1560 all automatic line leak detectors shall be tested annually. No manufacturer shall recommend that  
1561 its equipment not be tested nor interfere with the testing of its equipment in any way. In  
1562 addition, all underground pressurized piping shall:

1563  
1564 (I) Be tightness tested annually. A periodic test of piping may  
1565 be conducted only if it can detect a 0.1 gallon per hour (gph) leak rate at one and one-half times  
1566 the operating pressure; or

1567  
1568 (II) Be monitored using any of the methods listed in Sections  
1569 16(d), (e), (f), (g), (h), or (i). Methods not specifically named in these regulations shall be  
1570 approved by the department prior to use pursuant to Section 33. The request for approval shall  
1571 state that the method will detect a leak in lines.

1572

1573 (ii) A U.S. suction system is a system of underground piping that conveys a  
1574 regulated substance using suction and has more than one check valve in the line. All U.S.  
1575 suction systems shall:

1576  
1577 (A) Have a line tightness test performed once every 3 years. A  
1578 periodic test of piping may be conducted only if it can detect a 0.1 gallon per hour leak rate at  
1579 one and one-half times the operating pressure; or

1580  
1581 (B) Be monitored using any of the methods listed in Section 16(d), (e),  
1582 (f), (g), (h), or (i). Methods not specifically named in these regulations shall be approved by the  
1583 department prior to use pursuant to Section 33. The request for approval shall state that the  
1584 method will detect a leak in lines.

1585  
1586 (iii) Underground piping that conveys regulated substances using an exempt  
1587 suction system is not required to have a release detection system. An exempt suction system is  
1588 one that is designed and constructed to meet the following requirements:

1589  
1590 (A) The below-grade piping operates at less than atmospheric pressure;

1591  
1592 (B) The below-grade piping is sloped so that the contents of the pipe  
1593 will drain back into the storage tank if the suction is released;

1594  
1595 (C) Only one check valve is included in each suction line;

1596  
1597 (D) The check valve is located directly below and as close as practical  
1598 to the suction pump; and

1599  
1600 (E) A method shall be provided that allows compliance with this  
1601 Section to be readily determined.

1602  
1603 (h) *UST System Installations or Replacements on or after December 1, 2005.*  
1604 Regardless of any other Section in this Chapter, all new or replacement installations occurring on  
1605 or after December 1, 2005, shall meet the following secondary containment criteria:

1606  
1607 (i) New or replacement tanks shall be provided with full secondary  
1608 containment in the form of:

1609  
1610 (A) Double-wall tanks; or

1611  
1612 (B) Single-wall tanks with a polyethylene tank jacket.

1613  
1614 (ii) New or replacement connected piping shall be provided with full  
1615 secondary containment in the form of:

1616  
1617 (A) Double-wall lines; or

1618

- 1619 (B) Single-wall lines with secondary containment piping.  
1620  
1621 (iii) All dispensers shall be equipped with full secondary containment in the  
1622 form of dispenser pans.  
1623  
1624 (iv) All secondary containment systems shall be monitored in accordance with  
1625 Section 16(f). Pressurized piping shall be equipped with an automatic line leak detector in  
1626 accordance with Section 14(g).  
1627  
1628 (v) If mechanical line leak detectors or electronic line leak detectors are being  
1629 used for leak detection, sump sensors used for interstitial monitoring do not need to meet the 3  
1630 gallons per hour leak detection requirement. In these cases, the sump sensors may be placed  
1631 anywhere in the sump from the lowest point of the sump to no higher than 2 inches below the  
1632 lowest penetration in the sump.  
1633  
1634 (i) *Piping Installed After June 30, 2017.* When a new piping interstitial monitoring  
1635 system is installed and sump sensors are used as standalone automatic line leak detectors, the  
1636 system shall be configured to shut off the flow of product in that piping run when a sump sensor  
1637 triggers an alarm. Essential homeland security systems, emergency generator systems, and  
1638 systems used for other disaster relief efforts are exempt from this requirement.  
1639  
1640 (j) *Interstitially Monitored Pressurized Piping Installed Prior to December 1, 2005.*  
1641 If double-wall piping systems using sumps for interstitial monitoring were installed before  
1642 December 1, 2005, the owner and/or operator may install mechanical or electronic line leak  
1643 detectors and perform annual line tightness testing in accordance with Section 14(g)(i)(B)(I) or  
1644 an alternative tank leak detection method as described in Section 14(g)(i)(B)(II) to meet leak  
1645 detection requirements. In this case, the owner and/or operator will not be required to perform  
1646 periodic integrity testing of containment sumps used for interstitial monitoring.

1648 **Section 15. Petroleum USTs with a Capacity of 2,000 Gallons or Less.** Tanks  
1649 installed on or after December 1, 2005, shall be double-wall systems and interstitially monitored.  
1650 Tanks installed on or before November 30, 2005, shall be monitored for releases at least every 30  
1651 days using one of the methods listed in Section 16. Tanks with a capacity of 550 gallons or less  
1652 and tanks with a capacity of 551 to 1,000 gallons that meet the tank diameter criteria in Table 1  
1653 may use manual tank gauging as the sole method of release detection in accordance with Section  
1654 15(a). All other tanks with a nominal capacity of 551 to 2,000 gallons may use manual tank  
1655 gauging in place of inventory control.

1656  
1657 (a) *Manual Tank Gauging.* Manual tank gauging shall meet the following  
1658 requirements:

- 1659  
1660 (i) Tank liquid level measurements shall be taken at the beginning and ending  
1661 of the minimum test duration shown in Table 1 during which no liquid is added to or removed  
1662 from the tank;  
1663

1664 (ii) Level measurements shall be based on an average of two consecutive stick  
1665 readings at both the beginning and end of the period;

1666  
1667 (iii) The equipment used shall be capable of measuring the depth of the  
1668 regulated substance over the full range of the UST's height to the nearest one-eighth of an inch;

1669  
1670 (iv) A suspected release shall be declared and the requirements of Part E shall  
1671 be followed if the variation between beginning and ending measurements exceeds the weekly or  
1672 monthly standards in Table 1:

1673  
1674

<b>TABLE 1 MANUAL TANK GAUGING VARIATION STANDARDS</b>			
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

1675  
1676 \* Nothing can be added to or removed from the UST for the duration of the test.

1677  
1678 (b) *Other Release Detection Methods.* Owners and/or operators of petroleum USTs  
1679 with a capacity of 2,000 gallons or less may also use any of the release detection methods listed  
1680 in Section 16(a) through (j).

1681  
1682 **Section 16. Petroleum UST Systems with a Capacity of More Than 2,000 Gallons.**  
1683 Petroleum USTs with a capacity of more than 2,000 gallons installed on or after December 1,  
1684 2005, shall be double-wall systems and interstitially monitored. Petroleum USTs installed on or  
1685 before November 30, 2005, with a capacity of more than 2,000 gallons shall be monitored at least  
1686 every 30 days for releases using one or more of the following methods:

1687  
1688 (a) *Inventory Control.* Inventory control is not acceptable as a leak detection method  
1689 except when it is combined with another method or when the UST meets the requirements of  
1690 Section 14(f). Product inventory control (or another test of equivalent performance) shall be  
1691 conducted monthly to detect a release of at least 1% of throughput plus 130 gallons in the  
1692 following manner:

- 1693 (i) Inventory volume measurements for regulated substance inputs,  
1694 withdrawals, and the amount still remaining in the UST shall be recorded each operating day;  
1695
- 1696 (ii) The equipment used shall be capable of measuring the depth of regulated  
1697 substance over the full range of the UST's height to the nearest one-eighth of an inch;  
1698
- 1699 (iii) The regulated substance inputs shall be reconciled with delivery receipts  
1700 by measurement of the UST inventory volume before and after delivery;  
1701
- 1702 (iv) Deliveries shall be made through a drop tube that extends to within 6  
1703 inches of the tank bottom;  
1704
- 1705 (v) Regulated substance dispensing shall be metered and recorded within the  
1706 local standards for meter calibration or an accuracy of 6 cubic inches for every 5 gallons of  
1707 regulated substance withdrawn; and  
1708
- 1709 (vi) Water in the bottom of the UST shall be measured to the nearest one-  
1710 eighth of an inch at least once a month.  
1711
- 1712 (vii) Owners and/or operators using inventory control shall report a suspected  
1713 release under Section 19 whenever:  
1714
- 1715 (A) The inventory control fails to balance within 1% of total  
1716 throughput plus 130 gallons for the second consecutive month; or  
1717
- 1718 (B) Daily over/short readings show a consistent non-zero trend for two  
1719 consecutive months.  
1720
- 1721 (viii) The following are methods of equivalent performance to inventory control:  
1722
- 1723 (A) Vapor monitoring conducted in accordance with Section 16(d);  
1724
- 1725 (B) Groundwater monitoring conducted in accordance with Section  
1726 16(e);  
1727
- 1728 (C) Interstitial monitoring conducted in accordance with Section 16(f);  
1729
- 1730 (D) Statistical inventory reconciliation conducted in accordance with  
1731 Section 16(g);  
1732
- 1733 (E) Tracer surveys conducted in accordance with Section 16(h);  
1734
- 1735 (F) Manual tank gauging conducted in accordance with Section 15,  
1736 provided the tank has a capacity of 2,000 gallons or less; or  
1737

1738 (G) Other methods approved under Section 16(i), provided that the  
1739 request for approval of the method specifically states that the method is of equivalent  
1740 performance to inventory control.

1741  
1742 (b) *Tank Tightness Testing.* Tank tightness testing shall be capable of detecting a 0.1  
1743 gallon per hour leak rate from any portion of the UST that routinely contains regulated substance  
1744 while accounting for the effects of thermal expansion or contraction of the regulated substance,  
1745 vapor pockets, tank deformation, evaporation or condensation, and the location of the water  
1746 table. Whenever a tank tightness test shows a failing result, the owner and/or operator shall  
1747 report a suspected release and follow either Section 20 or 21.

1748  
1749 (c) *Automatic Tank Gauging.* Equipment for automatic tank gauging that tests for the  
1750 loss of a regulated substance shall detect a 0.2 gallon per hour leak rate from any portion of the  
1751 tank that routinely contains a regulated substance. Owners and/or operators using automatic tank  
1752 gauging shall also:

1753  
1754 (i) Conduct inventory control in conformance with paragraph (a) of this  
1755 Section, unless:

1756  
1757 (A) The regulated substance is placed in the UST in batches of 25  
1758 gallons or less;

1759  
1760 (B) The tank is used only to fuel an emergency power generator;

1761  
1762 (C) A passing result is obtained monthly from the automatic tank  
1763 gauge (ATG) with the tank at least 85% full;

1764  
1765 (D) The ATG reconciles the inventory to the same levels as required by  
1766 paragraph (a) of this Section; or

1767  
1768 (E) A method of equivalent performance to inventory control is also  
1769 conducted. To meet the definition of “equivalent performance to inventory control,” the method  
1770 must measure volume for regulated substance inputs, withdrawals, and the amount still  
1771 remaining in the tank. Measurements must be recorded each operating day. The method must  
1772 meet the requirements of Section 16(i) and be approved by the department prior to use.

1773  
1774 (ii) Perform the test with the system operating in one of the following modes:

1775  
1776 (A) In-tank static testing conducted at least once every 30 days; or

1777  
1778 (B) Continuous in-tank leak detection operating on an uninterrupted  
1779 basis or operating within a process that allows the system to gather incremental measurements to  
1780 determine the leak status of the tank at least once every 30 days.

1781  
1782 (iii) Report a suspected release and follow the requirements of Part E

1783 whenever:



- 1784 (A) Any calendar month goes by when a passing result cannot be  
1785 obtained from the ATG sometime during the month;  
1786
- 1787 (B) A pattern becomes evident that the ATG produces a failing result  
1788 whenever the level of a regulated substance in the tank is high, even if passing results can be  
1789 obtained when the level is low; or  
1790
- 1791 (C) Inventory control fails for the second consecutive month.  
1792
- 1793 (d) *Vapor Monitoring*. Testing or monitoring for vapors within the soil gas of the  
1794 excavation zone shall meet the following requirements:  
1795
- 1796 (i) The materials used as backfill are sufficiently porous (e.g., gravel, sand,  
1797 crushed rock) to readily allow diffusion of vapors from releases into the excavation zone;  
1798
- 1799 (ii) The stored regulated substance, or a tracer compound placed in the UST  
1800 system, is sufficiently volatile to result in a vapor level that is detectable by the monitoring  
1801 devices located in the excavation zone in the event of a release from the tank;  
1802
- 1803 (iii) The measurement of vapors by the monitoring device is not rendered  
1804 inoperative by groundwater, rainfall, soil moisture, or other known interferences so that a release  
1805 could go undetected for more than 30 days;  
1806
- 1807 (iv) The soil and backfill material immediately surrounding the UST system  
1808 shall not be contaminated with the regulated product in such a way as to interfere with the  
1809 method used to detect releases from the UST system;  
1810
- 1811 (v) The vapor monitors shall be designed and operated to detect any  
1812 significant increase in concentration above background of the regulated substance stored in the  
1813 UST system, a component or components of that substance, or a tracer compound placed in the  
1814 UST system;  
1815
- 1816 (vi) The UST excavation zone is assessed to ensure compliance with the  
1817 requirements in this Section and to establish the number and positioning of vapor monitoring  
1818 wells that will detect releases within the excavation from any portion of the tank that routinely  
1819 contains the regulated substance; and  
1820
- 1821 (vii) Vapor monitoring wells shall be clearly marked for identification and  
1822 secured to avoid unauthorized access and tampering.  
1823
- 1824 (viii) Owners and/or operators using vapor monitoring wells for leak detection  
1825 shall report a suspected release in accordance with Section 19 whenever a vapor monitoring  
1826 device detects a leak and cannot be made to reset within 48 hours.  
1827
- 1828 (ix) New UST facilities shall not be installed using vapor monitoring as the  
1829 only leak detection method. Owners and/or operators may install vapor monitoring wells as a

1830 secondary method. In the event that vapor monitoring wells are installed in the backfill, a permit  
1831 to construct under Chapter 3, Wyoming Water Quality Rules and Regulations, is not required.

1832  
1833 (e) *Groundwater Monitoring.* Testing or monitoring for liquids on the groundwater  
1834 shall meet the following requirements:

1835  
1836 (i) The regulated substance stored is immiscible in water and has a specific  
1837 gravity of less than 1;

1838  
1839 (ii) Groundwater is never more than 20 feet from the ground surface, and the  
1840 hydraulic conductivity of the soil(s) between the UST system and the monitoring wells or  
1841 devices is not less than 0.01 cm/sec (e.g., the soil should consist of gravels, coarse to medium  
1842 sands, coarse silts or other permeable materials);

1843  
1844 (iii) The slotted portion of the monitoring well casing or well screen shall be  
1845 designed to prevent migration of natural soils or filter pack into the well and to allow entry of the  
1846 regulated substance on the water table into the well under both high and low groundwater  
1847 conditions;

1848  
1849 (iv) Monitoring wells shall be sealed from the ground surface to the top of the  
1850 filter pack with hydrated bentonite and concrete;

1851  
1852 (v) Monitoring wells or devices shall intercept the excavation zone or are as  
1853 close to it as is technically feasible;

1854  
1855 (vi) The continuous monitoring devices or manual methods used shall be  
1856 capable of detecting the presence of at least one-eighth of an inch of free product on top of the  
1857 groundwater in the monitoring wells;

1858  
1859 (vii) Within and immediately below the UST excavation zone, the site shall be  
1860 assessed to ensure compliance with the requirements in this Section and to establish the number  
1861 and positioning of monitoring wells or devices that will detect releases from any portion of the  
1862 UST system that routinely contains a regulated substance;

1863  
1864 (viii) Monitoring wells shall be clearly marked for identification and secured to  
1865 avoid unauthorized access and tampering; and

1866  
1867 (ix) Groundwater monitoring shall not be used when the ambient groundwater  
1868 is already contaminated with the regulated substance being stored in the UST system.

1869  
1870 (x) Owners and/or operators using groundwater monitoring shall report a  
1871 suspected release and follow the requirements of Part E whenever any regulated substance is  
1872 observed in any monitoring well at any level.

1873  
1874 (xi) New UST facilities shall not be installed using groundwater monitoring as  
1875 the only leak detection method. Owners and/or operators may install groundwater monitoring

1876 wells as a secondary method. In the event that groundwater monitoring wells are installed in the  
1877 backfill, a permit to construct under Chapter 3, Wyoming Water Quality Rules and Regulations,  
1878 is not required.

1879

1880 (f) *Interstitial Monitoring.* Interstitial monitoring between the UST system and a  
1881 secondary barrier immediately around or beneath it may be used if the system is designed,  
1882 constructed, and installed to detect a leak from any portion of the tank that routinely contains a  
1883 regulated substance and also meets one of the following requirements:

1884

1885 (i) The sampling or testing method for double-wall UST systems shall be  
1886 capable of detecting a leak through the inner wall in any portion of the tank that routinely  
1887 contains a regulated substance.

1888

1889 (ii) The sampling or testing method used for UST systems with a secondary  
1890 barrier within the excavation zone shall be capable of detecting a leak between the UST system  
1891 and the secondary barrier in accordance with the following:

1892

1893 (A) The secondary barrier around or beneath the UST system shall  
1894 consist of artificially constructed material that is sufficiently thick and impermeable (at least  $10^{-6}$   
1895 cm/sec for the regulated substance stored) to direct a leak to the monitoring point and permit its  
1896 detection;

1897

1898 (B) The barrier shall be compatible with the regulated substance stored  
1899 so that a leak from the UST system will not cause a deterioration of the barrier allowing a release  
1900 to pass through undetected;

1901

1902 (C) The secondary barrier for cathodically protected USTs shall be  
1903 installed so that it does not interfere with the proper operation of the CP system;

1904

1905 (D) Groundwater, soil moisture, or rainfall shall not render the testing  
1906 or sampling method used inoperative so that a release could go undetected for more than 30 days;

1907

1908 (E) The site shall be assessed to ensure that the secondary barrier is  
1909 always above the groundwater and not in a 25-year flood plain unless the barrier and monitoring  
1910 designs are for use under such conditions; and

1911

1912 (F) Monitoring wells shall be clearly marked for identification and  
1913 secured to avoid unauthorized access and tampering.

1914

1915 (iii) An automated device shall be capable of detecting a leak between the  
1916 inner wall of the UST and the liner on USTs with internally fitted liners. The liner shall be  
1917 compatible with the regulated substance stored.

1918

1919 (iv) Owners and/or operators using interstitial monitoring shall report a  
1920 suspected release and follow the requirements of Part E whenever any monitoring device

1921 indicates a leak and the device cannot be shown to be defective within 48 hours of the initial  
1922 alarm.

1923  
1924 (v) Double-wall and interstitially monitored storage tank systems or piping  
1925 installed after December 1, 2005, shall be interstitially monitored for the lifetime of the tank  
1926 system or piping.

1927  
1928 (vi) Monthly interstitial monitoring results shall be recorded by the owner  
1929 and/or operator. This may be accomplished by maintaining a monthly log or obtaining a monthly  
1930 printout from an approved monitoring system.

1931  
1932 (g) *Statistical Inventory Reconciliation (SIR)*. All SIR methods shall:

1933  
1934 (i) Meet the requirements in Section 16(a) for inventory control;

1935  
1936 (ii) Report a quantitative result with a calculated leak rate;

1937  
1938 (iii) Be capable of detecting a 0.2 gallon per hour leak rate or a release of 150  
1939 gallons within 30 days with a probability of detection of at least 0.95 and a probability of false  
1940 alarm of no more than 0.05;

1941  
1942 (iv) Use a threshold that does not exceed one-half the minimum detectible leak  
1943 rate; and

1944  
1945 (v) Be approved, in writing, by the department prior to use.

1946  
1947 (vi) Monitoring results must be obtained by the owner and/or operator from the  
1948 SIR provider within each 30-day monitoring period.

1949  
1950 (vii) All “inconclusive” results shall be investigated by the owner and/or  
1951 operator as soon as they are reported by the SIR company, including a complete audit of all input  
1952 data. The owner and/or operator shall make every effort to resolve all “inconclusive” results as  
1953 soon as they are reported. If the inventory for an entire month fails to balance within 2,000  
1954 gallons, that month shall be treated as inconclusive. A month with an unresolved inconclusive  
1955 result is a month when no valid leak detection was provided.

1956  
1957 (viii) Owners and/or operators using SIR shall report a suspected release and  
1958 follow the requirements of Part E whenever:

1959  
1960 (A) Any single month is reported as a failure for the UST system by the  
1961 SIR company;

1962  
1963 (B) Any month is reported by the SIR company as “inconclusive”  
1964 unless that inconclusive result has been resolved by resubmission of audited inventory numbers  
1965 to the SIR company.

