

**CHAPTER 9**

**WYOMING GROUNDWATER POLLUTION CONTROL PERMIT**

**TABLE OF CONTENTS**

Section 1. Authority. .... 1

Section 2. Definitions ..... 1

Section 3. Applicability; General. .... 4

Section 4. Control of Subsurface Discharges; Permit Required; Exemptions. .... 6

Section 5. Permit Application. .... 7

Section 6. Application Requirements. .... 8

Section 7. Application Processing Procedures; Permit Issuance or Denial; Permit  
 Duration..... 11

Section 8. Permit Conditions and Content. For any subsurface discharge excepting a  
 special process discharge: ..... 13

Section 9. Special Permit Conditions. .... 15

Section 10. Environmental Monitoring Program for Groundwaters of the State..... 15

Section 11. Sample Collection and Analysis. .... 16

Section 12. Records and Reports..... 17

Section 13. Prohibitions. .... 17

Section 14. Permit Revocation. .... 18

Section 15. Responsibility; Transfer of Responsibility..... 18

Section 16. Public Information..... 18

Section 17. Public Participation. .... 18

Section 18. Public Hearing..... 19

Section 19. Special Process Discharge/In Situ Mining; Permit Conditions an Content;  
 Records and Reports; Permit Revocation; Responsibility; Public  
 Participation; Public Hearing. .... 20

Section 20. Civil or Criminal Remedy. .... 21

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29

## CHAPTER 9

### WYOMING GROUNDWATER POLLUTION CONTROL PERMIT

**Section 1. Authority.** These regulations are promulgated pursuant to W.S. 35-11-101 through 1104, specifically 302, and no person shall cause, threaten or allow violations of any provision contained herein. Nothing in these regulations shall interfere or conflict with the authority of the United States Nuclear Regulatory Commission (NRC), under the Atomic Energy Act of 1954 and the Uranium Mill Tailings Radiation Control Act of 1978.

**Section 2. Definitions.** The following definitions supplement those definitions contained in Section 35-11-103 of the Wyoming Environmental Quality Act.

(a) "Aquifer" means a zone, stratum or group of strata that can store and transmit water in sufficient quantities for a specific use.

(b) "Area of review" means the area for which information and analyses will be submitted as part of a groundwater pollution control permit application, and reviewed for issuance of a permit; the extent of the area will never be less than an area within a 1/4 mile radius of the discharge site. The area of review may coincide with a permit area and adjacent lands, or may be determined by use of a mathematical model and formula ~~which~~ that have been developed to describe groundwater hydraulics and flow.

Methodology for determining the area of review is not limited to a specific method, as long as the method used can be documented as being appropriate. The formula recommended by the U.S. Environmental Protection Agency for determining the radius of endangering influence may be used. This formula is given as:

$$R = \sqrt{\frac{2.25 KHt}{S_{pG_B} \left( \frac{h_w - h_{bo}}{S_P G_B} \right) \left( \frac{4\pi KH}{2.3Q} \right)}}$$

where:

- 31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44
- R = Radius from injection or discharge well (feet)
  - K = Hydraulic conductivity of the injection or discharge zone (feet/day)
  - H = Thickness of the injection or discharge zone (feet)
  - t = Time of injection or discharge (days)
  - S = Storage coefficient (dimension less)
  - Q = Injection or discharge rate (feet /day)
  - h<sub>bo</sub> = Original hydrostatic head of formation fluid (feet) measured from top of injection or discharge zone
  - h<sub>w</sub> = Hydrostatic head of underground source of water (feet) measured from top of injection or discharge zone
  - S<sub>p</sub>G<sub>B</sub> = Specific gravity of formation fluid (dimension less)
  - π = 3.14

45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90

(c) "Background" means the constituents or parameters and the concentrations or measurements ~~which~~ that describe water quality and water quality variability prior to the subsurface discharge.

(d) "Best management alternative" means the subsurface discharge operation or action described ~~which~~ that, after problem assessment and examination of alternative methods, is proposed as the most practically effective (including technological, economic, environmental and institutional considerations) means of waste management.

(e) "Commercial waste" means waste or pollutants resulting from a commercial activity.

(f) "Discharge area" means the area designated by an owner/operator and/or specified in a permit or permit application as the area ~~which~~ that will be involved in a subsurface discharge operation. It may coincide with the area of review.