1966 (ix) UST systems with a throughput of more than 500,000 gallons per month in  
1967 any single system shall not be monitored using SIR as the only release detection method.  
1968  
1969 (h) *Tracer Surveys.* Owners and/or operators may use tracer surveys as an approved  
1970 monthly monitoring technique if:  
1971  
1972 (i) The tracer method can detect a 0.2 gallon per hour leak rate or a release of  
1973 150 gallons within 30 days with a probability of detection of 0.95 and a probability of false alarm  
1974 of 0.05;  
1975  
1976 (ii) The tanks are inoculated with the same tracer each month;  
1977  
1978 (iii) The tanks are inoculated each month before the 10th day of the month;  
1979  
1980 (iv) The tracer survey is completed before the 25th day of each month;  
1981  
1982 (v) The report for each month includes the calculations of the amount of tracer  
1983 needed, the amount actually added to each tank, and the calculated leak detection limit in gallons  
1984 per day; and  
1985  
1986 (vi) The report for each test clearly states that the tank(s) either passed or failed  
1987 the test.  
1988  
1989 (vii) Any failing test using tracer surveys shall be treated as a suspected release  
1990 under Part E.  
1991  
1992 (i) *Other Technology.* With prior department authorization, pursuant to Section 33,  
1993 other types of release detection methods, or combination of methods, may be used if:  
1994  
1995 (i) The method can detect a 0.2 gallon per hour leak rate or a release of 150  
1996 gallons within 30 days with a probability of detection of 0.95 and a probability of false alarm of  
1997 0.05; or  
1998  
1999 (ii) The owner and/or operator can demonstrate that the method can detect a  
2000 release as effectively as any of the methods allowed in Section 16(b) through (h). In comparing  
2001 methods, the department shall consider the size of release that the method can detect and the  
2002 frequency and reliability with which it can be detected. If the method is approved, the owner  
2003 and/or operator shall comply with any conditions imposed by the department to ensure the  
2004 protection of human health and the environment.  
2005  
2006 (j) *Multiple Methods.* Whenever these regulations require the use of more than one  
2007 leak detection method, owners and/or operators shall meet all requirements for all leak detection  
2008 methods required.  
2009

2010           **Section 17. Hazardous Substance UST Systems.** Owners and/or operators of  
2011 hazardous substance UST systems shall provide containment that meets the following  
2012 requirements and monitor these systems every 30 days using Section 16(f):  
2013

2014           (a)     *Release Detection.* Hazardous substance UST systems shall have a secondary  
2015 containment system, be constructed with double-wall tanks, or be constructed with an external  
2016 liner or vault surrounding the entire tank system. These systems shall meet the following  
2017 requirements:

2018  
2019           (i)     Secondary containment systems shall:

2020  
2021                     (A)    Be designed, constructed, and installed to contain regulated  
2022 substances leaked from the primary containment until those substances are detected and  
2023 removed;

2024  
2025                     (B)    Be designed, constructed, and installed to prevent the release of  
2026 regulated substances to the environment at any time during the operational life of the UST  
2027 system; and

2028  
2029                     (C)    Be inspected for evidence of a release at least once every 30 days.  
2030

2031           (ii)    Double-wall tanks shall:

2032  
2033                     (A)    Be designed, constructed, and installed to contain a leak from any  
2034 portion of the inner tank within the outer wall;

2035  
2036                     (B)    Be designed, constructed, and installed to detect the failure of the  
2037 inner wall; and

2038  
2039                     (C)    Be inspected for evidence of a release at least once every 30 days.  
2040

2041           (iii)   External liners (including vaults) shall:

2042  
2043                     (A)    Be designed, constructed, and installed to contain 100% of the  
2044 capacity of the largest tank within its boundary;

2045  
2046                     (B)    Be designed, constructed, and installed to prevent the interference  
2047 of precipitation or groundwater intrusion with the ability to contain or detect a release of  
2048 regulated substances;

2049  
2050                     (C)    Be designed, constructed, and installed to surround the tank  
2051 completely (i.e., capable of preventing lateral and vertical migration of regulated substances);  
2052 and

2053  
2054                     (D)    Be inspected for evidence of a release at least once every 30 days.

2055 (b) *Connected Piping.* Connected piping shall be equipped with secondary  
2056 containment that satisfies the requirements of this Section. Trench liners and double-wall pipe  
2057 are examples of secondary containment systems. Connected piping that conveys regulated  
2058 substances under pressure shall be equipped with an automatic line leak detector in accordance  
2059 with Section 14(g)(i).  
2060

2061 (c) *Other Methods.* Other methods of release detection may be used for hazardous  
2062 substance UST systems installed on or before October 13, 2015, if owners and/or operators:  
2063

2064 (i) Demonstrate to the department that an alternate method can detect a  
2065 release of the stored regulated substance as effectively as any of the methods allowed in Section  
2066 16(b) through (h) can detect a release of petroleum;  
2067

2068 (ii) Provide information to the department on effective corrective action  
2069 technologies, health risks, and chemical and physical properties of the stored substance, and the  
2070 characteristics of the UST site; and  
2071

2072 (iii) Obtain authorization from the department to use the alternate release  
2073 detection method before the installation and operation of the new or modified UST system.  
2074

2075 **Section 18. Release Detection Recordkeeping for UST Owners and/or Operators.**

2076 All UST system owners and/or operators shall maintain records in accordance with Section 13  
2077 demonstrating compliance with all applicable requirements of this Part. These records shall  
2078 include the following:  
2079

2080 (a) *Performance Claims.* All written performance claims pertaining to any release  
2081 detection system used, and the manner in which these claims have been justified or tested by the  
2082 equipment manufacturer or installer, shall be maintained for 5 years from the date of installation.  
2083 Not later than October 13, 2018, records of site assessments required under Sections 16(d) and  
2084 (e) shall be maintained for as long as the methods are used. Records of site assessments  
2085 developed after October 13, 2015, shall be signed by a professional engineer or professional  
2086 geologist registered in the State of Wyoming;  
2087

2088 (b) *Test Results.* The results of any sampling, testing, or monitoring shall be  
2089 maintained for at least 3 years except:  
2090

2091 (i) Tank tightness testing results shall be retained until the next test is  
2092 conducted; and  
2093

2094 (ii) Tank tightness testing, line tightness testing, and vapor monitoring using a  
2095 tracer compound placed in the tank system conducted in accordance with Section 51(d) shall be  
2096 retained until the next test is conducted.  
2097

2098 (c) *Calibration, Maintenance and Repair.* Written documentation of all calibration,  
2099 maintenance, and repair of release detection equipment permanently located onsite shall be

2100 maintained for the operational life of the tank in accordance with W.S. 35-11-1416(a)(vi). Any  
2101 schedules of required calibration and maintenance provided by the release detection equipment  
2102 manufacturer shall be retained for the operational life of the tank.  
2103



2104 PART E  
2105 RELEASE REPORTING, INVESTIGATION, CONFIRMATION  
2106 AND RESPONSE  
2107

2108 **Section 19. Release Reporting.** Storage tank system owners and/or operators shall  
2109 report all releases or suspected releases to the department within 24 hours of discovery in  
2110 accordance with Section 22 and follow the procedures of Section 22. All confirmed releases  
2111 shall also be reported to the fire department having local jurisdiction. Owners of sites where  
2112 storage tanks were formerly located shall report to the department within 7 days after discovering  
2113 any new evidence of a release.

2114  
2115 (a) *Release Reporting.* Release reporting shall be made for any of the following  
2116 conditions:

2117  
2118 (i) Released Regulated Substances. The discovery by owners and/or  
2119 operators or others of released regulated substances at a storage tank site or in the surrounding  
2120 area (such as the presence of free product or vapors in soils, basements, utility lines, nearby  
2121 surface water and/or groundwater).

2122  
2123 (ii) Unusual Operating Conditions. Unusual operating conditions observed by  
2124 owners and/or operators (such as the erratic behavior of product dispensing equipment, the  
2125 sudden loss of a regulated substance from a storage tank system, an unexplained presence of  
2126 water in a storage tank, or liquid in the interstitial space of secondarily contained systems),  
2127 unless:

2128  
2129 (A) The system equipment or component is found not to be releasing  
2130 regulated substance to the environment;

2131  
2132 (B) Any defective system equipment or component is immediately  
2133 repaired or replaced; or

2134  
2135 (C) Except as provided in Section 16(f)(ii)(D), any liquid in the  
2136 interstitial space of secondarily contained systems that is not used as part of the interstitial  
2137 monitoring method (e.g., brine filled) is immediately removed.

2138  
2139 (iii) Monitoring Results. Monitoring results, including investigation of an  
2140 alarm, from a release detection method required under Part D that indicate a release may have  
2141 occurred unless:

2142  
2143 (A) The monitoring device is found to be defective, and is immediately  
2144 repaired, recalibrated or replaced, and additional monitoring does not confirm the initial result;

2145  
2146 (B) The leak is contained in the secondary containment and:  
2147

2148 (I) Except as provided in Section 16(f)(ii)(D), any liquid in the  
2149 interstitial space not used as part of the interstitial monitoring method (e.g., brine filled) is  
2150 immediately removed, and

2151  
2152 (II) Any defective system equipment or component is  
2153 immediately repaired or replaced;

2154  
2155 (C) In the case of inventory control described in Section 16(a), a  
2156 second month of data does not confirm the initial result or the investigation determines no  
2157 released has occurred; or

2158  
2159 (D) The alarm was investigated and determined to be a non-release  
2160 event (e.g., a power surge or caused by filling the tank during release detection testing).

2161  
2162 (b) *Off-site Impacts.* Owners and/or operators of storage tank systems and owners of  
2163 former storage tank sites shall follow the applicable procedures in Section 20 or 21 to determine  
2164 if the storage tank system is the source of off-site impacts. These impacts include the discovery  
2165 of regulated substances (such as the presence of free product or vapors in soils, basements, utility  
2166 lines, nearby surface water and/or groundwater) that have been observed by the department or  
2167 brought to its attention by another party.

2168  
2169 **Section 20. Release Investigation and Confirmation for Eligible Owners and/or**  
2170 **Operators.** Storage tank owners and/or operators who are eligible for cleanup under the  
2171 Corrective Action Account shall comply with Section 25 and immediately investigate and  
2172 confirm all suspected releases of regulated substances requiring reporting under Section 19  
2173 within 7 days of detection as follows:

2174  
2175 (a) *System Test.* Owners and/or operators shall conduct tests according to the  
2176 requirements for tightness testing in Sections 14(g) and 16(b) or, as appropriate, secondary  
2177 containment testing described in Section 8(a)(v) that determine if a leak exists in any portion of  
2178 the storage tank system that routinely contains a regulated substance or a breach of either wall of  
2179 the secondary containment has occurred. If the primary wall of a double-wall tank or double-  
2180 wall/secondarily contained pipe fails, an integrity test of the outer wall and/or secondary  
2181 containment shall be conducted. Owners and/or operators of all storage tanks shall also audit  
2182 inventory control required by Section 16(a) or 36(e) for 12 months prior to the suspected release.

2183  
2184 (i) Owners and/or operators shall repair, replace, or permanently close the  
2185 storage tank system if the test results for the system, tank, or delivery piping indicate that a leak  
2186 exists.

2187  
2188 (ii) Owners and/or operators shall conduct a thorough audit of their leak  
2189 detection methods for the preceding year. This audit shall be performed by a qualified third party  
2190 employed for this purpose by the owner and/or operator. In the event that the audit indicates a  
2191 pattern of releases over several months, the department will complete the site check as described  
2192 in Section 20(c).

2193 (iii) Further investigation is not required if the test results for the system, tank,  
2194 and delivery piping and the audit do not indicate that a release exists and if environmental  
2195 contamination is not the basis for suspecting a release.

2196  
2197 (b) *Further Action.* If the test results required under Section 20(a) do not indicate a  
2198 release, but environmental contamination is the basis for suspecting a release, the department will  
2199 complete the site check required under Section 20(c) and other Part E activities determined by  
2200 the Solid and Hazardous Waste Division Administrator.

2201  
2202 (c) *Site Check.* The department shall test for the presence of a release where  
2203 contamination is most likely to be present at the storage tank site. In selecting sample types,  
2204 sample locations, and measurement methods, the department shall consider the nature of the  
2205 stored regulated substance, the type of initial alarm or cause for suspicion, the type of backfill,  
2206 the depth of groundwater, and other factors appropriate for identifying the presence and source of  
2207 the release. If the test results for the site check do not indicate that a release has occurred, further  
2208 investigation is not required.

2209  
2210 (d) *Plans and Specifications.* All plans, specifications and reports submitted to the  
2211 department under this Section shall be signed and sealed by a Wyoming Registered Professional  
2212 Engineer and/or a Wyoming Registered Professional Geologist, as applicable and required by  
2213 state statute.

2214  
2215 **Section 21. Release Investigation and Confirmation for Owners and/or Operators**  
2216 **Not Eligible for the Corrective Action Account.** Contaminated site owners and storage tank  
2217 owners and/or operators may become ineligible for cleanup under the Corrective Action Account  
2218 for any reason listed in W.S. 35-11-1424. Owners and/or operators who are not eligible for  
2219 cleanup under the Corrective Action Account shall investigate and confirm all suspected releases  
2220 of regulated substances requiring reporting under Section 19 within 7 days of detection as  
2221 follows:

2222  
2223 (a) *System Test.* Owners and/or operators shall conduct tests according to the  
2224 requirements for tightness testing in Sections 14(g) and 16(b), or, as appropriate, secondary  
2225 containment testing described in Section 8(a)(v) that determine if a leak exists in any portion of  
2226 the storage tank system that routinely contains regulated substance or a breach of either wall of  
2227 the secondary containment has occurred. Storage tank owners and/or operators shall also audit  
2228 all inventory control required under Sections 16(a) or 36(e) for 12 months prior to the suspected  
2229 release.

2230  
2231 (i) Owners and/or operators shall repair, replace, or permanently close the  
2232 storage tank system if the test results for the system indicate that a leak exists.

2233  
2234 (ii) When environmental contamination is the basis for suspecting a release,  
2235 owners and/or operators shall also conduct a thorough audit of their leak detection methods for  
2236 the preceding 12 months. This audit shall be performed by a qualified third party employed for  
2237 this purpose by the owner and/or operator. In the event that the audit indicates a pattern of

2238 releases over several months, owners and/or operators shall conduct a site check as described in  
2239 Section 20(c).

2240  
2241 (iii) Owners and/or operators shall conduct a minimum site assessment as  
2242 described in Section 29 any time results of the system test described in Section 21(a) indicate that  
2243 a leak exists or when environmental contamination is the basis for suspecting a release.

2244  
2245 (b) *Further Action.* Further investigation is not required if the system test results  
2246 required under Section 21(a) do not indicate that a leak exists or if environmental contamination  
2247 is not the basis for suspecting a release. If the test results for the excavation zone at an UST site  
2248 or the results for the area immediately adjacent to the storage tank system at an aboveground  
2249 storage tank site indicate that a release has occurred, owners and/or operators shall begin  
2250 corrective action in accordance with Part E.

2251  
2252 (c) *Permits Required.* Owners of contaminated sites and/or owners and/or operators  
2253 of storage tank systems shall ensure that well permits have been issued prior to initiating site  
2254 check activities.

2255  
2256 (d) *Plans and Specifications.* All plans, specifications and reports submitted to the  
2257 department shall be signed and sealed by a Wyoming Registered Professional Engineer and/or a  
2258 Wyoming Registered Professional Geologist, as applicable and required by state statute.

2259

2260 **Section 22. Spill and Overfill Reporting and Cleanup.**

2261

2262 (a) *Cleanup and 24-Hour Reporting.* Owners and/or operators of storage tank  
2263 systems shall contain and immediately clean up a spill or overfill. Spills and overfills shall be  
2264 reported to the department within 24 hours by telephone (307) 777-7097 (STP) and (307) 777-  
2265 7781 (spill response) and by logging into the spill response database on the DEQ website. The  
2266 owner and/or operator shall begin corrective action in accordance with Sections 23 through 25 in  
2267 the following cases:

2268

2269 (i) Spill or overfill of petroleum that results in a release to the environment  
2270 that exceeds 25 gallons or that causes a sheen on nearby surface water; and/or

2271

2272 (ii) Spill or overfill of a regulated hazardous substance that results in a release  
2273 to the environment that equals or exceeds its reportable quantity under 40 CFR Part 302 as  
2274 referenced in Section 2.

2275

2276 (b) *Owner's and/or Operator's Costs.* Costs incurred by owners and/or operators to  
2277 contain and/or cleanup surface spills and/or overfills are not eligible for the state Corrective  
2278 Action Account funds. Leaks that occur within a dispenser cabinet at or above the fire valve are  
2279 considered surface spills and are not eligible for cleanup under the Corrective Action Account.  
2280 Leaks that occur below the fire valve are considered leaks from piping and are eligible for  
2281 cleanup under the Corrective Action Account.

2282

2283 (c) *Small Spills.* Owners and/or operators of storage tank systems shall contain and  
2284 immediately cleanup a spill or overflow of petroleum that is less than 25 gallons and a spill or  
2285 overflow of a hazardous substance that is less than the reportable quantity. If cleanup cannot be  
2286 accomplished within 24 hours, owners and/or operators shall immediately notify the department.  
2287

2288 (d) *Other Reporting.* A release of a hazardous substance equal to or in excess of its  
2289 reportable quantity must also be reported immediately (rather than within 24 hours) to the  
2290 National Response Center in accordance with CERCLA (1980) and to appropriate state and local  
2291 authorities under Title III of the Superfund Amendments and Reauthorization Act of 1986.  
2292

2293 **Section 23. General.** Owners and/or operators of storage tank systems and owners of  
2294 former storage tank sites shall, in response to a confirmed release from a storage tank system,  
2295 comply with the requirements of this Part.  
2296

2297 **Section 24. Owners and/or Operators Not Eligible for the State Corrective Action**  
2298 **Account.**  
2299

2300 (a) *Initial Response.* Within 24 hours of confirmation of a release in accordance with  
2301 Section 21 or after a release from a storage tank system is confirmed in any other manner,  
2302 owners and/or operators shall perform the following initial response actions:  
2303

2304 (i) Report the release to the department by telephone (307) 777-7097 (STP)  
2305 and (307) 777-7781 (spill response) and by logging into the spill response database on the DEQ  
2306 website;  
2307

2308 (ii) Take immediate action to prevent any further release of the regulated  
2309 substance into the environment; and  
2310

2311 (iii) Identify and mitigate fire, explosion, and vapor hazards.  
2312

2313 (b) *Initial Abatement Measures and Site Check.* Owners and/or operators of storage  
2314 tank systems shall complete the following abatement measures:  
2315

2316 (i) Remove as much of the regulated substance from the storage tank system  
2317 as is necessary to prevent further release to the environment;  
2318

2319 (ii) Visually inspect any above ground or exposed below ground releases and  
2320 prevent further migration of the released substance into surrounding soils, groundwater, or  
2321 surface water;  
2322

2323 (iii) Monitor and mitigate fire, explosion, and other safety hazards in  
2324 subsurface structures (such as sewers or basements);  
2325

2326 (iv) Remedy hazards posed by contaminated soils that are excavated or  
2327 exposed as a result of release confirmation, site investigation, abatement, or corrective action

2328 activities. If these remedies include treatment or disposal of soils, the owner and/or operator  
2329 shall comply with the applicable department requirements;

2330  
2331 (v) Measure for the presence of a release where contamination is most likely  
2332 to be present at the storage tank site, unless the presence and source of the release have been  
2333 confirmed during the completion of the system test required by Section 21 or the minimum site  
2334 assessment required by Section 31. In selecting sample types, sample locations, and  
2335 measurement methods, the owner and/or operator shall consider the nature of the stored regulated  
2336 substance, the type of backfill, depth to groundwater and other factors as appropriate for  
2337 identifying the presence and source of the release;

2338  
2339 (vi) Investigate to determine the possible presence of free product and begin  
2340 free product removal as soon as practicable in accordance with Section 24(d); and

2341  
2342 (vii) Within 30 days of release confirmation, submit a report to the department  
2343 summarizing the initial abatement steps taken and any resulting information or data required by  
2344 this Section.

2345  
2346 (c) *Initial Site Characterization.* Owners and/or operators shall assemble information  
2347 about the site and the nature of the release. The information shall be submitted to the department  
2348 within 60 days of release confirmation. This information shall include data obtained while  
2349 confirming the release or completing the initial abatement measures required by this Section.  
2350 This information shall include, but is not limited to, the following:

2351  
2352 (i) Data on the nature and estimated quantity of the release;

2353  
2354 (ii) Data from available sources and/or site investigations regarding  
2355 surrounding populations, water quality, use and approximate locations of wells potentially  
2356 affected by the release, subsurface soil conditions, locations of subsurface sewers, climatological  
2357 conditions, and land use;

2358  
2359 (iii) Results of the site check required under Section 24(b);

2360  
2361 (iv) Results of the free product investigations required under Section 24(b) to  
2362 be used by owners and/or operators to determine if free product is to be recovered under Section  
2363 24(d); and

2364  
2365 (v) Information necessary to classify the affected groundwater under Chapter  
2366 8, Wyoming Water Quality Rules and Regulations.

2367  
2368 (d) *Free Product Removal.* When free product is discovered, owners and/or operators  
2369 shall contact the department within 24 hours of the discovery by telephone (307) 777-7097 (STP)  
2370 or (307) 777-7781 (spill response) and by logging into the spill response database on the DEQ  
2371 website. Owners and/or operators shall submit a Corrective Action Plan (CAP) for product  
2372 removal at sites where investigations under Section 24(b) indicate the presence of free product.

2373 Owners and/or operators shall remove free product to the maximum extent practicable as  
2374 determined by the department. Owners and/or operators shall:

2375  
2376 (i) Conduct free product removal in a manner that minimizes the spread of  
2377 contamination into previously uncontaminated areas. Free product recovery and disposal  
2378 techniques shall be appropriate for the hydrogeologic conditions at the site. Techniques shall  
2379 properly treat and discharge or dispose of recovery by-products in compliance with applicable  
2380 local, state, and federal regulations;

2381  
2382 (ii) Use abatement of free product migration as a minimum objective for the  
2383 design of the free product removal system;

2384  
2385 (iii) Handle any flammable products in a safe and competent manner to prevent  
2386 fires and explosions; and

2387  
2388 (iv) Prepare and submit to the department, within 45 days of confirming a  
2389 release, a free product removal plan that provides at least the following information:

2390  
2391 (A) The name of the person(s) responsible for implementing the free  
2392 product removal measures;

2393  
2394 (B) The estimated quantity, type, and thickness of free product  
2395 observed or measured in wells, boreholes, and excavations;

2396  
2397 (C) The type of free product recovery system used;

2398  
2399 (D) Whether or not any discharge will take place on-site or off-site  
2400 during the recovery operation and where this discharge will be located;

2401  
2402 (E) The type of treatment applied to, and the effluent quality expected  
2403 from, any discharge;

2404  
2405 (F) The steps that have been or are being taken to obtain necessary  
2406 permits for any discharge; and

2407  
2408 (G) The disposition of the recovered free product.

2409  
2410 (e) *Investigation for Soil and Groundwater Cleanup.* To determine the full extent and  
2411 location of soil and/or groundwater contaminated by a release, owners and/or operators shall  
2412 conduct a subsurface investigation. The release site and the surrounding area possibly affected by  
2413 the release shall be investigated to determine if any of the following conditions exist:

2414  
2415 (i) Existing groundwater wells have been affected by the release;

2416  
2417 (ii) Free product is present requiring recovery;

- 2418 (iii) Contaminated soils are in contact with groundwater; and/or  
2419  
2420 (iv) There are potential threats to nearby surface water and/or groundwater  
2421 resources.  
2422  
2423 (v) Owners and/or operators shall submit the information collected under this  
2424 Section to the department in accordance with a schedule established by the Solid and Hazardous  
2425 Waste Administrator.  
2426  
2427 (f) *Corrective Action Plan (CAP)*.  
2428  
2429 (i) Any owner and/or operator, the department, or other person, taking a  
2430 corrective action required by this regulation, shall restore the environment to a condition and  
2431 quality consistent with the standards established in Sections 38 and 39.  
2432  
2433 (ii) At any point after reviewing the information submitted in compliance with  
2434 this Section, the department may require owners and/or operators to submit additional  
2435 information or develop and submit a CAP for responding to contaminated soils and groundwater.  
2436 If a CAP is required, owners and/or operators shall submit the CAP according to a schedule and  
2437 format established by the department. Alternatively, owners and/or operators may, after  
2438 fulfilling the requirements of this Section, choose to submit a CAP for responding to  
2439 contaminated soil and groundwater. In either case, owners and/or operators are responsible for  
2440 submitting a plan that provides adequate protection of human health and/or restoration of the  
2441 environment, as determined by the department, and shall modify their plan as necessary to meet  
2442 the requirements of this regulation.  
2443  
2444 (A) The department will authorize and issue applicable department  
2445 permits for the CAP only after ensuring that implementation of the plan will adequately protect  
2446 human health, safety, and the environment, and the plan is in compliance with other applicable  
2447 department rules and regulations. In making this determination, the department will consider the  
2448 following factors:  
2449  
2450 (I) The physical and chemical characteristics of the regulated  
2451 substance, including its toxicity, persistence, and potential for migration;  
2452  
2453 (II) The hydrogeologic characteristics of the site and the  
2454 surrounding area;  
2455  
2456 (III) The proximity, quality, and current and future uses of  
2457 nearby surface water and groundwater;  
2458  
2459 (IV) The potential effects of residual contamination on nearby  
2460 surface water and groundwater;  
2461  
2462 (V) An exposure assessment; and



2463 (VI) Any information assembled in compliance with this  
2464 Section.

2465  
2466 (B) Upon authorization and issuance of applicable department permits  
2467 for the CAP, owners and/or operators shall implement the plan, including modifications to the  
2468 plan made by the department. Owners and/or operators shall monitor, evaluate, and report the  
2469 results of implementing the plan in accordance with the schedule and a format established by the  
2470 department.

2471  
2472 (C) In the interest of minimizing environmental contamination,  
2473 remediating an imminent health and/or safety hazard, and/or promoting more effective cleanup,  
2474 owners and/or operators may begin remediation of soil and groundwater before the CAP is  
2475 authorized and permitted by the department provided they:

2476  
2477 (I) Notify the department of their intention to begin cleanup;

2478  
2479 (II) Comply with any conditions imposed by the department,  
2480 including halting cleanup or mitigating adverse consequences from cleanup activities; and

2481  
2482 (III) Incorporate these self-initiated cleanup measures in the  
2483 CAP that is submitted to the department for authorization and permitting.

2484  
2485 (g) *Voluntary Remediation Program.* Owners and/or operators not eligible for the  
2486 state Corrective Action Account may be eligible to enter the Solid and Hazardous Waste  
2487 Voluntary Remediation Program.

2488  
2489 **Section 25. Owners and/or Operators Eligible for the State Corrective Action**  
2490 **Account.**

2491  
2492 (a) *Initial Response.* Within 24 hours of release confirmation in accordance with  
2493 Section 20 or after a release from the storage tank system is identified in any other manner,  
2494 owners and/or operators shall perform the following initial response actions:

2495  
2496 (i) Report the release to the department by telephone (307) 777-7097 (STP)  
2497 and (307) 777-7781 (spill response) and by logging into the spill response database on the DEQ  
2498 website;

2499  
2500 (ii) Take immediate action to prevent any further release of the regulated  
2501 substance into the environment; and

2502  
2503 (iii) Orally notify the department immediately of any fire, explosion, or vapor  
2504 hazards. The department shall begin resolving these hazards as soon as practicable.

2505  
2506 (b) *Initial Abatement Measures and Site Check.* Owners and/or operators shall  
2507 complete the following abatement measures:

2508 (i) Remove as much of the regulated substance from the storage tank system  
2509 as is necessary to prevent further release to the environment; and

2510  
2511 (ii) Visually inspect any above ground or exposed below ground releases and  
2512 prevent further migration of the released substance into surrounding soils, groundwater, and/or  
2513 surface water.

2514  
2515 (c) *Site Characterization and Corrective Action.* The department will prioritize the  
2516 site pursuant to Section 27 after completion of initial abatement measures. The department will  
2517 also collect sufficient data for classification of the affected groundwater under Chapter 8,  
2518 Wyoming Water Quality Rules and Regulations.

2519  
2520 **Section 26. Public Participation.**

2521  
2522 (a) *Notice Provided.* Whenever a confirmed release from a storage tank system  
2523 occurs that requires a CAP for soil or groundwater remediation, the department shall provide  
2524 notice to the public directly affected by the release and the planned corrective action. This notice  
2525 may include, but is not limited to, public notice in local newspapers, block advertisements, public  
2526 service announcements, or personal contacts by staff. All public notices shall be posted to the  
2527 DEQ website.

2528  
2529 (b) *Notice Content.* All public notices issued under this Chapter shall contain the  
2530 following minimum information:

2531 (i) Name and address of the facility where the release occurred;

2532  
2533 (ii) Name and address of the owner and/or operator;

2534  
2535 (iii) Name and address of the department;

2536  
2537 (iv) Name and phone number of the department representative where  
2538 additional information can be obtained;

2539  
2540 (v) Type and estimated volume of the release, if known; and

2541  
2542 (vi) The Class of Use of all affected groundwater as determined under Chapter  
2543 8, Wyoming Water Quality Rules and Regulations.

2544  
2545 (c) *Information Requests.* Upon request, the department shall provide or make  
2546 available information concerning the nature of the release and corrective actions planned or  
2547 taken.

2548  
2549 (d) *Public Meetings.* A public meeting may be held to consider comments on a  
2550 proposed CAP or at the termination of a CAP if the Solid and Hazardous Waste Division  
2551

2552 Administrator determines there is sufficient public interest or whenever such a meeting may  
2553 clarify issues involved in a CAP.

2554

2555 **Section 27. Corrective Action Prioritization Ranking System.**

2556

2557 (a) *Criteria.* This ranking system establishes criteria for use by the department in  
2558 determining priorities for conducting state corrective actions at leaking storage tank sites. The  
2559 ranking is based upon the following primary factors:

2560

2561 (i) Degree of immediate adverse health exposure and/or safety hazards to  
2562 people in nearby occupied buildings or to public utilities;

2563

2564 (ii) Water quality protection;

2565

2566 (iii) Potential for contaminant(s) migration; and

2567

2568 (iv) Ecological protection.

2569

2570 (b) *Scoring.* The scoring system provides that the sites with the highest scores shall  
2571 be of the highest priority in conducting department corrective actions. The following listing and  
2572 point values compose the department's corrective action prioritization ranking system. Points  
2573 will be applied to each site, as appropriate, depending upon local circumstances. The total score  
2574 for each leaking storage tank site is the sum of all applicable categories in Table 2.

2575

2576

2577 **TABLE 2**  
2578 **WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY**  
2579 **STORAGE TANK PROGRAM**  
2580 **CONTAMINATED SITE EVALUATION WORKSHEET**

2581 Facility ID, Site Name \_\_\_\_\_

2582 Location \_\_\_\_\_

2583 Staff Name \_\_\_\_\_

2584 Date \_\_\_\_\_

2585

2586 Score 1-5: Score only one line under each criterion. Total = Score X Weight

2587

<b>CONTAMINANT CRITERIA</b>	<b>SCORE</b>	<b>WEIGHT</b>	<b>TOTAL</b>
<b>Toxicity/Hazard</b>			
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>			
<b>Concentration – Soil</b>			
1 Greater than the soil cleanup levels		1	

<b>TABLE 2 (Continued)</b>		<b>SCORE</b>	<b>WEIGHT</b>	<b>TOTAL</b>
3	Ten times greater than soil cleanup levels		2	
5	Free product (saturated soil or waste material)		3	
<i>Comments (consider volumes)</i>				
<b>Concentration – Groundwater</b>				
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>				
<b>Hazardous Vapors and Particulates</b>				
1	Noticeable odors		1	
3	Known vapor emitting volatiles present		2	
5	Explosive conditions		3	
<i>Comments</i>				
<b>ENVIRONMENTAL CRITERIA</b>				
<b>Depth to Groundwater</b>				
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>				
<b>Proximity to Surface Water</b>				
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>				
<b>HUMAN EXPOSURE CRITERIA</b>				
<b>Proximity to Drinking Water Source</b>				
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>				
<b>Land Use</b>				
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>				
<b>ECOLOGICAL EXPOSURE CRITERIA</b>				
<b>Important/Sensitive Habitats or Threatened or Endangered Species</b>				
1	I/S habitats OR T/E species greater than 1 mile		1	

<b>TABLE 2 (Continued)</b>	<b>SCORE</b>	<b>WEIGHT</b>	<b>TOTAL</b>
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>			
<b>SITE EVALUATION SUMMARY – TOTAL SCORE</b>			

2588  
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2605

**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.

2606 PART F  
2607 MINIMUM SITE ASSESSMENTS (MSAs)  
2608

2609 **Section 29. MSA Requirements.**  
2610

2611 (a) *When an MSA is Required.* MSAs are used to determine if a regulated substance  
2612 has been released from a storage tank system and, if so, to determine if soil and/or groundwater  
2613 contamination is present in excess of applicable standards. The MSA results will determine the  
2614 site's eligibility for the Corrective Action Account. MSAs are required when any of the  
2615 following conditions are met:  
2616

2617 (i) Unless the site is already listed as a contaminated site, all tank owners  
2618 and/or operators that have not previously performed an MSA shall perform an MSA. This MSA  
2619 shall be performed at the site owner's and/or operator's expense no sooner than 18 years, and no  
2620 later than 20 years, after the tanks were installed. This requirement applies to all USTs installed  
2621 after September 22, 1988, and to all regulated ASTs.  
2622

2623 (ii) Owners and/or operators who permanently close or change the service of  
2624 storage tanks without obtaining the required department authorization and inspection shall  
2625 complete an MSA at their own expense within 45 days of the tank closure or change in service.  
2626 To obtain the required department inspection, the owner and/or operator shall notify the  
2627 department 30 days prior to tank closure or change in service activities. If tank closure or change  
2628 in service activities are not sufficient for department personnel to characterize the subsurface  
2629 conditions at the site, the owner and/or operator shall complete an MSA at his/her expense. The  
2630 department will assign a priority ranking in accordance with Section 27 based on the results of  
2631 the inspection or owner's and/or operator's MSA.  
2632

2633 (iii) Owners and/or operators who change a regulated tank to a non-regulated  
2634 use in accordance with Section 31, or change a non-regulated tank to a regulated use shall  
2635 complete an MSA at their own expense regardless of whether or not the site is listed as a  
2636 contaminated site. The MSA shall be completed within 45 days of the change of use.  
2637

2638 (iv) Any owner and/or operator of a storage tank system abandoned prior to the  
2639 program that now elects to participate in the state program shall:  
2640

2641 (A) Provide written documentation that the site actually had a program-  
2642 eligible storage tank system at some time;  
2643

2644 (B) In the case where the storage tank was an AST, provide  
2645 documentary evidence that the storage tank was used to dispense gasoline or diesel fuels to the  
2646 public;  
2647

2648 (C) Complete an MSA in accordance with this Part and prove that the  
2649 site has been contaminated by a program-eligible storage tank system; and  
2650

2651 (D) Pay one year's storage tank fee for all storage tanks on the site at  
2652 the time of the initial site registration. If all tanks were removed and it is not possible to  
2653 determine how many storage tanks were on the site, pay the fee for one tank.  
2654

2655 (v) Unless the site is already listed as a contaminated site, an MSA shall be  
2656 completed by the owner and/or operator, in accordance with this Part, before permanently closing  
2657 a storage tank in place.  
2658

2659 (vi) When a storage tank system is temporarily closed for more than 12  
2660 months, the owner and/or operator shall complete a minimum site assessment in accordance with  
2661 this Section unless the site is already listed as a contaminated site or a time extension has been  
2662 granted, in writing, by the department.  
2663

2664 (b) *MSA Work Plan.* At least 30 days prior to performing an MSA, the owner and/or  
2665 operator shall submit a Work Plan to the appropriate Storage Tank Program (STP) District Office  
2666 for review and approval. The STP will review the Work Plan to ensure the proposed MSA will  
2667 meet the requirements of this Part. At a minimum, the Work Plan shall include the following:  
2668

2669 (i) Facility name, address and identification number, if applicable;  
2670

2671 (ii) Name, address and telephone number of person(s) who will be conducting  
2672 the MSA;  
2673

2674 (iii) Number of storage tanks, whether they are ASTs or USTs, and how many  
2675 are regulated versus unregulated;  
2676

2677 (iv) Description of MSA methodology to be used for storage tanks and  
2678 connected piping, including borehole and/or soil excavation installation and abandonment,  
2679 temporary monitoring well installation and abandonment, equipment decontamination, and  
2680 contaminated soil and groundwater disposal;  
2681

2682 (v) Soil and Groundwater Sampling and Analysis Plan, including proposed  
2683 sample collection and shipment protocols and analytical methods;  
2684

2685 (vi) A plan map showing the location of property lines, drainages, buildings,  
2686 tanks, connected piping, and proposed boreholes/monitoring wells and/or soil excavations. All  
2687 maps shall be to scale and provide a north arrow; and  
2688

2689 (vii) Proposed construction for any permanent monitoring wells being installed.  
2690 Well construction shall be approved by the STP.  
2691

2692 (c) *MSA Completion Requirements.*  
2693

2694 (i) The MSA shall be inclusive for all storage tanks, associated piping, and  
2695 dispensers located on the site.

2696 (ii) MSAs for Storage Tanks.

2697  
2698 (A) The MSA for storage tanks shall consist of boreholes and/or soil  
2699 excavations completed within 5 horizontal feet of the UST basin or AST secondary containment  
2700 structure.

2701  
2702 (B) To the extent possible, the boreholes and/or soil excavations shall  
2703 surround the tank area and provide an adequate representation of any potential contamination that  
2704 may have been released from the storage tank system(s). The total number and locations of the  
2705 boreholes or soil excavations will vary depending on the number of storage tanks and the total  
2706 storage tank capacity at the location. The number and location of the boreholes shall be provided  
2707 in the Work Plan and approved by the District Office reviewing the Work Plan. In addition to  
2708 the soil borings/excavations, any site that is permanently closing by abandoning USTs in place or  
2709 removing ASTs shall install at least three temporary groundwater monitoring wells. The wells  
2710 shall be drilled at least 5 feet into groundwater or 40 feet deep, whichever comes first. The  
2711 location, depth, and exact number of wells to be installed shall be determined by actual site  
2712 conditions and construction requirements for monitoring wells. The wells may be abandoned  
2713 after sampling. This requirement is intended to provide data on the condition of the groundwater  
2714 at the site and allow the STP to evaluate site closure without further work.

2715  
2716 (C) Whenever groundwater is encountered in a borehole or excavation,  
2717 a groundwater sample shall be collected for laboratory analysis. If groundwater is encountered in  
2718 more than one borehole or excavation, up to three groundwater samples shall be collected; one  
2719 sample from each borehole or excavation.

2720  
2721 (iii) MSAs for Connected Piping and Dispensers. The MSA for connected  
2722 piping and dispensers shall consist of boreholes or soil excavations completed within 3 horizontal  
2723 feet of the piping or dispenser. The total number and locations of the boreholes or soil  
2724 excavations will vary depending on the length of the piping and the number of dispensers. If the  
2725 dispenser is located less than 20 feet from the storage tank(s), one borehole or soil excavation  
2726 shall be completed at the dispenser. At sites where the dispenser is located more than 20 feet  
2727 from the storage tank(s), a borehole or soil excavation shall be completed at the dispenser and  
2728 every 20 feet along the piping from the dispenser to the storage tank(s).

2729  
2730 (iv) Borehole or Soil Excavation Completion Requirements.

2731  
2732 (A) Either borehole drilling or soil excavation are acceptable  
2733 techniques for accomplishing the MSA as long as the results meet the purpose of the MSA in this  
2734 Part. The MSA technique shall be proposed in the Work Plan for review and approval by the  
2735 STP.

2736  
2737 (B) Boreholes or soil excavations shall be completed to a depth of 5  
2738 feet below the bottom of a UST and 5 feet below ground surface of an AST. Boreholes or  
2739 excavations shall extend to a depth of 5 feet below the bottom of the piping and 5 feet below the  
2740 bottom of dispenser sumps.



2741 (C) An accurate log of subsurface conditions shall be provided for all  
2742 boreholes, wells, and/or soil excavations. This documentation shall be provided by a person  
2743 qualified and experienced to describe soils based on the Unified Soil Classification System.  
2744

2745 (D) All boreholes and temporary wells shall be abandoned in  
2746 accordance with the approved Work Plan. Boreholes that do not penetrate the groundwater table  
2747 may be abandoned with drill cuttings to within 2 feet of the surface. The upper 2 feet of the  
2748 borehole shall consist of a hydrated bentonite plug. Boreholes or wells that encounter  
2749 groundwater shall be abandoned with a bentonite slurry from the bottom of the borehole to the  
2750 ground surface completion.  
2751

2752 (E) Soil excavations shall be abandoned in accordance with the  
2753 approved Work Plan. Soils may be returned to the excavation with approval from the STP  
2754 project manager.  
2755

2756 (v) Soil Sampling.  
2757

2758 (A) All borehole and/or soil excavation samples shall be collected in a  
2759 manner that ensures the samples are representative of the in-place soil at the sampling location.  
2760 Soil samples shall be submitted to an STP-approved laboratory (A2LA or NELAP certification  
2761 required; refer to STP website for current list of approved laboratories).  
2762

2763 (B) Based on field instrument measurements, the most heavily  
2764 contaminated soil sample shall be properly packaged and submitted to an STP-approved  
2765 analytical laboratory for analysis. If field instrument measurements do not indicate a  
2766 contaminated soil layer, the soil sample submitted to the laboratory shall be from the bottom of  
2767 the borehole or excavation.  
2768

2769 (vi) Groundwater Sampling.  
2770

2771 (A) Groundwater samples shall be collected in accordance with the  
2772 approved Work Plan and in a manner that ensures the samples are representative of the in-place  
2773 groundwater formation.  
2774

2775 (B) All groundwater samples shall be properly preserved and packaged  
2776 prior to submission to an STP-approved analytical laboratory (A2LA or NELAP certification  
2777 required; refer to STP website for current list of approved laboratories).  
2778

2779 (d) *Documented Contamination.* If contamination is documented during this MSA  
2780 process and the storage tank system is currently in use, the site owner and/or operator site shall  
2781 implement the requirements in Part E.  
2782

2783 (e) *MSA Report.* Within 45 days after the completion of the MSA, the owner and/or  
2784 operator shall submit one copy of the MSA summary report to the appropriate STP District  
2785 Office for review and approval. At a minimum, the report shall include the following:

- 2786 (i) Facility name, address and ID number; owner's name and address; and  
2787 name of person(s) or company performing the MSA;  
2788
- 2789 (ii) Date assessment was completed;  
2790
- 2791 (iii) Storage tank(s) information, including tank number, type (AST or UST),  
2792 capacity, regulated substance stored, and depth to bottom of tank(s);  
2793
- 2794 (iv) Borehole, temporary well, and/or soil excavation information, including  
2795 borehole, well, and/or soil excavation identification, total depth, depth to groundwater, and  
2796 description of soils and/or groundwater;  
2797
- 2798 (v) Discussion of any contamination noting depths encountered or lack of  
2799 contamination discovered;  
2800
- 2801 (vi) All analytical results and field measurements;  
2802
- 2803 (vii) Description of temporary monitoring well installations; and  
2804
- 2805 (viii) Plan map showing the location of the following: structures, drainages,  
2806 property lines, boreholes or soil excavations, monitoring wells, tank(s), piping, and dispensing  
2807 pumps. Drawings shall include title, north arrow, and scale.  
2808

2809 PART G  
2810 OUT-OF-SERVICE TANK SYSTEMS AND CLOSURE

2811  
2812 **Section 30. Temporary Closure.**

2813  
2814 (a) *General Requirements.* When a storage tank system is temporarily closed, owners  
2815 and/or operators shall:

2816  
2817 (i) Notify the department within 30 days of placing the tanks in temporarily  
2818 out-of-use status;

2819  
2820 (ii) Continue operation and maintenance of corrosion protection in accordance  
2821 with Section 11 for USTs and Part I for ASTs;

2822  
2823 (iii) Continue release detection and release detection operation and  
2824 maintenance testing and inspections in accordance with Parts C, D, I, and M;

2825  
2826 (iv) Comply with Parts E and F if a release is suspected or confirmed; and

2827  
2828 (v) Provide licensed Class A and B Operators in accordance with Section 46.