(g) "Discharge zone" means the receiver proposed in the permit application or into which the permittee has been authorized by permit to discharge pollution or wastes.

(h) "Domestic waste" means pollutants or waste from residences, business buildings, institutions and public water supplies.

(i) "Dry well" means any well ~~which~~ that, upon completion, does not collect groundwater.

(j) "Endangerment" means exposure to actions or activities ~~which~~ that could pollute ~~g~~Groundwaters of the ~~S~~state.

(k) "Fluid" means any material ~~which~~ that flows or moves whether semisolid, liquid, sludge, gas or any other form or state.

(l) "Groundwater" means subsurface water that fills available openings in rock or soil materials such that they may be considered water saturated under hydrostatic pressure.

(m) "Groundwaters of the State" are all bodies of underground water ~~which~~ that are wholly or partially within the boundaries of the State.

(n) "Hazardous material (or wastes)" means any matter (or wastes) of any description including petroleum related products and radioactive material ~~which~~ that, when discharged into any waters of the State, presents an imminent and substantial hazard to public health or welfare and shall include all materials (or wastes) so designated by the U.S. Environmental Protection Agency in the Federal Register for March 13, 1978 (Part III), Water Programs, Hazardous Substances.

(o) "Industrial waste" is waste or pollutants resulting from an industrial activity.

- 91  
92 (p) "Logging data" means the written record progressively describing the strata and  
93 geologic and hydrologic character thereof to include electrical, radioactivity and similar surveys,  
94 a lithologic description of all cores, and test data.  
95  
96 (q) "Mechanical integrity" means the sound and unimpaired condition of all  
97 components of the well or facility or system for control of a subsurface discharge and associated  
98 activities.  
99  
100 (r) "Mining wastes" refers to waste or pollutants resulting from any mining activity.  
101  
102 (s) "Monitor" means obtain fluid samples for analysis and/or water level measure-  
103 ments, or observe and record.  
104  
105 (t) "Municipal waste" means pollutants or waste from a municipal collection, storage  
106 or treatment facility.  
107  
108 (u) "New subsurface discharge facility" means a subsurface discharge facility for  
109 which construction starts after the effective date of these regulations.  
110  
111 (v) "Permit" means a Wyoming Groundwater Pollution Control Permit, unless  
112 otherwise identified.  
113  
114 (w) "Recharge" means replenishment of groundwater.  
115  
116 (x) "Receiver" means any zone, interval, formation or unit in the subsurface into  
117 which fluids and pollutants are discharged.  
118  
119 (y) "Special process discharge" is a subsurface discharge for the purpose of recover-  
120 ing a product or fluid at the surface, and includes any process used to obtain products or  
121 solutions of uranium, copper, oil shale, hydrocarbon-impregnated sands and sandstones and tar  
122 sands not amenable to oil field production modes, sulfur, coal and lignite, bedded salt, sodium,  
123 potassium, phosphate or any other naturally occurring mineral commodity; excepting, it does not  
124 include the primary or enhanced recovery of naturally occurring oil and gas.  
125  
126 (z) "Subsidence" means a lowering of a portion of the earth's surface or substrata  
127 ~~which~~ that is detectable by visual observation or by instrumentation above or below the surface.  
128  
129 (aa) "Subsidence control discharge" means a discharge into a non-oil or gas producing  
130 receiver to reduce or eliminate subsidence associated with the withdrawal of subsurface fluids or  
131 solids.  
132  
133 (bb) "Subsurface" means any level below the surface.  
134  
135 (cc) "Subsurface discharge" means a discharge to a receiver.  
136

137 (dd) "Subsurface discharge facility" means any construction, such as a well, or  
138 utilization by a permittee to discharge pollution or waste into a receiver.

139  
140 (ee) "System" means each and all components of a subsurface discharge facility.

141  
142 (ff) "Toxic characteristics (or wastes)" are those characteristics (or wastes) ~~which~~ that  
143 are due to the presence of: Those substances or combinations of substances including disease-  
144 causing agents, ~~which~~ that, after discharge and upon exposure, ingestion, inhalation or  
145 assimilation into any environmentally significant organism, either directly from the  
146 environmental or indirectly by ingestion through food chains, may cause death, disease,  
147 behavioral abnormalities, cancer, genetic malfunctions, physiological malfunctions (including  
148 malfunctions in reproduction) or physical deformation in such organisms or their offspring; and  
149 include all substances so designated as toxic or hazardous by the U.S. Environmental Protection  
150 Agency in the Federal Register for December 24, 1975 (Part IV), Water Programs, National  
151 Interim Primary Drinking Water Regulations.