2829  
2830 (vi) Release detection and release detection operation and maintenance testing  
2831 and inspections in Parts C, D, and I are not required as long as the tank does not contain more  
2832 than 1 inch of regulated substance at the measuring point directly under the fill tube.

2833  
2834 (b) *Tanks Temporarily Closed for 3 Months or More.* When a storage tank system is  
2835 temporarily closed for 3 months or more, owners and/or operators shall comply with the  
2836 following requirements:

2837  
2838 (i) All requirements in Section 30(a);

2839  
2840 (ii) Leave vent piping open and functioning;

2841  
2842 (iii) Drain, cap, and secure all other connected piping, pumps, manways, and  
2843 ancillary equipment; and

2844  
2845 (iv) Continue to pay the annual tank fee and maintain financial responsibility  
2846 pursuant to Part N.

2847  
2848 (c) *Tanks Temporarily Closed for 12 Months or More.* When a storage tank system is  
2849 temporarily closed for more than 12 months, the owner and/or operator shall complete a  
2850 minimum site assessment in accordance with Section 29. Except tanks within operating fueling  
2851 facilities, the tank shall be permanently closed in accordance with this Part not later than 12  
2852 months after the date on which the tank is placed in temporarily out-of-use status or July 1, 2018,  
2853 whichever is later, unless a time extension is authorized in writing by the department.

2854           **Section 31.   Permanent Closure and Changes In Service.**  
2855

2856           (a)   *Notification.* At least 30 days before beginning either permanent closure or  
2857 changing a storage tank system to a non-regulated use under Section 31(b) or (c), owners and/or  
2858 operators shall notify the department of their intent, unless such action is in response to  
2859 corrective action. The required MSA shall be completed after notifying the department but  
2860 before work begins to permanently close the tank or change the tank system to a non-regulated  
2861 use.

2862  
2863           (b)   *Permanent Closure.* To permanently close a UST or AST system, owners and/or  
2864 operators shall empty and clean it by removing all liquids and accumulated sludges and perform  
2865 an MSA as defined in Section 29. All USTs taken out of service permanently shall also be  
2866 removed from the ground or filled with an inert solid material. All USTs and ASTs taken out of  
2867 service permanently shall be managed in accordance with Solid Waste Rules and Regulations.  
2868 The tank cleaning and closure procedures shall be properly conducted in accordance with one of  
2869 the following industry standards or practices:

- 2870                   (i)   API Recommended Practice 1604, as referenced in Section 2;  
2871  
2872                   (ii)   API Standard 2015, as referenced in Section 2;  
2873  
2874                   (iii)   API Recommended Practice 1631, as referenced in Section 2;  
2875  
2876                   (iv)   API Recommended Practice 2016, as referenced in Section 2;  
2877  
2878                   (v)   U.S. Department of Health, Education, and Welfare, Criteria for a  
2879 Recommended Standard, Working in Confined Spaces, as referenced in Section 2; and/or  
2880  
2881                   (vi)   NFPA Standard 326, as referenced in Section 2.  
2882  
2883                   (vii)   Section 33 provides a process for evaluating and permitting designs or  
2884 procedures that deviate from recognized industry standards or practices.  
2885  
2886

2887           (c)   *Change of Service.* Before converting any regulated storage tank to store a non-  
2888 regulated substance, owners and/or operators shall empty and clean the tank by removing all  
2889 liquid and accumulated sludge in accordance with Section 31(b) unless the non-regulated  
2890 substance is the same as the regulated substance. Before converting any regulated storage tank to  
2891 store a non-regulated substance, owners and/or operators shall conduct an MSA in accordance  
2892 with Section 29. An MSA shall be performed at all sites, including known contaminated sites,  
2893 where a tank is converted from a regulated use to a non-regulated use. ASTs and USTs  
2894 converted to a use not regulated by the department shall be managed under the federal or local  
2895 jurisdiction having authority for such non-regulated use.

2896           (d)   *Owners and/or Operators not Eligible for the Corrective Action Account.* If  
2897 contaminated soils, contaminated groundwater, or free product as a liquid or vapor is discovered  
2898

2899 during the MSA, or by any other manner, owners and/or operators not eligible for use of the  
2900 Corrective Action Account shall begin corrective action in accordance with Section 24.

2901  
2902 (e) *Records.*

2903  
2904 (i) Results of the MSA required under this Section shall be submitted to the  
2905 department within 90 days of MSA completion.

2906  
2907 (ii) Owners and/or operators shall maintain records that are capable of  
2908 demonstrating compliance with closure requirements under this Part. The results of the  
2909 excavation zone assessment shall be maintained for at least 3 years after completion of  
2910 permanent closure or change-in-service in one of the following ways:

2911  
2912 (A) By the owners and/or operators who took the tank system out of  
2913 service;

2914  
2915 (B) By the current owners and/or operators of the tank system site; or

2916  
2917 (C) By mailing these records to the department only if they cannot be  
2918 maintained at the closed facility.

2919  
2920 **Section 32. Applicability to Previously Closed or Abandoned Storage Tank**  
2921 **Systems.**

2922  
2923 (a) Owners and/or operators with UST systems permanently closed after December  
2924 22, 1988, or AST systems permanently closed after the date of these regulations shall comply  
2925 with Section 31.

2926  
2927 (b) When directed by the Solid and Hazardous Waste Administrator, the owner and/or  
2928 operator of a storage tank system or an owner of a site upon which such a system was located  
2929 that was permanently closed before the effective date of these regulations shall complete an MSA  
2930 in accordance with Section 29. When directed by the Solid and Hazardous Waste Administrator,  
2931 abandoned storage tank systems shall be permanently closed in accordance with Section 31. The  
2932 Solid and Hazardous Waste Administrator may take action under this Section if the department  
2933 determines that releases from the storage tank system pose a current or potential threat to human  
2934 health and/or the environment. Owners and/or operators of UST systems permanently closed  
2935 before December 22, 1988, shall have complied with API Recommended Practice 1604, as  
2936 referenced in Section 2.  
2937

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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.

2983 PART I  
2984 AST SYSTEMS  
2985

2986 **Section 34. Tanks Covered by this Part.** This Part covers all ASTs that meet the  
2987 requirements found in W.S. 35-11-1415(a)(xi). Regulated AST components are those from the  
2988 fire valve to the tank including the tank and fire valve.  
2989

2990 **Section 35. Construction Requirements for AST Systems.**  
2991

2992 (a) *Tanks.* All tanks regulated by this Part, whether existing or new, shall be welded  
2993 steel tanks. Bolted or riveted steel tanks or tanks made of any material other than steel shall not  
2994 be used as a regulated AST. A tank intended for use as a UST shall not be installed as an AST.  
2995

2996 (b) *Secondary Containment.* All ASTs regulated under this Section shall be  
2997 constructed with secondary containment equal to at least 110% of storage capacity of the largest  
2998 single AST within the secondary containment wall. The owner and/or operator of any AST shall  
2999 control runoff captured inside the secondary containment system and ensure that runoff is free of  
3000 floating oils prior to discharge from the secondary containment structure. Secondary  
3001 containment shall be constructed of materials that are:  
3002

3003 (i) Fireproof; and  
3004

3005 (ii) Compatible with the regulated substance stored.  
3006

3007 (c) *Vehicle Impact Protection.* ASTs shall be protected against vehicle impact by  
3008 barriers. Barriers are required on any side of the AST subject to impact by a vehicle traveling on  
3009 any surface accessible to the public. Vehicle impact protection is not required for tanks meeting  
3010 UL-Standard 2085, as referenced in Section 2, if the manufacturer certifies that the tank provides  
3011 vehicle impact protection. Barriers shall meet one of the following specifications:  
3012

3013 (i) Guard posts constructed of concrete-filled steel no less than 4 inches in  
3014 diameter, spaced not more than 4 feet apart, and set not less than 3 feet above ground in a  
3015 concrete-filled footing. Footing shall be 15 inches minimum diameter and set into the ground a  
3016 minimum of 3 feet deep. Posts shall not be located less than 5 feet from the tanks.  
3017

3018 (ii) Concrete secondary containment walls that are at least 5 feet from the  
3019 tanks; extend at least 3 feet above ground level on the outside of the containment wall; and  
3020 contain a minimum of two, 5/8-inch reinforcing rods placed in the concrete as a continuous band  
3021 within 1 foot of the top of the containment wall. Concrete secondary containment structures that  
3022 do not meet this requirement may be approved by the department on a case-by-case basis.  
3023

3024 (iii) Concrete barriers constructed to Department of Transportation  
3025 specifications for use as barriers along highways. These barriers are commonly called “jersey  
3026 barriers.”  
3027

3028 (d) *Corrosion Protection.* AST systems shall be protected against corrosion using one  
3029 of the following methods:  
3030

3031 (i) *Sacrificial/Galvanic Anode CP System.* Sacrificial/galvanic anode CP  
3032 systems shall be tested by a CP tester at least once every 3 years for proper operation. These  
3033 systems shall be designed by a corrosion expert. Owners and/or operators of ASTs protected by  
3034 sacrificial/galvanic anode systems shall also comply with Section 11;  
3035

3036 (ii) *Impressed Current CP System.* Impressed current CP systems shall be  
3037 checked at least once every 60 days by the owner and/or operator and tested by a CP tester at  
3038 least once every 3 years for proper operation. These systems shall be designed by a corrosion  
3039 expert. Owners and/or operators of ASTs protected by impressed current systems shall also  
3040 comply with Section 11; or  
3041

3042 (iii) *Isolation.* Isolating the AST system from the ground by placing the tank  
3043 on a bed of dry and freely draining gravel, at least 3 inches thick, on a concrete floor within a  
3044 concrete secondary containment system. Horizontal cylindrical tanks on saddles and tanks that  
3045 meet the requirements of UL Standard 2085, as referenced in Section 2, meet this corrosion  
3046 protection method.  
3047

3048 (e) *Additional Requirements for Cathodic Protection.*  
3049

3050 (i) Both sacrificial/galvanic anode and impressed current CP systems on  
3051 ASTs shall be designed and installed with test stations to enable the owners and/or operators to  
3052 monitor the operation of the CP system.  
3053

3054 (ii) All CP systems installed on ASTs shall be designed by a corrosion expert.  
3055 All CP systems shall be designed, installed, inspected and maintained to meet or exceed one or  
3056 more of the following industry standards or practices:  
3057

3058 (A) NACE Standard SP0193, as referenced in Section 2;  
3059

3060 (B) NACE Standard SP0285, as referenced in Section 2; and/or  
3061

3062 (C) API Standard 651, as referenced in Section 2.  
3063

3064 (f) *Overfill Protection.* ASTs shall have overfill protection as follows:  
3065

3066 (i) Systems shall sound an audible or visible alarm at the filling rack when the  
3067 AST is 90% full;  
3068

3069 (ii) Systems shall close valves and prevent overfilling the tank before the AST  
3070 is 95% full; and  
3071



3072 (iii) The system for tanks larger than 100,000 gallons shall sound a second  
3073 audible and visible alarm at the filling rack when the AST is 95% full.  
3074

3075 (g) *Spill Prevention.* AST systems shall have fill lines protected with a double-check  
3076 valve to prevent backflow from the tank and a self-closing fire valve, activated by a frangible,  
3077 fusible link. Additionally, spill prevention equipment shall meet one of the following:  
3078

3079 (i) The fill lines shall be completely enclosed within the secondary  
3080 containment system; or  
3081

3082 (ii) Each fill line shall have its own system to control spillage.  
3083

3084 (h) *Connected Lines.* All underground pipelines connected to ASTs shall be non-  
3085 corrodible, double-wall lines equipped with working leak detection equipment. All aboveground  
3086 lines shall be steel. All connections between aboveground lines and underground lines shall be  
3087 made inside accessible leak-proof sumps. All new and replacement underground piping shall be  
3088 double-wall and interstitially monitored.  
3089

3090 (i) *Applicable Standards for New ASTs.* All new AST systems shall meet the  
3091 requirements of one or more of the following industry standards or practices:  
3092

3093 (i) Field Constructed Steel Tanks.  
3094

3095 (A) API Specification 12D, as referenced in Section 2;  
3096

3097 (B) API Standard 620, as referenced in Section 2;  
3098

3099 (C) API Standard 650, as referenced in Section 2;  
3100

3101 (D) NFPA Standard 30, as referenced in Section 2;  
3102

3103 (E) NFPA Standard 30A, as referenced in Section 2;  
3104

3105 (F) API Standard 653, as referenced in Section 2;  
3106

3107 (G) PEI RP200, as referenced in Section 2; and/or  
3108

3109 (H) Other standards approved by the department.  
3110

3111 (ii) Shop Constructed Tanks.  
3112

3113 (A) UL Standard 2085, as referenced in Section 2;  
3114

3115 (B) UL Standard 142, as referenced in Section 2;  
3116

- 3117 (C) API Standard 650, as referenced in Section 2;  
3118  
3119 (D) NFPA Standard 30, as referenced in Section 2;  
3120  
3121 (E) API Standard 653, as referenced in Section 2; and/or  
3122  
3123 (F) PEI RP200, as referenced in Section 2.  
3124  
3125 (j) *ASTs Installed After the Effective Date of These Regulations.*  
3126  
3127 (i) ASTs shall have a foundation designed by a Registered Professional  
3128 Engineer, licensed in the State of Wyoming. The foundation design shall provide positive  
3129 drainage of water away from the base. ASTs located in areas subject to flooding shall be  
3130 anchored to prevent flotation. The foundation shall also meet one of the following:  
3131  
3132 (A) Capable of supporting the tank, when full, without excessive  
3133 differential settlement as defined in API Standard 653, as referenced in Section 2; or  
3134  
3135 (B) Designed per the manufacturer's recommendation.  
3136  
3137 (ii) ASTs installed or re-installed shall meet all requirements of Part I before  
3138 being placed in service.  
3139  
3140 (iii) ASTs shall be placed on a release prevention barrier. The integrity of the  
3141 barrier shall not deteriorate due to exposure to the elements or soil contaminated by regulated  
3142 substances. Double-wall vaulted tanks with an interstitial monitoring device shall meet all  
3143 requirements for both secondary containment and the release detection barrier. The following  
3144 are acceptable release prevention barriers:  
3145  
3146 (A) An impermeable geosynthetic clay liner with a permeability of  $10^{-6}$   
3147 cm/sec or less;  
3148  
3149 (B) An impermeable geosynthetic liner installed in accordance with  
3150 manufacturer's recommendations, such as a 60-mil unreinforced liner or a 40-mil reinforced  
3151 liner, or a material of similar or more stringent specifications that is compatible with the  
3152 regulated substance stored; or  
3153  
3154 (C) A double-bottom tank equipped with a leak detection system that  
3155 will detect the presence of the regulated substance in the space between the bottoms.  
3156  
3157 (D) For tanks of less than 100,000 gallons capacity, an impermeable  
3158 reinforced concrete slab.  
3159  
3160 (iv) Owners and/or operators of field constructed ASTs shall keep on file for  
3161 the life of the tank, and make available to the department upon request, the following:

- 3162 (A) Floor and wall/shell thickness measurements;  
3163  
3164 (B) Material certifications for all materials used in the construction of  
3165 the AST system, including secondary containment and release prevention barriers; and  
3166  
3167 (C) A report including welding procedures, welding certification  
3168 reports, and any non-destructive testing performed on the AST.  
3169  
3170 (v) Owners and/or operators of shop fabricated ASTs shall keep on file for the  
3171 life of the tank, and make available to the department on request, the following:  
3172  
3173 (A) The floor and wall/shell thickness measurement if a UL label does  
3174 not exist on the tank; and  
3175  
3176 (B) Material certifications for all materials used in the construction of  
3177 the entire AST system.  
3178  
3179 (vi) All exposed exterior surfaces of field constructed ASTs shall be protected  
3180 against corrosion. This requirement may be met using field applied coatings, compatible with  
3181 the stored regulated substance, on visible tank surfaces.  
3182  
3183 (vii) The completed installation of metallic field constructed ASTs shall be  
3184 inspected and certified by a certified API Standard 653, as referenced in Section 2, inspector.  
3185  
3186 (viii) Owners and/or operators of shop fabricated ASTs shall keep on file for the  
3187 life of the AST, and provide to the department on request, a report including welding procedures,  
3188 welding certification reports, and any non-destructive testing performed on the AST.  
3189  
3190 (ix) Owners and/or operators of ASTs shall provide a certificate of installation  
3191 to the department that meets the requirements of Section 6(e).  
3192  
3193 (k) *Labeling.* Tanks do not need to be UL labeled but shall be designed, constructed,  
3194 and tested to the approved standards. ASTs shall bear an all-weather label with the following  
3195 information: name and address of the tank manufacturer, year the tank was built or date of re-  
3196 certification, capacity of the tank in U.S. gallons, and the tank construction or inspection standard  
3197 used.  
3198  
3199 (l) *Operational Venting.* Normal operation vents are required to prevent the  
3200 development of vacuum or pressure within ASTs. Such vents shall be sized in accordance with  
3201 IFC 5704.2.7.3, as referenced in Section 2, and shall be at least the size of the fill or withdrawal  
3202 connection but not less than 1-1/4 inches inside diameter. Flammable liquid vents shall terminate  
3203 not less than 12 feet above grade and 5 feet from a building opening or property line. Vents shall  
3204 discharge upward and outward. Operational venting shall comply, as applicable, with: API  
3205 Standard 2000, as referenced in Section 2; NFPA Standard 30, as referenced in Section 2; UL  
3206 Standard 142, as referenced in Section 2; and UL Standard 2085, as referenced in Section 2.

3207 (m) *Emergency Venting.* ASTs shall be equipped with adequate additional emergency  
3208 venting that will relieve excessive internal pressure caused by fire exposure. Emergency venting  
3209 shall comply, as applicable, with: API Standard 2000, as referenced in Section 2; NFPA Standard  
3210 30, as referenced in Section 2; UL Standard 142, as referenced in Section 2; and UL Standard  
3211 2085, as referenced in Section 2.

3212  
3213 (n) *Warning Signs.* Signs, product placarding, and no smoking signs shall be properly  
3214 posted in accordance with IFC 5704.2.3.1, 5704.2.3.2, and 5703.5, all as referenced in Section 2.

3215  
3216 (o) *Upgrading Existing Tanks.* Existing ASTs that do not meet the requirements of  
3217 this Chapter shall be upgraded to meet all requirements of this Chapter for new ASTs.

3218  
3219 (p) *Fire Marshall Plan Review.* Owners and/or operators of AST systems installed or  
3220 modified after the date of these rules shall provide documentary proof to the department that the  
3221 installation plans were reviewed and approved by the appropriate authorizing authority under the  
3222 State Fire Marshall.

3223  
3224 (q) *New Installation, Upgrade, and Modification Inspections.* AST system upgrades  
3225 required by this Part, modifications, and new AST installations shall be inspected by the  
3226 department. Notification of new installations, upgrades, and modifications shall be made to the  
3227 department in accordance with Section 9.

3228  
3229 (r) *Access to Tank Tops.* ASTs greater than 6 feet in height shall have a permanently  
3230 mounted, solidly constructed, non-combustible ladder or stairs. The ladder or stairs shall provide  
3231 access to the top of the AST for visual inspection of venting, overfill equipment, and other  
3232 equipment requiring inspection. Other Occupational Safety and Health Administration  
3233 requirements may apply.