152  
153 (gg) "Vadose zone" means the unsaturated zone in the earth, between the land surface  
154 and the top of the first saturated aquifer ~~which~~ that is not a perched water aquifer. The vadose  
155 zone characteristically contains liquid water under less than atmospheric pressure and water  
156 vapor and air or other gases at atmospheric pressure. Perched water bodies exist within the  
157 vadose zone.

158  
159 (hh) "Well" means an opening, excavation, shaft or hole in the ground allowing or  
160 used for a subsurface discharge or for the purpose of extracting a fluid, mineral, product or  
161 pollutant from the subsurface or for monitoring.

162  
163 **Section 3. Applicability; General.**

164  
165 (a) These regulations shall apply to any discharge to the subsurface including the  
166 vadose zone ~~which~~ that could render any ~~g~~Groundwater of the State unsuitable or degrade it for  
167 all uses for which it was suitable prior to discharge. Class I and Class V facilities are regulated  
168 pursuant to Chapters 13 and 16, respectively and are not regulated under Chapter 9.

169  
170 (b) A permit for a discharge shall not be required if the discharge is part of a facility  
171 for which an application has been made to the Division for a Permit to Construct, Install or  
172 Modify Public Water Supplies and Wastewater Facilities.

173  
174 (c) Discharges, for the purpose of these regulations, are described and identified as:

175  
176 (i) Discharges of commercial, municipal and industrial wastes, which include  
177 but are not limited to:

178  
179 (A) Municipal wastes;

180  
181 (B) Chemical, refining and manufacturing wastes;

182

- 183 (C) Mining and mineral processing wastes;  
184  
185 (D) Oil field wastes including water produced with oil and gas;  
186  
187 (E) Power-generation wastes;  
188  
189 (F) Geothermal fluid return or geothermal resource wastes;  
190  
191 (G) Nuclear and radioactive wastes from any source; and  
192  
193 (H) Toxic and hazardous wastes from any source.  
194

195 Not included is a discharge ~~which~~ that is further described by the Administrator as  
196 a discharge of commercial, municipal and industrial wastes of limited time and scope for the  
197 purpose of considering the effects specified in W.S. 35-11-302 (a) (vi) (A) through (E), or for  
198 demonstrating compatibility between the waste and the receiver and fluids in the receiver. This  
199 type of discharge is identified as a Miscellaneous Discharge in Section 3.(c) (iii) (H).

200  
201 (ii) Special process discharges:  
202

203 (A) Special process discharges include processes or operations called  
204 in situ gasification, in situ mining, in situ leaching, borehole mining, slurry mining, solution  
205 mining or by any other descriptive terminology; which in fact consist of discharging fluids,  
206 including air, oxygen or steam, into and circulating through subsurface rock formations or  
207 mineral accumulations, or of using a hydraulic jet to slurrify a mineral commodity or of injecting  
208 fluids to fracture rock strata and/or stimulate production, or a process involving borehole  
209 fragmentation or blasting; as part of a process or operation, excluding the production of naturally  
210 occurring oil and gas, whereby a subsurface commodity is extracted remotely by activities that  
211 are conducted from the surface.  
212

213 (B) Not included is a special process discharge ~~which~~ that is further  
214 described by the Administrator as a discharge of limited time and scope for the purpose of  
215 considering the effects specified in W.S. 35-11-302 (a) (vi) (A) through (E), or for demonstrating  
216 compatibility between the injected fluid and the receiver and fluids in the receiver. This type of  
217 discharge is identified as a Miscellaneous Discharge in Section 3 (c) (iii) (H).  
218

219 (iii) Discharges for the purpose of artificial recharge and miscellaneous  
220 discharges, ~~which~~ include but are not limited to:

- 221  
222 (A) Groundwater replenishment to augment water supplies.  
223  
224 (B) Injection(s) of chemicals used as tracers.  
225  
226 (C) Discharge from drainage well(s) ~~which~~ that accept(s) urban storm  
227 water runoff or highway runoff or excess ponded surface water.  
228