3234  
3235 (s) *Piping Connections.* All AST piping connections that are below normal liquid  
3236 level shall have internal or external fire/impact valves located as close as possible to the tank  
3237 shell. All lines shall be equipped with anti-siphon devices.

3238  
3239 (t) *Emergency Switches.* Emergency disconnect switches shall be provided at  
3240 prominent locations to stop the transfer of fuel to the fuel dispenser in the event of a spill or other  
3241 emergency. These switches shall be within 100 feet, but not less than 20 feet, of dispensers. All  
3242 emergency disconnect switches shall be labeled: "EMERGENCY FUEL SHUT OFF" using a  
3243 durable, weatherproof sign that is prominently posted and visible from the dispensers.

3244  
3245 (u) *Direct Connection Between USTs and ASTs.* An existing UST directly connected  
3246 to an AST shall have an automatic tank gauging system. This system shall be equipped with an  
3247 audible and visual alarm that will sound when the UST is 90% full or automatically shut off the  
3248 flow to the UST when the UST is 95% full. This system shall be separate from any system that  
3249 controls the filling of the UST. New connections shall not be made between a UST and an AST.

3250  
3251 (v) *Repairs.* Repairs to ASTs shall be performed in accordance with Section 8.

3252 (w) *Submerged ASTs.* ASTs shall not be operated submerged in water.

3253  
3254 (x) *Site Security.* ASTs shall be protected from vandalism and unauthorized product  
3255 release by security fencing. Security fences shall be galvanized wire mesh, no less than 6 feet  
3256 high, and topped with three strands of barbed wire on an angled support bracket. Fencing shall  
3257 be no less than 5 feet from any of the tanks within the secondary containment structure. At  
3258 facilities where wire fencing is not allowed by any other authority, the owner and/or operator  
3259 may substitute other types of fencing at least 6 feet high.

3260  
3261 (y) *Compatibility.* AST systems shall be compatible with the substance stored.  
3262 Owners and/or operators that intend to store biofuel blends in a new or existing AST system shall  
3263 demonstrate compatibility of the biofuel blend with the AST system in accordance with Section  
3264 12.

3265  
3266 (z) *Monthly Inspections.* Monthly inspections shall be completed in accordance with  
3267 Section 13.

3268  
3269 **Section 36. AST Leak Detection Requirements.**

3270  
3271 (a) *Methods.* AST owners and/or operators shall provide leak detection for the tank  
3272 using one of the following methods:

3273  
3274 (i) *Automatic Tank Gauging.* AST owners and/or operators using this  
3275 method shall conduct automatic tank gauging in accordance with Section 16(c). Automatic tank  
3276 gauges used for ASTs shall be third-party certified for use in an AST.

3277  
3278 (ii) *Manual Tank Gauging.* Owners and/or operators of ASTs with a capacity  
3279 of less than 1,320 gallons may monitor the tanks using manual tank gauging in accordance with  
3280 Section 15(a).

3281  
3282 (iii) *Interstitial Monitoring.* Owners and/or operators of ASTs that were  
3283 constructed under UL Standard 2085, as referenced in Section 2, shall monitor the interstitial  
3284 space between the inner tank and the outer shell. Records shall be kept showing the date of the  
3285 monitoring, the name of the person doing the monitoring and the monitoring results. Monthly  
3286 sensor status printouts from an automatic system may be used to meet this requirement.

3287  
3288 (iv) *Visual Monitoring of Tank Bottoms.* Owners and/or operators of ASTs  
3289 that are elevated aboveground, and the entire surface of the tank is visible from beneath, shall  
3290 monitor the tanks monthly for visible signs of leakage. Records of these inspections shall be  
3291 made showing the date of the inspection, the name of the person doing the inspection, and any  
3292 sign of leakage noted. Records shall be kept by the owner and/or operator for 3 years.

3293  
3294 (v) *Passive Acoustic Sensing.* If passive acoustic sensing is used, the AST  
3295 shall be equipped with a continuous sensing system. This system shall be capable of detecting a  
3296 release of 0.2 gallons per hour or a release of 150 gallons per month with a probability of

3297 detection of 0.95 and a probability of false alarm of 0.05. All passive acoustic sensing systems  
3298 shall produce a written record showing that the system is on and operable. All passive acoustic  
3299 sensing systems shall be calibrated annually.

3300  
3301 (vi) Tracer Surveys. Tracer surveys shall be conducted on a monthly basis in  
3302 accordance with Section 16(h).

3303  
3304 (vii) Another method approved in accordance with Section 16(i).

3305  
3306 (b) *ASTs With a Capacity of 100,000 Gallons or Larger.* Owners and/or operators of  
3307 ASTs with a capacity of 100,000 gallons or more shall follow the inspection requirements of API  
3308 Standard 653, as referenced in Section 2.

3309  
3310 (c) *SPCC Plans.* Owners and/or operators of any single AST or combination of more  
3311 than one AST, with a capacity of 1,320 gallons or more, shall have a Spill Prevention Control  
3312 and Countermeasures (SPCC) Plan on file with the department. This is the same document  
3313 required by the Environmental Protection Agency under 40 CFR 112 as referenced in Section 2.

3314  
3315 (d) *Additional Requirements for Large Facilities.* Facilities with above ground  
3316 capacity of 100,000 gallons or more shall provide at least one additional leak detection method  
3317 beyond the requirements for Section 36(a). Such methods may be custom designed for the  
3318 facility at the option of the owner and/or operator, or may be a second method named in Section  
3319 36(a). Department approval is required before implementing methods in compliance with this  
3320 Section.

3321  
3322 (e) *Inventory Control.* ASTs shall be monitored using inventory control in  
3323 accordance with Section 16(a) unless the tank and all lines are isolated from ground contact and  
3324 can be visually monitored, or the tank is isolated from ground contact and the connected  
3325 underground piping is double-wall and interstitially monitored.

3326  
3327 (f) *Operator's Annual Inspection.* Owners and/or operators of ASTs shall conduct an  
3328 annual inspection of all AST systems in accordance with Section 13(g).

3329  
3330 **Section 37. Leak Detection Requirements for Underground Lines Connected to**  
3331 **ASTs.** Leak detection requirements for underground piping connected to ASTs shall be the  
3332 same as those found in Section 14. Sump sensors shall be wired to shut down all pumps and  
3333 dispensers in the event of an alarm. Containment sumps used for interstitial monitoring of piping  
3334 shall be tested in accordance with Section 10(d).

3335  
3336  
3337  
3338

3339 PART J  
3340 ENVIRONMENTAL RESTORATION STANDARDS FOR  
3341 LEAKING STORAGE TANK REMEDIATION  
3342

3343 **Section 38. Soil Remediation.** Soil remediation criteria shall be based on evaluation  
3344 of: 1) the potential to contaminate groundwater, and 2) potential adverse impacts to public health.  
3345 The potential to impact groundwater quality shall be determined by evaluating the subsurface  
3346 fate and transport characteristics of the regulated substance using site-specific soil conditions. If  
3347 groundwater monitoring data conflict with fate and transport modeling estimates, the  
3348 groundwater monitoring data shall be used. Potential adverse public health impacts shall be  
3349 evaluated using an environmental risk assessment process for contaminated soil ingestion and  
3350 inhalation.  
3351

3352 **Section 39. Water Quality Standards.** If background concentrations of a constituent  
3353 are higher than the protection standards presented in this Section, cleanup shall be completed to  
3354 the background level. Cleanup shall only be completed for constituents from an eligible storage  
3355 tank system.  
3356

3357 (a) *Surface Water.* Storage Tank Program remediation actions shall protect surface  
3358 water quality to the standards contained in Chapter 1, Wyoming Water Quality Rules and  
3359 Regulations, Quality Standards for Wyoming Surface Waters.  
3360

3361 (b) *Groundwater.* Storage Tank Program remediation actions shall:

3362 (i) Protect Class I, II, III, IV(a), IV(b) or Special A groundwater quality to the  
3363 most stringent of the:

3364 (A) Federal primary MCL contained in 40 CFR 141, as referenced in  
3365 Section 2;

3366 (B) Water quality standards contained in this Section when there is no  
3367 federal MCL for a substance; or  
3368

3369 (C) Groundwater quality standards found in Chapter 8, Wyoming  
3370 Water Quality Rules and Regulations, Quality Standards for Wyoming Groundwaters.  
3371

3372 (ii) Protect Class VI groundwater to the groundwater quality standards found  
3373 in Chapter 8, Wyoming Water Quality Rules and Regulations, Quality Standards for Wyoming  
3374 Groundwaters.  
3375

3376 (c) *Eligible Sources.* Groundwater remediation shall address contaminants that  
3377 originated from an eligible storage tank system. Remediation of constituents that are naturally  
3378 occurring or are from sources other than an eligible storage tank system shall not be completed,  
3379 except as incidental and necessary to the remediation of the eligible contaminants.  
3380  
3381  
3382  
3383

3384 (d) *Free Product*. Whenever any free-phase liquid layer of a regulated substance is  
3385 encountered in groundwater or floating on the groundwater surface with a thickness in excess of  
3386 0.05 inches, restoration shall begin as soon as possible to remove the regulated substance(s) and  
3387 prevent contaminant migration into previously uncontaminated areas.  
3388

3389 (e) *Drinking Water Equivalent Levels*. If an MCL does not exist and there is no  
3390 standard for a constituent in either Chapter 1 or 8, Wyoming Water Quality Rules and  
3391 Regulations, the following procedures shall be used to calculate a state Drinking Water  
3392 Equivalent Level (DWEL). Calculations shall be based on chronic exposure.  
3393

3394 (i) Non-carcinogenic substances:

3395  
3396 Equation 1:

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

3398  
3399

3400 (ii) Carcinogenic substances:

3401  
3402 Equation 2:

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

3404  
3405

3406 where:

3407

- 3408 DWEL = Drinking water equivalent level, mg/L.  
3409 RISK = Cancer risk for drinking water, (1 x 10<sup>-6</sup>).  
3410 ABW = Average adult body weight over exposure period (70 kg).  
3411 CPF<sub>o</sub> = Oral cancer potency factor (mg/kg-day)<sup>-1</sup>; chemical specific.  
3412 RfD<sub>o</sub> = Oral reference dose (mg/kg-day); chemical specific.  
3413 DWI = Adult drinking water intake, 2 L/day.  
3414 AB = Gastrointestinal absorption rate (1.0).  
3415 LIFE = Lifetime (70 years).  
3416 DUR = Duration of exposure (30 years).  
3417 FOE = Frequency of exposure, (350 days/365 days = 0.96).  
3418 HQ = Hazard quotient (1).  
3419

3420 Values for oral toxicological reference doses (RfD<sub>o</sub>) and/or cancer potency factors (CPF<sub>o</sub>) shall  
3421 be obtained from current data in the U.S. Environmental Protection Agency's (EPA) Integrated  
3422 Risk Information System (IRIS), the EPA Health Effects Assessment Summary Tables (HEAST)  
3423 toxicity data sources, or the EPA Region IX Preliminary Remediation Goals Data Base. If an  
3424 oral reference dose or cancer potency factor is not listed in the above database sources, the  
3425 administrator shall determine a state DWEL using the latest available toxicological data.  
3426



3427 (f) *Multiple Standards.* When more than one standard exists in Section 39 for any  
3428 constituent, the most stringent standard shall be used.  
3429

3430 **Section 40. Soil Human Health Risk Assessment.**  
3431

3432 (a) *Introduction.* A risk assessment for potential human health impacts is required for  
3433 storage tank remediation actions to evaluate the risk component from a release and to develop  
3434 quantitative soil cleanup concentrations directly related to the environmental risk. The human  
3435 health risk assessment model is based on existing EPA methodologies and exposure constant  
3436 values. The routes of potential exposure to be considered are soil ingestion and inhalation of  
3437 substances released from regulated storage tank systems. A remedial action plan shall be  
3438 submitted to the department for approval. The remedial action plan shall be approved by the  
3439 department after it has been determined that the plan will adequately protect human health,  
3440 safety, and the environment. In making this determination, the department shall consider the  
3441 following factors, as appropriate:  
3442

3443 (i) The physical and chemical characteristics of the released substance,  
3444 including its toxicity, persistence, and potential for migration;  
3445

3446 (ii) The hydrogeologic characteristics of the site and the surrounding area;  
3447

3448 (iii) The proximity, quality, and current and future uses of nearby surface water  
3449 and groundwater;  
3450

3451 (iv) The potential effects of residual contamination on nearby surface water  
3452 and groundwater;  
3453

3454 (v) An exposure assessment; and  
3455

3456 (vi) Any additional factors relevant to assessing risks to human health and the  
3457 environment.  
3458

3459 (b) *Risk Assessment Calculation Model.* Using soil property data collected during  
3460 site investigation, site-specific soil risk assessment calculations shall be completed using  
3461 equations in this Section. This model estimates chronic exposure(s) on a site-specific basis by  
3462 combining an average exposure point concentration with reasonably conservative values for  
3463 human intake and exposure duration. Thus, all site-specific soil parameters used to calculate risk  
3464 assessment remedial concentrations at each site should reflect average or typical site conditions.  
3465 In addition to site-specific soil conditions and chemical compounds, default values have been  
3466 established for other equation input parameters.  
3467

3468 (i) Combined Oral Ingestion and Inhalation Exposures to Carcinogenic  
3469 Contaminants in Residential Soil:  
3470  
3471

3472 Equation 3:

3473

3474

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

3475

3476

3477

3478 (ii) Combined Oral Ingestion and Inhalation Exposures to Non-carcinogenic  
3479 Contaminants in Residual Soil:

3480

3481 Equation 4:

3482

3483

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

3484

3485

3486 where:

3487

3488 Equation 5:

3489

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

3490

3491 where:

3492

3493 Equation 6:

3494

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

3495

3496

3497 where:

3498

3499  $C_s$  = Soil contaminant cleanup concentration, mg/kg.

3500 RISK = Cancer risk for soil cleanup actions,  $1 \times 10^{-6}$ .

3501  $AT_c$  = Averaging time, carcinogens, 25,550 d.

3502 EF = Exposure frequency, residential, 350 d.

3503  $IFS_{adj}$  = Ingestion factor, soil, 114 (mg-yr)/(kg-d).

3504  $CPF_o$  = Cancer potency factor, oral, chemical specific, (mg/kg-d)<sup>-1</sup>.

3505  $CPF_i$  = Cancer potency factor, inhalation, chemical specific, (mg/kg-d)<sup>-1</sup>.

3506  $INHF_{adj}$  = Inhalation factor, air, 11 (m<sup>3</sup>-yr)/(kg-d).

3507  $VF_s$  = Volatilization factor, soil, m<sup>3</sup>/kg.

3508 HQ = Hazard quotient, 1

3509	BW <sub>c</sub>	=	Body weight, child, 15 kg.
3510	ED <sub>c</sub>	=	Exposure duration, child, 6 yrs.
3511	IRS <sub>c</sub>	=	Soil ingestion rate, child, 200 mg/d.
3512	IRA <sub>c</sub>	=	Soil inhalation rate, child, 10 m <sup>3</sup> /d.
3513	RfD <sub>o</sub>	=	Reference dose, oral, mg/kg-d.
3514	RfD <sub>i</sub>	=	Reference dose, inhalation, mg/kg-d.
3515	Q/C	=	Inverse of the mean concentration at the center of a 0.5 acre square source in Wyoming, 100.13 (g/m <sup>2</sup> -s per kg/m <sup>3</sup> ).
3517	D <sub>A</sub>	=	Apparent diffusivity, cm <sup>2</sup> /s.
3518	D <sub>i</sub>	=	Chemical diffusivity in air, cm <sup>2</sup> /s, chemical specific.
3519	D <sub>w</sub>	=	Chemical diffusivity in water, cm <sup>2</sup> /s, chemical specific.
3520	T	=	Exposure interval, s, 9.5E08.
3521	ρ <sub>b</sub>	=	Soil density, g/cm <sup>3</sup> , 1.5 or actual value.
3522	ρ <sub>s</sub>	=	Soil particle density, g/cm <sup>3</sup> , 2.65.
3523	Θ <sub>a</sub>	=	Air filled soil porosity, L <sub>air</sub> /L <sub>soil</sub> , 0.28 or, n - Θ <sub>w</sub>
3524	Θ <sub>w</sub>	=	Water filled soil porosity, L <sub>water</sub> /L <sub>soil</sub> , 0.15.
3525	n	=	Total soil porosity, L <sub>pore</sub> /L <sub>soil</sub> , 0.43 or, 1 - (ρ <sub>b</sub> /ρ <sub>s</sub> ).
3526	H'	=	Dimensionless Henry's Law Constant, H(41), chemical specific.
3527	K <sub>d</sub>	=	Soil-water partition coefficient cm <sup>3</sup> /g, K <sub>oc</sub> f <sub>oc</sub> , chemical specific.
3528	K <sub>oc</sub>	=	Soil organic carbon-water partition coefficient, cm <sup>3</sup> /g, chemical specific.
3529			
3530	f <sub>oc</sub>	=	Fraction organic carbon in soil, g/g, 0.001 or site specific value.

3531  
3532 Values for oral toxicological reference doses (RfD<sub>o</sub>) and/or oral cancer potency factors (CPF<sub>o</sub>)  
3533 are obtained from current data in the U.S. Environmental Protection Agency (EPA) Integrated  
3534 Risk Information System (IRIS), the EPA Health Effects Assessment Summary Tables  
3535 (HEAST), or the EPA Region IX Preliminary Remediation Goals Data Base. If an oral reference  
3536 dose or cancer potency factor is not listed in the above database sources, the administrator will  
3537 determine an acceptable soil cleanup concentration using the latest available toxicological  
3538 information from other appropriate sources.

3539  
3540 **Section 41. Soil Environmental Fate and Transport Evaluation.** A soil  
3541 environmental fate and transport evaluation shall be completed. The evaluation shall estimate  
3542 the potential for soil to contaminate groundwater at levels exceeding STP groundwater  
3543 restoration standards.

- 3544  
3545 (a) *Conceptual Organic Compound Fate and Transport Model.*  
3546  
3547 (i) The model is based on the following assumptions:  
3548  
3549 (A) A finite amount of soil contamination exists at variable depths  
3550 beneath a leaking storage tank site. It may extend from the surface to below the groundwater  
3551 table, or it may be confined to a discrete zone. There is an uppermost aquifer beneath the site  
3552 that is not adequately protected by an impermeable barrier between the contaminated soil and the  
3553 aquifer. Percolating rainfall or snow melt moves through the contaminated soil, mobilizes some

3554 of the contamination as a leachate and carries the contamination towards the aquifer. A portion  
3555 of the contamination remains strongly adsorbed to the soil. The portion of the contaminants that  
3556 are not permanently adsorbed are available for biodegradation and a limited amount of leaching.

3557  
3558 (B) The point of compliance for protecting groundwater quality is  
3559 directly below the contaminated soils at the surface of the aquifer.

3560  
3561 (C) The rate of leaching from the soil has reached a steady state.

3562  
3563 (D) The soils beneath the leaking storage tank(s) represent the only  
3564 source of contamination to the groundwater.

3565  
3566 (E) Vapors emanating from the contaminants in the soil are moving  
3567 *primarily* upwards to the ground surface, and there is no perched saturated zone above the  
3568 contaminated soils. Based on existing program experience, the potential does exist for some  
3569 lateral movement of contaminant vapors; however, this movement is not the primary direction.

3570  
3571 (F) A leachate plume beneath the contaminated zone has not yet  
3572 reached the groundwater table.

3573  
3574 (ii) The model for calculating soil cleanup concentrations involves a set of  
3575 mathematical equations designed to calculate soil remediation concentrations. The equations  
3576 have been modified and simplified to make it possible to calculate soil cleanup concentrations  
3577 using as much site-specific data/information as possible. The site-specific data used in the  
3578 equations should be available from the subsurface investigations and are preferred over using the  
3579 default values.

3580  
3581 (iii) The equations are a mathematical expression of the conceptual model.  
3582 The organic contaminant concentration in the soil is reduced by a fractional amount that has been  
3583 biodegraded by natural bacteria in the soil system. Therefore, a biodegradation factor,  $e^{-kt}$ , has  
3584 been included in the evaluation process. Because the biodegradation factor will reduce the  
3585 amount of contaminant available for leachate generation, the soil cleanup concentration can be  
3586 adjusted upward by a calculated amount. The amount, which is adsorbed, is calculated using the  
3587 chemical-specific adsorption coefficient,  $K_d$ .

3588  
3589 (iv) The adsorption coefficient,  $K_d$ , is calculated from the following equation  
3590 using site-specific data:

3591  
3592 Equation 7:

3593  
3594  
3595 
$$K_d = (f_{oc})(K_{oc})$$

3596  
3597  
3598

3599 where:

3600  
3601  $f_{oc}$  = Site-specific fraction of organic carbon, mg organic carbon/mg soil  
3602 in the uncontaminated subsurface site soil. Normal range of  $f_{oc}$  in  
3603 Wyoming soils is 0.1-3%. If a site-specific  $f_{oc}$  value is not  
3604 determined, use a default value of 0.1%.  
3605  $K_{oc}$  = Chemical specific organic carbon partition coefficient, mL/gm.

3606  
3607 (v) The conceptual model discussed above is represented by the following  
3608 series of equations with further explanation, as necessary:

3609  
3610 (A) Determine travel time to reach groundwater table,  $t$ .

3611  
3612 (I) Subsurface soil contamination separated from the  
3613 groundwater table by more than 1 foot of depth is calculated as follows. Because subsurface  
3614 organic carbon content below 1 foot is expected to approach a very low number in Wyoming  
3615 soils, the following contaminant travel time equation has been developed:

3616  
3617 Equation 8:  
3618  
3619

$$t = \frac{(d)[(K_d)(\rho) + \theta]}{0.5(\alpha)}$$

3620  
3621 where:

3622  
3623  
3624  $t$  = Time for contaminant(s) to travel from the bottom of the  
3625 contaminated zone to the groundwater table, yrs.  
3626  $d$  = Depth to the groundwater table from the bottom of the  
3627 contaminated zone(s), cm.  
3628  $\Theta$  = Volumetric soil moisture content(s) at field capacity, mL/cm<sup>3</sup>.  
3629 0.5 = 50% infiltration rate for precipitation (worst case).  
3630  $\alpha$  = Average annual precipitation, cm/yr.  
3631  $\rho$  = Bulk soil density, gm/cm<sup>3</sup>.

3632  
3633 (II) If more than one soil type exists at a contaminated site or  
3634 remediation project location where the organic carbon content differs by 0.5% or greater and the  
3635 different soil type is 1 foot or greater in thickness, individual soil type specific values for  $K_d$ ,  $\Theta$ ,  
3636 and  $\rho$  shall be used in the time of travel calculation for *each* soil type. Further, the individual  
3637 values for depth,  $d$ , to the groundwater table from the bottom of *each* contaminated soil type  
3638 zone shall be used in the calculation. If the depth,  $d$ , from the bottom of the contaminated soil  
3639 type zone to the groundwater table is less than 12 inches, this method for determining  
3640 contaminated soil remediation concentrations is not valid. In these cases, cleanup of

3641 contaminated groundwater will govern the satisfactory remediation of contaminated soil within  
3642 this 12-inch interval. The final time of travel,  $t$ , is the sum of the individual soil-type segments.

3643  
3644 (III) Surface contamination extending from the ground surface  
3645 to depths greater than 2 feet. In order for the following equation to be used, the subsurface soil  
3646 within the 2-foot distance shall contain at least 3 percent total organic carbon, otherwise Equation  
3647 8 applies for the time of travel calculation. If using two different  $K_d$  values for different soil  
3648 organic carbon concentrations, the equation is derived as follows:

3649  
3650 Equation 9:

3651

$$t = \frac{(Z)[(K'_d)(\rho') + \theta'] + (d)[(K_d)(\rho) + \theta]}{0.5(\alpha)}$$

3652

3653

3654 where:

3655

3656  $Z$  = Thickness of soil containing 3 percent or greater organic carbon,  
3657 cm.

3658  $K'_d$  = Adsorption coefficient in the top 2 feet of soil, which is equal to  
3659 the measured fraction of organic carbon,  $f_{oc}$ , times the  $K_{oc}$  value.

3660  $K_d$  = Soil adsorption coefficient in the remaining soil column calculated  
3661 from Equation 7, mL/gm.

3662  $\rho'$  = Bulk soil density of soil containing 3 percent or greater organic  
3663 carbon, gm/cm<sup>3</sup>.

3664  $\Theta'$  = Volumetric soil moisture content at field capacity of soil containing  
3665 3 percent or greater organic carbon, mL/cm<sup>3</sup>.

3666

3667 The parameter,  $Z$ , takes into account natural organic carbon that may be present at the ground  
3668 surface, and it may extend for a limited vertical distance [0-60 cm (0-24 inches)] into the ground.  
3669 Development of site-specific soil adsorption coefficient isotherms *may* be required for complex  
3670 surface environments where  $f_{oc}$  is greater than 3 percent. If the uppermost 2-foot zone contains  
3671 less than 3 percent natural organic carbon, the  $Z$  portion of the time of travel calculation drops  
3672 out, leaving Equation 8 to apply for the time of travel calculation. This portion of the calculation  
3673 provides a mechanism to account for higher surface contaminant adsorption by naturally  
3674 occurring organic carbon within this zone.

3675

3676 (B) Calculate the soil remediation concentration for the *biodegradation*  
3677 *potential*,  $C_{s,org}$ , for the organic compound(s) using Equation 10:

3678

3679

$$C_{s,org} = \frac{(C_{st,org})(K_d)}{e^{-kt}}$$

3680

3681

3682

3683 where:

- 3684
- 3685  $k$  = Biodegradation rate constant,  $0.693/T_{1/2}$ , 1/yr.
- 3686  $T_{1/2}$  = Half-life for the specific chemical substance in groundwater in
- 3687 years.
- 3688  $t$  = Contaminant travel time to reach groundwater table, yrs.
- 3689  $C_{st,org}$  = Organic compound drinking water MCL, or state DWEL, mg/L.
- 3690  $C_{s,org}$  = Soil cleanup concentration for organic chemical compound, mg/kg.
- 3691  $K_d$  = Soil adsorption coefficient calculated from Equation 7, mL/gm.
- 3692 Where more than one  $K_d$  value is used for two or more different
- 3693 organic carbon soil types, use the lowest individual  $K_d$  value.
- 3694

3695 Equation 10 establishes the site soil remediation concentration for each organic chemical

3696 compound that could be allowed to remain in soil without threatening degradation of

3697 groundwater quality even if groundwater seasonally passes through the contaminated zone.

3698

3699 (vi) The soil saturation limit is the contaminant concentration at which soil

3700 pore air and pore water are saturated with the chemical and the adsorptive limits of the soil

3701 particles have been reached. Above this limit, the contaminant may be present in the free phase.

3702 Equation 11 is used to calculate the soil saturation limit for each organic chemical at the site:

3703

3704 Equation 11:

3705

$$C_{sat} = \frac{S(K_d \rho_b + \theta_w + H' \theta_a)}{\rho_b}$$

3706

3707

3708 (b) *Conceptual Metal, Inorganic Compound, and Total Petroleum Hydrocarbon Fate*

3709 *and Transport Model.*

3710

3711 The conceptual model for metals, inorganic compounds, and total petroleum hydrocarbons (TPH)

3712 assumes that these substances are distributed in subsurface soils around, or below, the level of a

3713 storage tank that had contained leaded regular gasoline or a hazardous substance. Some of these

3714 substances will be mobilized in percolating rainfall or snow melt and may be transported to the

3715 groundwater table as a leachate. That portion of these substances that remains adsorbed to the

3716 soil particles is determined by the adsorptive properties of both the substance and soil. It is

3717 calculated using the adsorption coefficient,  $K_d$ . The factor,  $e^{\lambda t}$ , is used as a leaching rate factor in

3718 this model to determine the rate at which leachate is released from the contaminated soil.

3719

3720 The conceptual model for metals, inorganic compounds, and TPH is represented by the following

3721 series of equations:

3722

3723 (i) Determine the *leaching rate constant*,  $\lambda$

3724

3725

3726

3727 Equation 12:  
3728

$$\lambda = \frac{(0.5)(\alpha)}{(\Theta)(\tau)(1 + \frac{\rho(K_d)}{\theta})}$$

3729  
3730  
3731 where:  
3732

- 3733  $\lambda$  = Leaching rate constant, 1/yr.  
3734  $\alpha$  = Average annual precipitation, cm/yr.  
3735  $\Theta$  = Volumetric soil moisture content at field capacity, mL/cm<sup>3</sup>.  
3736  $\rho$  = Bulk soil density, gm/cm<sup>3</sup>.  
3737  $K_d$  = Soil metal, inorganic compound, or TPH adsorption coefficient,  
3738 mL/gm.  
3739  $\tau$  = Thickness of contaminated soil seam, cm.

3740  
3741 If more than one soil type exists at a contaminated site where the organic carbon content differs  
3742 by 0.5% or more and the different soil type is 1 foot or greater in thickness, individual specific  
3743 soil type values for  $K_d$ ,  $\Theta$  and  $\rho$  shall be used in the leaching rate constant calculation for each  
3744 soil type. The final leaching rate constant,  $\lambda$ , is the sum of the individual soil type segments.

3745  
3746 (ii) Calculate *travel time* to reach groundwater table,  $t$ .  
3747

3748 Subsurface soil contamination separated from the groundwater table by more than 1 foot is  
3749 handled in the following way:

3750  
3751 Because subsurface organic carbon content below 1 foot is expected to approach a very low  
3752 number in Wyoming soils, contaminant travel time is calculated by:

3753  
3754 Equation 13:  
3755

$$t = \frac{(d)[(K_d)(\rho) + \theta]}{0.5(\alpha)}$$

3756  
3757 where:

- 3758  
3759  $t$  = Time for contaminant to travel from the bottom of the  
3760 contaminated zone to the groundwater table, yrs.  
3761  $d$  = Depth to the groundwater table from the bottom of the  
3762 contaminated zone, cm.  
3763  $\Theta$  = Volumetric soil moisture content at field capacity, mL/cm<sup>3</sup>.  
3764 0.5 = 50% infiltration rate for precipitation (worst case).  
3765  $\alpha$  = Average annual precipitation, cm/yr.  
3766  $\rho$  = Bulk soil density, gm/cm<sup>3</sup>.



3767 If more than one soil type exists at a contaminated site where the organic carbon content differs  
 3768 by 0.5% or greater and the different soil type is 1 foot or greater in thickness, individual soil type  
 3769 specific values for  $K_d$ ,  $\Theta$ , and  $\rho$  shall be used in the time of travel calculation for each soil type.  
 3770 Further, the individual values for depth,  $d$ , to the groundwater table from the bottom of each  
 3771 contaminated soil-type zone shall be used in the calculation. If the depth,  $d$ , from the bottom of  
 3772 the contaminated soil-type zone to the groundwater table is less than 12 inches or groundwater  
 3773 travel fluctuates this distance, this method for determining contaminated soil remediation  
 3774 concentrations is not valid. In these cases, cleanup of contaminated groundwater will govern the  
 3775 satisfactory remediation of contaminated soil within this 12-inch interval. The final time of  
 3776 travel,  $t$ , is the sum of the individual soil type segments.

3777  
 3778 (iii) Calculate the soil remediation concentration for the leaching potential of  
 3779 the metal, inorganic compound, or TPH using the following derived equation:

3780  
 3781 Equation 14:

$$C_{s,inorg} = \frac{(C_{stm})(K_d)}{e^{-\lambda t}}$$

3784  
 3785  
 3786 where:

- 3787  $C_{s,inorg}$  = Soil cleanup concentration due to metal, inorganic  
 3788 compound, or TPH leaching potential, mg/kg.  
 3789  $C_{stm}$  = Environmental standard concentration, primary MCL, or  
 3790 state DWEL, mg/L.  
 3791 = Chemical leaching rate, 1/yr.  
 3792  $t$  = Contaminant travel time to reach groundwater table, yrs.  
 3793  $K_d$  = Soil metal, inorganic compound, or TPH adsorption  
 3794 coefficient, ml/gm.  
 3795

3796 The soil cleanup concentration for metals, inorganic compounds, or TPH is determined by  
 3797 evaluating the above calculations and the natural background concentration. Information  
 3798 concerning the natural subsurface concentration may be available from either: (1) a subsurface  
 3799 investigation report, or (2) site-specific subsurface soil samples from an uncontaminated, up-  
 3800 gradient location immediately near the leaking storage tank site. Soil metal remediation is not  
 3801 required for concentrations that are below natural background concentration(s).

3802  
 3803 (c) *Final Storage Tank Cleanup Concentration.* The final numerical soil cleanup  
 3804 concentration for organic chemical compounds shall be the lower numerical value of the total  
 3805 petroleum hydrocarbon concentration, the human health risk assessment, the soil saturation  
 3806 concentration, or the environmental fate and transport considerations. The final numerical soil  
 3807 cleanup concentration value for metals, inorganic compounds, or total petroleum hydrocarbons  
 3808 shall be the lower numerical value of the environmental fate and transport calculation or the  
 3809 human health risk assessment component. The goal of the final cleanup concentration(s) is to

3810 ensure that the remedial action will result in an acceptable cleanup for organic chemical  
3811 compounds, inorganic compounds, TPH, and metals.

3812

3813 **Section 42. Vapor Hazards Evaluation.**

3814

3815 (a) Petroleum and/or hazardous substance vapors in soil, the vadose zone, or  
3816 groundwater resulting from a storage tank release and that have caused, or have a potential to  
3817 cause, an explosive atmosphere in a private residence, business, or other occupied structure, or in  
3818 a confined space such as utility conduits, sewer mains, etc., shall be evaluated and remediated  
3819 according to this Section. Monitoring for explosive atmosphere action levels shall be completed  
3820 using a properly calibrated and operating combustible gas meter. Explosive atmosphere action  
3821 levels for volatile substances are defined as 25% of the substance's lower explosive limit (LEL).

3822

3823 (b) When an explosive action level is exceeded, immediate measures shall be taken to  
3824 reduce the explosive environment to below the action level. If a mechanical remediation system  
3825 capable of mitigating vapors is installed, it shall be operated and maintained until, at a minimum,  
3826 the explosive atmosphere has been eliminated. Atmospheric monitoring shall continue until the  
3827 explosive atmosphere has been eliminated.

3828

3829 (c) Contamination may not remain in soil or groundwater if the contamination could  
3830 cause a release of vapors to receptors in an indoor structure or confined space at levels that  
3831 present a human health hazard.

3832

3833 (d) Chemical substance airborne concentrations in *occupational* environments are  
3834 regulated by the Wyoming Occupational Health and Safety Division, Department of  
3835 Employment, for protection of employees in a work place.

3836

3837 (e) Hazardous substance *indoor* air quality action levels shall be calculated using the  
3838 following equations:

3839

3840 (i) *Carcinogens:*

3841

3842 Equation 15:

3843

3844

$$IAAL(\mu g/m^3) = \frac{(RISK)(ABW)(LIFE)(UCF)}{(CPF_i)(BR)(ABS)(DUR)}$$

3845

3846

3847

3848

3849 Equation 16:

3850

$$IAAL(\mu g/m^3) = \frac{(RfD_i)(ABW)(UCF)(HQ)}{(BR)(ABS)}$$

3851

3852

3853 where:

3854

3855 *IAAL* = Indoor Air Action Level,  $\mu\text{g}/\text{m}^3$ .

3856 *RISK* = Cancer risk ( $1 \times 10^{-6}$ ).

3857 *RfDi* = Inhalation Reference Dose; chemical specific.

3858 *CPF<sub>i</sub>* = Inhalation Cancer Potency Factor; chemical specific.

3859 *ABW* = Average body weight (70 kg).

3860 *UCF* = Unit conversion factor (1,000  $\mu\text{g}/\text{mg}$ ).

3861 *BR* = Indoor breathing rate ( $15 \text{ m}^3/\text{day}$ ).

3862 *ABS* = Absorption percentage (100%).

3863 *HQ* = Hazard quotient (1).

3864 *LIFE* = Lifetime exposure (70 years).

3865 *DUR* = Duration of exposure (30 years).

3866

3867 Values for *inhalation* toxicological reference doses (*RfDi*) and/or cancer potency factors (*CPF<sub>i</sub>*)  
3868 shall be obtained from current data in the U.S. Environmental Protection Agency's (EPA)  
3869 Integrated Risk Information System (IRIS), the Health Effects Assessment Summary Tables  
3870 (HEAST), or the EPA Region IX Preliminary Remediation Goals Data Base. Where  
3871 toxicological data are not listed in these references, the administrator shall establish the  
3872 appropriate airborne concentration standard.

3873

3874 When an airborne concentration is confirmed in any building that equals or exceeds calculated  
3875 concentrations and the source of the contaminant airborne concentration is known to be  
3876 associated with a leaking storage tank release, immediate action shall be implemented. Action  
3877 shall be taken to eliminate the airborne health hazard to the applicable airborne occupational or  
3878 indoor air quality action level. Immediate action shall continue until the airborne  
3879 concentration(s) is below those levels specified in this Section.

3880

3881 **Section 43. Default Organic Compound and Total Petroleum Hydrocarbon Soil**  
3882 **Cleanup Concentrations.** When site-specific geological data/information are not available to  
3883 calculate soil cleanup concentrations, default remediation standards shall be used. Default  
3884 remediation standards shall be based on exposure of the most sensitive receptor using both oral  
3885 ingestion and inhalation pathways and the potential for soil contamination to migrate to  
3886 groundwater. The default soil condition for organic compounds has been established as a sandy  
3887 clay formation with a minimal organic carbon content of 0.1% and a depth to the first  
3888 groundwater table from the bottom of the default contaminated soil zone equal to 1 foot. The  
3889 default thickness of contaminated soil is 5 feet. The annual precipitation rate is 14 inches per  
3890 year with a 50% infiltration rate. These conservative default soil conditions indicate residential  
3891 exposures with protection of groundwater quality to EPA/STP MCLs or DWELs.

3892

3893 PART K

3894  
3895 DELIVERY PROHIBITION  
3896 AT NON-COMPLIANT FACILITIES  
3897

3898 **Section 44. Delivery Prohibition.**  
3899

3900 (a) *Reasons for Restricting Delivery.* Regulated substance delivery prohibition to a  
3901 storage tank system shall be required when the department becomes aware that:

3902  
3903 (i) The owner and/or operator has not performed leak detection on the tanks  
3904 as required in Part D for any period exceeding 60 days;

3905  
3906 (ii) The most recently required cathodic protection test has not been done  
3907 within 90 days of the due date as required by Section 11(b);  
3908

3909 (iii) A cathodic protection test done in accordance with Section 11 has failed  
3910 and has not been repaired and re-tested within 90 days of the date when the original failing result  
3911 was obtained;

3912  
3913 (iv) The most recently required pressure test of the lines has not been done as  
3914 required by Section 14(g)(i)(B) or Section 14(g)(ii) (as applicable) within 90 days of the date  
3915 due;

3916  
3917 (v) The most recently required functional test of automatic line leak detectors  
3918 has not been done as required by Section 14(g)(i)(B) or Section 37 within 90 days of the date  
3919 due;

3920  
3921 (vi) The owner and/or operator has failed to report a suspected release under  
3922 Section 19 when required by Part D and/or Section 19;

3923  
3924 (vii) The owner and/or operator has reported a suspected release under Section  
3925 19 but has failed to initiate the release investigation required under Section 20 or 21;

3926  
3927 (viii) The owner and/or operator has reported a confirmed release, but repairs  
3928 have not been made to the storage tank system;

3929  
3930 (ix) The owner and/or operator has failed to pay the storage tank registration  
3931 fee, which is due on January 1 of each year, by April 1 of the year when due;

3932  
3933 (x) The owner and/or operator has failed to follow any Order issued by the  
3934 department, unless that Order is under appeal to the Environmental Quality Council;

3935  
3936 (xi) Any required monitoring device has been purposely tampered with or  
3937 turned off (unless it is being repaired);

- 3938 (xii) Any record required to be kept under this Chapter has been falsified;  
3939  
3940 (xiii) Any regulated tank is discovered without overfill and spill prevention  
3941 devices in place as required by Sections 6(c) or 35(f);  
3942  
3943 (xiv) Any regulated tank, or any piping or ancillary equipment that routinely  
3944 contains product and is not isolated from ground contact, is discovered without corrosion  
3945 protection or cathodic protection systems in place as required by Sections 6(a)(ii), 6(b)(ii), or  
3946 35(d);  
3947  
3948 (xv) Any regulated AST has not been fully upgraded in accordance with Part I;  
3949  
3950 (xvi) The operator's annual inspection has not been performed within 90 days of  
3951 the due date as required by Section 13(g) or Section 36(f);  
3952  
3953 (xvii) The department becomes aware that there has been no Licensed Class A or  
3954 B Operator for a facility for 90 days or more;  
3955  
3956 (xviii) Repaired tanks and piping have not been tightness tested within 30 days of  
3957 repair completion;  
3958  
3959 (ixx) Cathodic protection impressed current systems have not been inspected at  
3960 least every 60 days;  
3961  
3962 (xx) A storage tank system has been installed or substantially modified and is  
3963 being operated without written authorization by the department; or  
3964  
3965 (xxi) Spill prevention equipment, containment sumps, or overfill prevention  
3966 device testing has not been completed within 60 days of the due date as required in Section  
3967 10(d); or  
3968  
3969 (xxii) Pressurized piping is being operated without an automatic line leak  
3970 detector in accordance with Section 14(g)(i)(B).  
3971  
3972 (b) *Delivery Prohibition Procedures.* When any of the delivery prohibition reasons in  
3973 Section 44(a) exist, the department shall issue an Administrative Order to prohibit deliveries of  
3974 the regulated substance.  
3975  
3976 (i) The department shall obtain, from the Wyoming Fuel Tax Administration,  
3977 the names of suppliers of record for any facility that is the subject of an Administrative Order  
3978 under this subsection. Those suppliers shall also be ordered not to deliver regulated substances  
3979 in the Administrative Order.  
3980  
3981 (ii) Administrative Orders issued under this Part shall include the following  
3982 information:

- 3983 (A) The name of the owner and/or operator of the storage tank system;  
3984  
3985 (B) The street address of the facility where the storage tank system is  
3986 located;  
3987  
3988 (C) The Storage Tank Program facility ID number;  
3989  
3990 (D) The specific tanks at the facility that are affected; and  
3991  
3992 (E) The reason for the delivery prohibition.  
3993