- 229 (D) Discharge of domestic wastes.  
230  
231 (E) Discharge for subsidence control not associated with oil and gas  
232 production.  
233  
234 (F) Discharge by means of a facility constructed or utilized to  
235 discharge into an abandoned underground mine for purposes other than oil and gas storage or  
236 commercial, municipal or industrial waste disposal or storage.  
237  
238 (G) Discharge by means of a dry well not constructed or utilized for  
239 any other identified discharge.  
240  
241 (H) Discharge of commercial, municipal and industrial waste or a  
242 special process discharge from any facility ~~which~~ that utilizes subsurface discharges in an  
243 activity or operation of limited time and scope conducted to determine facts bearing upon the  
244 reasonableness of the pollution involved or ~~which~~ that may result from the subsurface discharge,  
245 the economic reasonableness of reducing or eliminating the source of pollution and the effect  
246 upon the environment, pursuant to W.S. 35-11-302 (a) (vi) (A) through (E); or for demonstrating  
247 the applicability of a proposed methodology, or for demonstrating that pollution can be contained  
248 and will not migrate into other receivers or to the surface; or for demonstrating compatibility  
249 between waste and the receiver and fluids in the receiver.

250  
251 A miscellaneous discharge ~~which~~ that is a special process discharge of Section 3 (c) (ii)  
252 (B), for the purpose of these regulations, is the same as an in situ mining research, in a  
253 development testing project of Land Quality Rules and Regulations, Chapter ~~24~~18, Section 2(a).  
254

255 **Section 4. Control of Subsurface Discharges; Permit Required; Exemptions.**

- 256  
257 (a) New subsurface discharges shall be allowed only pursuant to the Act and  
258 provisions of Water Quality Rules and Regulations Chapter 8, Quality Standards for Wyoming  
259 Groundwaters, and these regulations.  
260  
261 (b) No new subsurface discharge to ~~g~~Groundwaters of the State shall be allowed:  
262  
263 (i) Unless a permit has been obtained from the  
264 Department; or  
265 (ii) Unless the discharge is exempt from the requirements of these regulations.  
266  
267 (c) Specifically exempt from these permitting regulations are:  
268  
269 (i) New discharges associated with mineral exploration and water, including  
270 geothermal well drilling:  
271  
272 (A) Drilling fluids and additives used in drilling or development; and  
273  
274 (B) Pits constructed or utilized to hold drilling fluids or drilling wastes.



- 275  
276 (ii) New discharges associated with the drilling of oil and gas production  
277 wells:  
278  
279 (A) Drilling fluids and additives; and  
280  
281 (B) Pits constructed or utilized to hold drilling fluids or drilling wastes.  
282  
283 (iii) New discharges for the purpose of storage of oil and gas or other  
284 hydrocarbons.  
285  
286 (iv) New discharges for the purpose of the enhanced recovery of naturally  
287 occurring oil and gas.  
288  
289 (v) Aboveground facilities authorized by permits issued pursuant to Wyoming  
290 Water Quality Rules and Regulations.  
291  
292 (vi) Overburden replacement associated with mining operations authorized by  
293 permits issued pursuant to Land Quality Division Rules and Regulations of the Department.  
294  
295 (vii) Facilities authorized pursuant to Solid Waste Management Rules and  
296 Regulations of the Department.  
297  
298 (viii) Skim ponds associated with oil production.  
299  
300 (d) Existing subsurface discharges to ~~g~~Groundwaters of the State excluded or exempt  
301 from these regulations are those originating from:  
302  
303 (i) Aboveground domestic sewage treatment and disposal facilities, including  
304 individual disposal systems constructed prior to January 15, 1975;  
305  
306 (ii) Any kind of facility mentioned in Section 4. (c) ~~which~~ that is existing and  
307 operating at the time these regulations go into effect.  
308

309 **Section 5. Permit Application.**

- 310  
311 (a) The owner/operator of a subsurface discharge facility shall apply for a permit in  
312 accordance with these regulations.  
313  
314 (i) The operation of a new subsurface discharge or facility not exempt or  
315 excluded from these regulations is prohibited unless the owner/operator has obtained a permit  
316 from the Department.  
317  
318 (ii) The owner/operator of an existing discharge facility not exempt or  
319 excluded from these regulations shall have a period of one (1) year within which to show compli-  
320 ance with the requirements of these regulations; excepting that for a special process discharge,



321 the operator shall comply with requirements of Land Quality Rules and Regulations, Chapter ~~21~~  
322 18, Section 2(a) for in situ mining.