3994 (iii) An Administrative Order issued under this Section is final as soon as it is  
3995 signed by the Director. Administrative Orders may be appealed to the Environmental Quality  
3996 Council.  
3997

3998 (iv) The department shall immediately issue a Notice of Compliance to all  
3999 entities covered by the Administrative Order that lifts the prohibition when the facility has been  
4000 returned to compliance. Such notice shall include the same information required in Section  
4001 44(b)(ii)(A) through (D).  
4002

4003 (c) *Posting on the Internet.* The department shall immediately post a copy of the  
4004 Administrative Order on its website whenever a facility is prohibited from accepting deliveries of  
4005 regulated substances. The department shall also post a Notice of Compliance on its website  
4006 when the prohibition has been lifted. The notice shall state which tanks at the facility are  
4007 affected.  
4008

4009 (d) *Red Tagging.* The department may, at any time after issuing an Administrative  
4010 Order under this Part, place a tag on the affected tanks stating:  
4011

4012 “DELIVERY PROHIBITION

4013 Deliveries of any regulated substance to this tank have been prohibited by the State of Wyoming,  
4014 Storage Tank Program. Delivery of any regulated substance to this tank while the delivery  
4015 prohibition exists is a violation of Chapter 1, Storage Tank Program, Solid and Hazardous Waste  
4016 Division Rules and Regulations, Storage Tanks, Part K.”  
4017

4018 (e) *Violation of this Part.* It is a violation of this Part for any person to purchase a  
4019 regulated substance for delivery to, or to deliver a regulated substance to, any storage tank that is  
4020 the subject of any Administrative Order issued under this Part.  
4021

4022 (f) *One-Time Fuel Delivery Allowance.* The department may issue a one-time fuel  
4023 delivery allowance to a tank prohibited from receiving a delivery so the owner and/or operator  
4024 can perform tank and line tightness testing. This delivery shall be for the minimum amount of  
4025 fuel needed to perform the required test.  
4026  
4027

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

4073 Tank Laws - ICC Test W-6.” A Class A Operator is generally the area manager for a company  
4074 with multiple locations.  
4075

4076 (b) *Class B Operator.* All storage tank owners and/or operators shall ensure that the  
4077 person in responsible charge of the day-to-day operation of the storage tanks obtains a Class B  
4078 Operator license from the department. For facilities used to fuel vehicles, the person in  
4079 responsible charge cannot be in responsible charge of more than 15 facilities at the same time.  
4080 The Class B Operator shall be an employee of the facility owner and/or operator.  
4081

4082 (c) *Timing.* Within 90 days of the first date of employment with the company, the  
4083 Class A and Class B Operators shall obtain a Class A or B Storage Tank Operator’s license from  
4084 the department. To obtain this license, the operator(s) shall submit documentary evidence that he  
4085 or she has passed the following tests within the 5 years preceding the application date:  
4086

4087 (i) UST Operators. The International Code Council test “ICC BU Class B  
4088 UST System Operator Exam” (Class B for UST operators); and/or  
4089

4090 (ii) AST Operators. The International Code Council test “Wyoming AST  
4091 System Operators – ICC Test W-5” (Class B for AST operators); or  
4092

4093 (iii) In lieu of both of the above tests, the International Code Council test  
4094 “Wyoming State Specific Storage Tank Laws – ICC Test W-6” (Class A operators).  
4095

4096 (d) *Class C Operators (Service Station Clerks).* The Class C Operator shall be  
4097 trained prior to assuming responsibility for responding to emergencies or alarms. Class C  
4098 Operator training shall include when and how to notify appropriate authorities and the Class A or  
4099 B Operator for the facility. Managers and fuel clerks who work at a service station or  
4100 convenience store, but who are not in responsible charge of the location, shall be trained onsite  
4101 by the Class A or B Operator for that location in all of the following areas:  
4102

4103 (i) Proper procedures to follow in the event of an accident that damages the  
4104 dispensers or any part of the fuel system, including but not limited to, exposed piping and vent  
4105 lines;  
4106

4107 (ii) The location and operation of all emergency shutoff switches, breakers,  
4108 and other controls necessary to completely control all pumps installed on the system;  
4109

4110 (iii) The limits of maintenance items that can be performed by the Class C  
4111 Operator and what items shall be referred to more qualified individuals;  
4112

4113 (iv) Procedures to be followed in the event of a fuel release, regardless of the  
4114 reason for that release;  
4115

4116 (v) Records that shall be kept (if any) on each shift to ensure that release  
4117 detection is properly done;



4118 (vi) Delivery procedures and hazards;  
4119  
4120 (vii) Alarm recognition with emphasis on the significance and proper response  
4121 to each and every alarm on the storage tank system; and  
4122  
4123 (viii) The location and function of all leak detection and CP devices and  
4124 systems.  
4125  
4126 (e) *Spill Reporting.* The Class C Operator shall notify the Class A or Class B  
4127 Operator for his or her facility whenever there has been a release of regulated substances.  
4128  
4129 (f) *License Renewal.* Persons who are licensed as UST or AST Operators shall renew  
4130 their license every 5 years.  
4131  
4132 (g) *Reciprocity with Other States and Cities.* The department may accept a license  
4133 from another state or a city after review and approval of the licensing requirement for that state  
4134 or city. The license shall be accepted in lieu of taking the International Code Council tests  
4135 required in Section 46(c)(i) for Class B UST Operators only. A license from another state or a  
4136 city that does not require passing an exam, but only requires continuing education units, will not  
4137 be accepted.  
4138  
4139 (h) *Documentation.* Owners and/or operators shall maintain a list of designated Class  
4140 A, Class B, and Class C Operators and maintain records verifying that training and retraining, as  
4141 applicable, have been completed. Training records shall be kept on site and available for  
4142 inspection.  
4143  
4144 (i) The list shall identify all Class A, Class B, and Class C Operators currently  
4145 designated for the facility. The list shall include names, class of operator trained, date the  
4146 operator assumed duties, date each completed initial training, and date of any retraining.  
4147  
4148 (ii) Records verifying completion of training or retraining shall be a paper or  
4149 electronic record for each operator class. The records, at a minimum, shall identify the name of  
4150 the trainee, the date the Class C Operators were trained, the expiration date on the license for  
4151 Class A or B Operators, and the name of the Class A or B Operator that trained each Class C  
4152 Operator. Owners and/or operators shall maintain these records for as long as the Class A, Class  
4153 B, or Class C Operators are designated.  
4154  
4155 (i) *Retraining Required.* When a Notice of Violation is issued to a facility for any of  
4156 the reasons listed in Section 44(a)(i) through (xxii), the Class B Operator shall be retrained.  
4157 Retraining shall be in the form of retaking (if previously taken) or taking (if not previously taken)  
4158 and passing the “Wyoming State Specific Storage Tank Laws – ICC Test W-6” exam. The Class  
4159 B Operator shall take this test within 90 days of the Notice of Violation date. If there is more  
4160 than one Class B Operator for the facility, at a minimum one of the Class B Operators shall take  
4161 the exam.  
4162

4163 (j) *Notification.* When a licensed operator is no longer responsible for the facility,  
4164 the facility owner and/or operator shall notify the department in writing within 30 days of the  
4165 date the operator is no longer responsible for the facility.  
4166

4167 **Section 47. Cathodic Protection Tester and Corrosion Expert Licensing.**  
4168

4169 (a) *Cathodic Protection Testers.* Persons performing cathodic protection testing shall  
4170 obtain a license from the department. To obtain this license, the tester shall submit documentary  
4171 evidence that he or she is:

4172 (i) Certified by NACE as a cathodic protection tester within the 3 years  
4173 preceding the application date; or

4174 (ii) Certified by the Steel Tank Institute as a cathodic protection tester within 3  
4175 years preceding the application date.  
4176

4177 (b) *Corrosion Experts.* Persons designing impressed current systems,  
4178 sacrificial/galvanic anode systems, or repairs to these systems shall be licensed by the  
4179 department. To obtain a license, the designer shall submit documentary evidence that he or she:

4180 (i) Is certified as a corrosion expert by NACE; or

4181 (ii) Possesses a current Professional Engineer's license issued by the  
4182 Wyoming Board of Registration for Professional Engineers and Land Surveyors and has 3 years'  
4183 experience in the field of cathodic protection.  
4184

4185 (c) *License Renewal.* Licenses issued for Cathodic Protection Testers and Corrosion  
4186 Experts shall expire on the date when the underlying certification by NACE or STI expires, or on  
4187 the date an underlying license issued by another state or city expires, or on the date the  
4188 underlying P.E. license expires. Persons holding those licenses shall renew their license prior to  
4189 the date when the license expires.  
4190

4191 (d) *Reciprocity with Other States and Cities.* The department may accept a license  
4192 from another state or a city after review and approval of the licensing requirement for that state  
4193 or city. The license shall be accepted in lieu of the NACE certification or STI certification  
4194 required in Section 47(a) and/or (b). A license from another state or a city that does not require  
4195 passing an exam, but only requires continuing education units, will not be accepted.  
4196

4197 **Section 48. Tank and Line Tester Licensing.**  
4198

4199 (a) *License Required.* Before performing tank and line tests, testers shall obtain a  
4200 license from the department. To obtain a license, the tester shall submit documentary evidence  
4201 that he or she has passed:  
4202

4207 (i) The International Code Council test entitled “Tank Tightness Testing –  
4208 ICC Test U-3” within the preceding 5 years; and

4209  
4210 (ii) The manufacturers’ training for the type of tank and line tests performed.

4211  
4212 (b) *License Renewal.* Persons who are licensed as tank and line testers shall renew  
4213 their license every 5 years.

4214  
4215 (c) *Reciprocity with Other States and Cities.* The department may accept a license  
4216 from another state or a city after review and approval of the licensing requirement for that state  
4217 or city. The license shall be accepted in lieu of the International Code Council test required in  
4218 Section 48(a)(i). A license from another state or a city that does not require passing an exam, but  
4219 only requires continuing education units, will not be accepted.

4220

4221 **Section 49. License Revocation.**

4222

4223 (a) *Reasons.* The department may revoke or refuse to issue any of the licenses  
4224 required under Sections 45 through 48 for the following reasons:

4225

4226 (i) *Submission of Falsified Data.* The department has documentary proof that  
4227 information submitted to the department for the purpose of obtaining a license was falsified or  
4228 misrepresented;

4229

4230 (ii) *False Reporting.* Submission of any report to the department that is shown  
4231 by the tester as passing when the test actually shows a failing result; or

4232

4233 (iii) *License Revoked.* Any issuing agency (ICC, NACE, the Wyoming Board  
4234 of Registration for Professional Engineers and Land Surveyors, or the manufacturer of test  
4235 equipment) revokes the certifications required for a license.

4236

4237 (b) *Continuation of Expiring Licenses.* When a licensee has made timely and  
4238 sufficient application for renewal of a license or a new license, the existing license does not  
4239 expire until the application has been reviewed by the department. If the application is denied or  
4240 the terms of a new license are limited, the license does not expire until the last day the licensee  
4241 seeks review by the department or a later date fixed by order of the reviewing court.

4242

4243 (c) *Notification.* Whenever the department intends to revoke any license issued under  
4244 this Part, the department shall notify the licensee by certified mail (return receipt requested) or by  
4245 process server, stating the facts or conduct that warrants the intended action. The notice shall  
4246 also provide evidence that the licensee was given an opportunity to show compliance with all  
4247 lawful requirements for the retention of the license. The licensee shall have 15 days from the  
4248 date of his/her receipt of the notice to provide additional evidence or information with respect to  
4249 the revocation of the license. Revocation of licenses is a final department action subject to  
4250 appeal to the Environmental Quality Council under Department of Environmental Quality, Rules  
4251 of Practice and Procedure, Chapter 1, General Rules.

4252

4253 PART M

4254 FIELD-CONSTRUCTED TANKS AND  
4255 AIRPORT HYDRANT FUEL DISTRIBUTION SYSTEMS  
4256

4257  
4258 **Section 50. General Requirements.**  
4259

4260 (a) *Implementation of Requirements.* Owners and/or operators shall comply with the  
4261 requirement of this Part for UST systems with field-constructed tanks and airport hydrant  
4262 systems as follows:

4263  
4264 (i) For UST systems installed on or before October 13, 2015, the  
4265 requirements are effective according to the following schedule:  
4266

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

4267  
4268 (ii) For UST systems installed after October 13, 2015, the requirements apply  
4269 at installation.

4270  
4271 (b) Not later than October 13, 2018, all owners and/or operators of previously  
4272 deferred UST systems shall submit a one-time notice of tank system existence to the department  
4273 using a form developed by the department. Owners and/or operators of UST systems in use as of  
4274 October 13, 2015, shall demonstrate financial responsibility at the time of submission of the  
4275 notification form.

4276  
4277 (c) Except as provided in Section 51, owners and/or operators shall comply with the  
4278 requirements of Parts A through E, G, L, and N.

4279  
4280 (d) In addition to the codes of practice listed in Section 6, owners and/or operators  
4281 may use military construction criteria, such as the UFC 3-460-01 as referenced in Section 2,  
4282 when designing, constructing, and installing airport hydrant systems and UST systems with field-  
4283 constructed tanks.

4284  
4285 **Section 51. Additions, Exceptions, and Alterations for UST Systems with Field-  
4286 Constructed Tanks and Airport Hydrant Systems.**  
4287

4288 (a) *Exception to Piping Secondary Containment Requirement.* Owners and/or  
4289 operators may use single-wall piping when installing or replacing piping associated with UST

4290 systems with field-constructed tanks greater than 50,000 gallons and piping associated with  
4291 airport hydrant systems. Piping associated with UST systems with field-constructed tanks less  
4292 than or equal to 50,000 gallons not part of an airport hydrant system shall meet the secondary  
4293 containment requirement when installed or replaced.

4294  
4295 (b) *Upgrade Requirements.* Not later than October 13, 2018, airport hydrant systems  
4296 and UST systems with field-constructed tanks where installation commenced on or before  
4297 October 13, 2015, shall meet the following requirements or be permanently closed pursuant to  
4298 Part G.

4299  
4300 (i) *Corrosion Protection.* UST system components in contact with the ground  
4301 that routinely contain regulated substances shall meet one of the following:

4302  
4303 (A) Except as provided in paragraph (a) of this Section, the new UST  
4304 system performance standards for tanks and piping found in Section 6; or

4305  
4306 (B) Be constructed of metal and cathodically protected according to  
4307 NACE International Standard Practice SP0285 as referenced in Section 2, or NACE International  
4308 Standard Practice SP0169 as referenced in Section 2, or National Leak Prevention Association  
4309 Standard 631 as referenced in Section 2, or ASTM Standard G158 as referenced in Section 2; and  
4310 shall meet the following:

4311  
4312 (I) Cathodic protection shall meet the requirements found in  
4313 Section 6 for tanks and piping.

4314  
4315 (II) Tanks over 10 years old without cathodic protection shall  
4316 be assessed to ensure the tank is structurally sound and free of corrosion holes prior to adding  
4317 cathodic protection. The assessment shall be by internal inspection or another method  
4318 determined by the department to adequately assess the tank for structural soundness and  
4319 corrosion holes.

4320  
4321 (ii) *Spill and Overfill Prevention Equipment.* To prevent spilling and  
4322 overfilling associated with product transfer to the UST system, all UST systems with field-  
4323 constructed tanks and airport hydrant systems shall comply with new UST system spill and  
4324 overfill prevention equipment requirements specified in Section 6.

4325  
4326 (c) *Walkthrough Inspections.* In addition to the walkthrough inspection requirements  
4327 in Section 13(d), owners and/or operators shall inspect the following additional areas for airport  
4328 hydrant systems at least once every 30 days if confined space entry according to the  
4329 Occupational Safety and Health Administration (29 CFR Part 1910) is not required or at least  
4330 annually if confined space entry is required. Walkthrough inspection records shall be maintained  
4331 in accordance with Section 13(f).

4332  
4333 (i) *Hydrant pits.* Visually check for any damage, remove any liquid or debris,  
4334 and check for any leaks; and

4335 (ii) Hydrant piping vaults. Check for any hydrant piping leaks.  
4336  
4337 (d) *Release Detection.* Owners and/or operators of UST systems with field-  
4338 constructed tanks and airport hydrant systems shall begin meeting the release detection  
4339 requirements described in this subpart not later than October 13, 2018.  
4340  
4341 (i) Methods of Release Detection for Field-Constructed Tanks. Owners  
4342 and/or operators of field-constructed tanks with a capacity less than or equal to 50,000 gallons  
4343 shall meet the release detection requirements in Part D. Owners and/or operators of field-  
4344 constructed tanks with a capacity greater than 50,000 gallons shall meet either the requirements  
4345 in Part D (except Sections 16(d) or (e) shall be combined with inventory control) or use one or a  
4346 combination of the following alternative methods of release detection:  
4347  
4348 (A) Conduct an annual tank tightness test that can detect a 0.5 gallon  
4349 per hour leak rate;  
4350  
4351 (B) Use an automatic tank gauging system to perform release detection  
4352 at least every 30 days that can detect a leak rate less than or equal to 1 gallon per hour. This  
4353 method shall be combined with a tank tightness test that can detect a 0.2 gallon per hour leak rate  
4354 performed at least every 3 years;  
4355  
4356 (C) Use an automatic tank gauging system to perform release detection  
4357 at least every 30 days that can detect a leak rate less than or equal to 2 gallons per hour. This  
4358 method shall be combined with a tank tightness test that can detect a 0.2 gallon per hour leak rate  
4359 performed at least every 2 years;  
4360  
4361 (D) Perform vapor monitoring (conducted in accordance with Section  
4362 16(d) for a tracer compound placed in the tank system) capable of detecting a 0.1 gallon per hour  
4363 leak rate at least every 2 years.  
4364  
4365 (E) Perform inventory control (conducted in accordance with  
4366 Department of Defense Directive 4140.25, or A4A Airport Fuel Facilities Operations and  
4367 Maintenance Guidance Manual (both as referenced in Section 2), or equivalent procedures) at  
4368 least every 30 days that can detect a leak equal to or less than 0.5 percent of flow-through; and  
4369  
4370 (I) Perform a tank tightness test that can detect a 0.5 gallon per  
4371 hour leak rate at least every 2 years; or  
4372  
4373 (II) Perform vapor monitoring or groundwater monitoring  
4374 (conducted in accordance with Sections 16(d) or (e), for the stored regulated substance) at least  
4375 every 30 days; or  
4376  
4377 (F) Another method approved by the department if the owner and/or  
4378 operator can demonstrate that the method can detect a release as effectively as any of the

4379 methods allowed in this Section. In comparing methods, the department shall consider the size  
 4380 of release that the method can detect and the frequency and reliability of the detection.

4381  
 4382 (ii) Methods of Release Detection for Piping. Owners and/or operators of  
 4383 underground piping associated with field-constructed tanks less than or equal to 50,000 gallons  
 4384 shall meet the release detection requirements in Part D. Owners and/or operators of underground  
 4385 piping associated with airport hydrant systems and field-constructed tanks greater than 50,000  
 4386 gallons shall follow either the requirements in Part D (except Sections 16(d) or (e) shall be  
 4387 combined with inventory control) or use one or a combination of the following alternative  
 4388 methods of release detection:

4389  
 4390 (A) Perform a semiannual or annual line tightness test at or above the  
 4391 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

4394  
 4395 Piping segment volumes ≥ 100,000 gallons not capable of meeting the maximum 3.0 gallon per  
 4396 hour leak rate for the semiannual test may be tested at a leak rate up to 6.0 gallons per hour  
 4397 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.

4399  
 4400 (B) Perform vapor monitoring (conducted in accordance with Section  
 4401 16(d) for a tracer compound placed in the tank system) capable of detecting a 0.1 gallon per hour  
 4402 leak rate at least every 2 years.

4403  
 4404 (C) Perform inventory control (conducted in accordance with  
 4405 Department of Defense Directive 4140.25, or A4A Airport Fuel Facilities Operations and

4406 Maintenance Guidance Manual (both as referenced in Section 2), or an equivalent procedure) at  
4407 least every 30 days that can detect a leak equal to or less than 0.5 percent of flow-through; and  
4408

4409 (I) Perform a line tightness test (conducted in accordance with  
4410 this Section using the leak rates for the semiannual test) at least every 2 years; or  
4411

4412 (II) Perform vapor monitoring or groundwater monitoring  
4413 conducted in accordance with Sections 16(d) or (e) for the stored regulated substance at least  
4414 every 30 days; or  
4415

4416 (D) Another method approved by the department if the owner and/or  
4417 operator can demonstrate that the method can detect a release as effectively as any of the  
4418 methods allowed in this Section. In comparing methods, the department shall consider the size  
4419 of release that the method can detect and the frequency and reliability of detection.  
4420

4421 (iii) Records for Release Detection. Owners and/or operators shall maintain  
4422 release detection records according to the recordkeeping requirements in Section 18.  
4423

4424 (e) *Applicability of Closure Requirements to Previously Closed UST Systems.* When  
4425 directed by the department, the owner and/or operator of an UST system with field-constructed  
4426 tanks or airport hydrant systems permanently closed before October 13, 2015, shall assess the  
4427 excavation zone. The UST system shall be closed in accordance with Part G if releases from the  
4428 UST may, in the judgment of the department, pose a current or potential threat to human health  
4429 and the environment.  
4430

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4451 PART N

4452 FINANCIAL ASSURANCE FOR UNDERGROUND STORAGE TANKS

4453 **Section 52. Applicability.**

4454  
4455  
4456  
4457 (a) All owners and/or operators of petroleum underground storage tank (UST)  
4458 systems as defined in W.S. § 35-11-1415 are subject to Part N requirements. UST systems with  
4459 field-constructed tanks and airport hydrant fuel distribution systems are also subject to Part N  
4460 requirements in accordance with the schedule in Part M.

4461  
4462 (b) If the owner and/or operator of a petroleum UST are not the same person, only  
4463 one person is required to demonstrate financial responsibility. However, both parties are liable in  
4464 the event of noncompliance.

4465  
4466 (c) When determining compliance with this Part, the total number of owned and/or  
4467 operated USTs includes not only those located in Wyoming, but also those located at all  
4468 locations throughout the United States.

4469 **Section 53. Financial Responsibility Amount and Scope.**

4470  
4471  
4472 (a) Petroleum USTs or contaminated site owners and/or operators not eligible for the  
4473 state corrective action account shall demonstrate financial responsibility for taking corrective  
4474 action and for compensating third parties for bodily injury or property damage caused by  
4475 accidental releases arising from the operation of the USTs. Financial responsibility shall be  
4476 provided in the following per-occurrence amounts:

4477  
4478 (i) Owners and/or operators of petroleum USTs located at petroleum  
4479 marketing facilities, or that handle an average of more than 10,000 gallons of petroleum per  
4480 month based on annual throughput for the previous calendar year; \$1 million.

4481  
4482 (ii) All other owners and/or operators of petroleum USTs; \$500,000.

4483  
4484 (b) For the purposes of Sections 53(c) and (f) only, a “petroleum UST” means a  
4485 single containment unit and does not mean combinations of single containment units.

4486  
4487 (c) Owners and/or operators of petroleum USTs not eligible for the state corrective  
4488 action account shall demonstrate financial responsibility for taking corrective action and for  
4489 compensating third parties for bodily injury or property damage caused by accidental releases  
4490 arising from the operation of petroleum USTs in at least the following annual aggregate amounts:

4491  
4492 (i) Owners and/or operators of 1 to 100 petroleum USTs; \$1 million.

4493  
4494 (ii) Owners and/or operators of 101 or more petroleum USTs; \$2 million.

4496 (d) Except as provided in Section 53(e), if an owner and/or operator not eligible for  
4497 the state corrective action account uses separate mechanisms or separate combinations of  
4498 mechanisms to demonstrate financial responsibility for taking corrective action and  
4499 compensating third parties for bodily injury or property damage caused by an accidental release,  
4500 the amount of assurance provided by each mechanism or combination of mechanisms must be in  
4501 the full amount specified in Sections 53(a) and (c).

4502  
4503 (e) If an owner and/or operator not eligible for the state corrective action account uses  
4504 separate mechanisms or separate combinations of mechanisms to demonstrate financial  
4505 responsibility for different petroleum USTs, the annual aggregate required shall be based on the  
4506 number of tanks covered by each such separate mechanism or combination of mechanisms.

4507  
4508 (f) Owners and/or operators not eligible for the state corrective action account shall  
4509 review the amount of aggregate assurance provided whenever additional petroleum USTs are  
4510 acquired or installed. If the total number of petroleum USTs for which assurance shall be  
4511 provided exceeds 100, the owner and/or operator shall demonstrate financial responsibility in the  
4512 amount of at least \$2 million of annual aggregate assurance by the anniversary of the date on  
4513 which the mechanism demonstrating financial responsibility became effective. If assurance is  
4514 being demonstrated by a combination of mechanisms, the owner and/or operator shall  
4515 demonstrate financial responsibility in the amount of at least \$2 million of annual aggregate  
4516 assurance by the first occurring effective date anniversary of any one of the mechanisms  
4517 combined (other than a financial test or guarantee) to provide assurance.

4518  
4519 (g) The amounts of financial assurance required under this Section exclude legal  
4520 defense costs.

4521  
4522 (h) The required per-occurrence and annual aggregate coverage amounts do not in  
4523 any way limit the liability of the owner and/or operator.

4524  
4525 (i) Owners and/or operators of 101 or more USTs who are eligible for the state  
4526 corrective action account shall demonstrate financial responsibility for compensating third parties  
4527 for bodily injury or property damage caused by accidental releases arising from the operation of  
4528 petroleum USTs. The amount required is \$1 million dollars such that a total aggregate amount of  
4529 \$2 million is reached when the financial responsibility of \$1 million provided by the state is  
4530 applied.

4531  
4532 **Section 54. Allowable Mechanisms and Combinations of Mechanisms.**

4533  
4534 (a) Petroleum USTs or contaminated site owners and/or operators not eligible for the  
4535 state corrective action account shall use any one or combination of mechanisms to demonstrate  
4536 financial responsibility under this Chapter for one or more USTs. Demonstration shall be  
4537 pursuant to the requirements of 40 CFR 280.95, 280.96, 280.97, 280.98, 280.99, and/or 280.102,  
4538 and 280.103 when required by the mechanism chosen; and for local governments, 40 CFR  
4539 280.104, 280.105, 280.106, and/or 280.107, all as referenced in Section 2. The demonstration  
4540 shall be executed on forms provided by the department.

4541 (b) An owner and/or operator may use a guarantee under 40 CFR 280.96 or surety  
4542 bond under 40 CFR 280.98, both as referenced in Section 2, only if the Wyoming Attorney  
4543 General submits in writing to the department that the guarantee or surety bond is executed as  
4544 described in the CFR and is a legally valid and enforceable obligation in Wyoming.  
4545

4546 (c) An owner and/or operator may use self-insurance in combination with a guarantee  
4547 only if, for the purpose of meeting the requirements of the financial test under this Part, the  
4548 financial statements of the owner and/or operator are not consolidated with the financial  
4549 statements of the guarantor.  
4550

4551 (d) The department's trust and agency account will serve as the standby trust fund as  
4552 described in 40 CFR 280.103, as referenced in Section 2, which is required in conjunction with a  
4553 guarantee, surety bond, and letter of credit.  
4554

4555 **Section 55. General Provisions for Allowable Mechanisms.**  
4556

4557 (a) *Self-Insurance, Guarantee, Local Government Financial Test, or Local*  
4558 *Government Guarantee.*  
4559

4560 (i) The application and letter from the Chief Financial Officer shall be  
4561 executed on forms provided by the department.  
4562

4563 (ii) Audited financial statements prepared and certified by an independent  
4564 certified public accountant shall accompany the self-insurance or guarantee financial test to  
4565 document data submitted.  
4566

4567 (iii) In the case of a guarantee, the owner and/or operator shall submit  
4568 documentation verifying the guarantor's power and authority to enter into guarantee agreements  
4569 on behalf of the owner and/or operator.  
4570

4571 (iv) Within 60 days of owner and/or operator submission of all materials  
4572 necessary to base a decision, the administrator shall make a determination on the self-insurance  
4573 or guarantee financial test. The administrator shall approve or reject such application and  
4574 declare, in writing, the reasons for such action. The decision shall be based on all information  
4575 submitted to the department.  
4576

4577 (b) *Insurance and Risk Retention Group Coverage.*  
4578

4579 (i) The certificate of insurance shall be submitted on a form acceptable to the  
4580 Department.  
4581

4582 (ii) The insurance shall be issued by a company licensed to do business in  
4583 Wyoming.  
4584

- 4585 (iii) Surplus line carriers shall be in compliance with the surplus lines laws  
4586 under the Wyoming Insurance Code.
- 4587  
4588 (iv) Risk retention groups shall be registered with the Wyoming Department of  
4589 Insurance.
- 4590  
4591 (c) *Surety Bond.*
- 4592  
4593 (i) The surety bond shall be executed on forms provided by the department.  
4594  
4595 (ii) The surety company shall be licensed to do business in Wyoming.  
4596  
4597 (iii) The bond shall be signed by an authorized Wyoming resident agent.  
4598
- 4599 (d) *Letter of Credit.* The letter of credit shall be executed in the format provided by  
4600 the department.
- 4601  
4602 (e) *Trust Fund.* The trust agreement shall be executed on forms provided by the  
4603 department.
- 4604  
4605 (f) *Standby Trust Fund* (required in conjunction with guarantee, surety bond, or letter  
4606 of credit). The department's Trust and Agency Account shall serve as the standby trust fund.  
4607
- 4608 (g) *Bond Rating Test for Local Governments or Local Government Fund.* The letter  
4609 from the chief financial officer shall be executed on forms provided by the department.  
4610
- 4611 (h) *Local Government Fund.* The letter from the chief financial officer shall be  
4612 executed on forms provided by the department.

4613  
4614 **Section 56. Financial Assurance Mechanism Substitutions.**  
4615

- 4616 (a) An owner and/or operator may substitute an alternate financial assurance  
4617 mechanism, provided that at all times an effective financial assurance mechanism or combination  
4618 of mechanisms that satisfy the requirements of this Part is maintained.
- 4619  
4620 (b) After obtaining alternate financial assurance and concurrence by the  
4621 administrator, an owner and/or operator may cancel a financial assurance mechanism by  
4622 providing notice to the financial assurance provider.

4623  
4624 **Section 57. Cancellation or Nonrenewal by a Financial Assurance Provider.**  
4625

- 4626 (a) Except as otherwise provided, a financial assurance provider may cancel or fail to  
4627 renew an assurance mechanism by sending a notice of termination by certified mail to the owner  
4628 and/or operator and the department.  
4629

4630 (i) A local government guarantee, guarantee, surety bond, or letter of credit  
4631 may not be terminated until 120 days after the date on which the owner and/or operator and the  
4632 department receive the notice of termination, as evidenced by the return receipt. Additionally,  
4633 termination may not occur without the administrator's written consent, which shall be granted  
4634 only when the conditions of the financial assurance have been met.

4635  
4636 (ii) Insurance, risk retention group coverage, or state funded assurance  
4637 termination may not occur until 60 days after the date on which the owner and/or operator and  
4638 the department receive the notice of termination, as evidenced by the return receipt.

4639  
4640 (b) If a financial responsibility provider cancels or fails to renew for reasons other  
4641 than provider incapacity as specified in Section 58, the owner and/or operator shall obtain  
4642 alternate coverage as specified in this Part within 60 days after receipt of the notice of  
4643 termination. If the owner and/or operator fails to obtain alternate coverage within 60 days after  
4644 receipt of the notice of termination, the owner and/or operator shall notify the administrator of  
4645 such failure before the 60-day period ends and submit:

4646  
4647 (i) The financial assurance provider's name and address;

4648  
4649 (ii) The effective date of termination; and

4650  
4651 (iii) Evidence of financial assurance mechanism subject to the termination  
4652 maintained in accordance with Section 58(b).

4653  
4654 (c) The department shall provide notification by mail to owners and/or operators  
4655 using the state Corrective Action and Financial Responsibility Accounts whenever either account  
4656 is incapable of paying for assured corrective actions or third-party damages. The owner and/or  
4657 operator shall have 30 days from the date of notification to provide alternate financial assurance.

4658  
4659 (d) Self insurance may be cancelled by the owner and/or operator only after 90 day's  
4660 notice to the administrator, and upon receipt of the administrator's written consent.  
4661 Administrator's consent shall be granted only when the requirements of the bond have been  
4662 fulfilled.

4663  
4664 **Section 58. Reporting by Owner and/or Operator Not Eligible for the State**  
4665 **Corrective Action Account.**

4666  
4667 (a) An owner and/or operator who receives notification of the following shall notify  
4668 the department within 5 days of:

4669  
4670 (i) Commencement of any proceeding under Title 11 (Bankruptcy), U.S.  
4671 Code, naming a provider of financial assurance as a debtor;

4672  
4673 (ii) Suspension or revocation of the authority of a provider of financial  
4674 assurance to issue a financial assurance mechanism;

- 4675 (iii) Failure of a guarantor to meet the requirements of the financial test;  
4676  
4677 (iv) Other incapacity of a provider of financial assurance; or  
4678  
4679 (v) As required by 40 CFR 280.95(g), as referenced in Section 2, and Section  
4680 57 of this Chapter.

4681  
4682 (b) An owner and/or operator shall obtain and submit evidence of financial  
4683 responsibility as required by Section 59(b) within 30 days of the owner and/or operator receiving  
4684 any notices under Section 58(a).

4685  
4686 (c) An owner and/or operator shall report to the administrator as required by 40 CFR  
4687 280.95(g), as referenced in Section 2, concerning self insurance.

4688  
4689 (d) Reporting is required under the conditions of Section 57(b).

4690  
4691 (e) An owner and/or operator of a new UST installation shall certify compliance with  
4692 the financial responsibility requirements in accordance with Section 9 and W.S. § 35-11-1419.

4693  
4694 **Section 59. Recordkeeping.**

4695  
4696 (a) Owners and/or operators shall maintain evidence of all financial assurance  
4697 mechanisms used to demonstrate financial responsibility under this Part until released from the  
4698 requirements under Section 61. An owner and/or operator shall maintain such evidence at the  
4699 UST site or the owner's and/or operator's place of business. Records maintained off site shall be  
4700 made available upon request by the department.

4701  
4702 (b) The following financial responsibility evidence shall be maintained:

4703  
4704 (i) Copy of the instrument worded as specified in the CFR for assurance  
4705 mechanisms specified in 40 CFR 280.95 through 280.99, 280.102, or 280.104 through 280.107,  
4706 all as referenced in Section 2.

4707  
4708 (ii) Copy of the chief financial officer's letter based on year-end financial  
4709 statements for the most recently completed financial reporting year for a financial test or  
4710 guarantee. Such evidence shall be on file no later than 120 days after the close of the financial  
4711 reporting year.

4712  
4713 (iii) Copy of the bond rating published within the last 12 months by Moody's  
4714 or Standard & Poor's for a local government bond rating test.

4715  
4716 (iv) Copy of the guarantor's bond rating published within the last 12 months  
4717 by Moody's or Standard & Poor's for a local government guarantee where the guarantor's  
4718 demonstration of financial responsibility relies on the bond rating test.

4719

4720 (v) Copy of the signed insurance policy or risk retention group coverage  
4721 policy, with the endorsement or certificate of insurance and any amendments to the agreements  
4722 for an insurance policy or risk retention group coverage.

4723  
4724 (vi) The following documents for a local government fund:

4725  
4726 (A) A copy of the state constitutional provision or local government  
4727 statute, charter, ordinance, or order dedicating the fund.

4728  
4729 (B) Year-end financial statements for the most recently completed  
4730 financial reporting year showing the amount in the fund. If the fund is established using  
4731 incremental funding backed by bonding authority, the financial statements shall show the  
4732 previous year's balance, the amount of funding during the year, and the closing balance in the  
4733 fund.

4734  
4735 (C) If the fund is established using incremental funding backed by  
4736 bonding authority, also maintain documentation of the required bonding authority, including  
4737 either the results of a voter referendum or attestation by the State Attorney General.

4738  
4739 (vii) Copy of the guarantor's year-end financial statements for the most recently  
4740 completed financial reporting year showing the amount of the fund for a local government  
4741 guarantee supported by the local government fund.

4742  
4743 (viii) Updated copy of a certification of financial responsibility for any  
4744 assurance mechanism specified in 40 CFR 280.95 through 280.99, 280.102, or 280.104 through  
4745 280.107, all as referenced in Section 2. The certification shall be worded as follows (except that  
4746 instructions in brackets are to be replaced with the relevant information):

4747  
4748 Certification of Financial Responsibility

4749  
4750 [Owner and/or operator name] hereby certifies that it is in compliance with the  
4751 requirements of the Wyoming Solid and Hazardous Waste Division Rules and Regulations,  
4752 Storage Tank Program, Chapter 1, Part N.

4753  
4754 The financial assurance mechanism(s) used to demonstrate financial responsibility under  
4755 this Chapter is/are as follows:

4756  
4757 [For each mechanism list the type of mechanism, name of issuer, mechanism number (if  
4758 applicable), amount of coverage, effective period of coverage and if the mechanism covers  
4759 "taking corrective action" and/or "compensating third parties for bodily injury and property  
4760 damage caused by" either "sudden accidental releases" or "non-sudden accidental releases" or  
4761 "accidental releases."]

4762  
4763 [Signature of owner and/or operator, name of owner and/or operator, title, date],  
4764 [signature of witness or notary, name of witness or notary, and date].

4765 (ix) The owner and/or operator shall update this certification whenever the  
4766 financial assurance mechanism(s) used to demonstrate financial responsibility change(s).  
4767

4768 **Section 60. Drawing on Financial Assurance Mechanisms.**  
4769

4770 (a) The administrator shall require the guarantor, surety, or institution issuing a letter  
4771 of credit to place the amount of funds stipulated by the administrator, up to the limit of funds  
4772 provided by the financial assurance mechanism, into the department's Trust and Agency  
4773 Account, which operates as a standby trust if:  
4774

4775 (i) The owner and/or operator fails to establish alternate financial assurance  
4776 within 60 days after receiving notice of cancellation of the guarantee, surety bond, letter of  
4777 credit, or, as applicable, other financial assurance mechanism; and the administrator determines  
4778 or suspects that a release from a UST covered by the mechanism has occurred and so notifies the  
4779 owner and/or operator, or the owner and/or operator has notified the administrator pursuant to  
4780 Part E of a release from a UST covered by the mechanism; or  
4781

4782 (ii) The conditions of Section 60(b)(i) or 60(b)(ii)(A) or (B) are satisfied.  
4783

4784 (b) The administrator may draw on a standby trust fund when:  
4785

4786 (i) The administrator makes a final determination that a release has occurred  
4787 and immediate or long-term corrective action for the release is needed, and the owner and/or  
4788 operator, after appropriate notice and opportunity to comply, has not conducted corrective action  
4789 as required under Part E.  
4790

4791 (ii) The administrator has received either:  
4792

4793 (A) Certification from the owner and/or operator, the third-party  
4794 liability claimant(s), and both party's attorneys that a third-party liability claim should be paid.  
4795 The certification shall be worded as specified in 40 CFR 280.112, as referenced in Section 2, or  
4796

4797 (B) A valid final court order establishing a judgment against the owner  
4798 and/or operator for bodily injury or property damage caused by an accidental release from a UST  
4799 covered by financial assurance under this Part and the administrator determines that the owner  
4800 and/or operator has not satisfied the judgment.  
4801

4802 (c) If the administrator determines that the corrective action costs and third-party  
4803 liability claims eligible for payment under Section 60(b) may exceed the balance of the standby  
4804 trust fund and the obligation of the financial assurance provider, the first priority for payment  
4805 shall be corrective action costs necessary to protect human health and the environment. The  
4806 administrator shall pay third-party liability claims in the order in which the administrator receives  
4807 certifications under Section 60(b)(ii)(A) and valid court orders under Section 60(b)(ii)(B).  
4808



4809           **Section 61. Release from the Requirements.** An owner and/or operator is no longer  
4810 required to maintain financial responsibility under this Part for a UST after the tank has been  
4811 properly closed or, if corrective action is required, after corrective action has been completed and  
4812 the tank has been properly closed in accordance with Part G.  
4813

4814           **Section 62. Bankruptcy or Other Incapacity of Owner and/or Operator or**  
4815 **Financial Assurance Guarantor.** Within 10 days after commencement of any proceeding under  
4816 Title 11 (Bankruptcy), U.S. Code, naming a guarantor providing financial assurance as debtor,  
4817 such guarantor shall notify the owner and/or operator by certified mail of such commencement as  
4818 required under the terms of the guarantee specified in 40 CFR 280.96, as referenced in Section 2.  
4819

4820           **Section 63. Replenish Guarantee, Letter of Credit, or Surety Bonds.**

4821  
4822           (a) Any time after a financial assurance mechanism is drawn on by the administrator  
4823 below the full amount of required coverage, the owner and/or operator shall:  
4824

4825                   (i) By the anniversary date of the financial mechanism, replenish the value of  
4826 financial assurance to equal the full amount of required coverage; or  
4827

4828                   (ii) By the anniversary date of the financial mechanism, acquire another  
4829 financial assurance mechanism for the amount by which funds have been reduced; or  
4830

4831                   (iii) Within 30 days of the withdrawal of the deductible amount required under  
4832 the state fund mechanism, replenish the value of the required deductible coverage.  
4833

4834           (b) If at any time after a standby trust fund is funded upon the instruction of the  
4835 administrator with funds drawn from a guarantee, letter of credit, or surety bond, and the amount  
4836 in the standby trust is reduced below the full amount of coverage required, the owner and/or  
4837 operator shall by the anniversary date of the financial mechanism from which the funds were  
4838 drawn:  
4839

4840                   (i) Replenish the value of financial assurance to equal the full amount of  
4841 coverage required; or  
4842

4843                   (ii) Acquire another financial assurance mechanism for the amount by which  
4844 funds in the standby trust have been reduced.  
4845

4846           (c) For purposes of this Section, the full amount of coverage required is the amount of  
4847 coverage to be provided by Section 53. If a combination of mechanisms is used to provide the  
4848 assurance funds which are drawn upon, replenishment shall occur by the date of the mechanism  
4849 with the earliest anniversary date.  
4850