323  
324 (b) After the effective date of these regulations, a modification in the operation of any  
325 subsurface discharge facility ~~which~~ that is capable of causing or increasing groundwater  
326 pollution in excess of standards or permit conditions will require a new or modified permit  
327 before the modification is implemented or constructed.

328  
329 **Section 6. Application Requirements.**

330  
331 (a) A complete application for a permit for the purpose of underground management  
332 of commercial, municipal and industrial wastes shall include the following:

333  
334 (i) Complete identification including name, address and telephone number of  
335 the owner/operator and the facility, and location of the facility by section, township, range and  
336 county.

337  
338 (ii) Type, source, and chemical, physical, radiological and toxic characteristics  
339 of the discharge; and the management procedure.

340  
341 (iii) The name, description, depth, geology and hydrology of the receiver; and  
342 fluid chemistry of the receiver, including total dissolved solids.

343  
344 (iv) A description of groundwater or receiver testing procedures used.

345  
346 (v) Water quality information, including background water quality data,  
347 ~~which~~ that will facilitate the classification of any groundwater ~~which~~ that may be affected by the  
348 proposed discharge.

349  
350 (vi) A listing of the locations of all water wells in the area of review and the  
351 status of each.

352  
353 (vii) Construction and engineering details of the facility.

354  
355 (viii) Operating data.

356  
357 (ix) Methods and procedures for inspection of the facility and operations, and  
358 for detecting failure of the well(s) and system in a timely fashion.

359  
360 (x) Information ~~which~~ that shows that the discharge can be controlled and will  
361 not migrate into other receivers or to the surface, or will not adversely affect the quality of other  
362 water resources.

363  
364 (xi) Maps and sections:

365  
366 (A) Location;

- 367  
368 (B) General geology;  
369  
370 (C) Area geohydrology.  
371  
372 (xii) Plans:  
373  
374 (A) For monitoring volume and chemistry of the discharge, and water  
375 quality of nearby water wells.  
376  
377 (B) For monitoring injection and annular fluid pressures of the  
378 discharge well and for minimizing the possibility of fracturing confining strata above and below  
379 the discharge zone.  
380  
381 (C) Contingency plans to cope with all shut-ins, malfunctions or well  
382 failures to prevent endangerment of groundwater.  
383  
384 (xiii) Documentation to show that the discharge will not impair existing water  
385 supply sources or rights, be hazardous to public health or eliminate an opportunity to economi-  
386 cally recover or store valuable minerals or groundwater in the receiver.  
387  
388 (xiv) The applicant will affirmatively demonstrate or document mechanical  
389 integrity of the well or system; and that the discharge is compatible with the receiver and fluids  
390 in the receiver and the operation is in conformity with provisions and standards of Quality  
391 Standards for Wyoming Groundwaters and these regulations.  
392  
393 (xv) The applicant will provide a written evaluation of alternative disposal  
394 practices demonstrating that subsurface discharge is the best management alternative.  
395  
396 (b) An application for a permit for the purpose of a special process discharge may be  
397 a copy of the application for an in situ mining permit meeting the requirements of Land Quality  
398 Rules and Regulations, Chapter ~~24~~ 18, Section 2(a), and shall include but not be limited to:  
399  
400 (i) Complete identification including name, address and telephone number of  
401 the owner/operator and the facility, and location of the facility by section, township, range and  
402 county.  
403  
404 (ii) A site facility description and engineering and operating data, including:  
405  
406 (A) A map ~~which~~ that accurately locates and identifies the area and  
407 shows the discharge area boundaries and the locations of all wells installed and planned by the  
408 owner/operator.  
409  
410 (B) Construction and engineering details of the facility.  
411

- 412 (C) A description of the special process technique and method of  
413 operation to be used, and the fluid to be injected.  
414
- 415 (iii) The name, geology, description and depth of the receiver; hydrologic  
416 information including, but not limited to, direction and rate of water movement in the receiver;  
417 and fluid chemistry of the receiver, including total dissolved solids.  
418
- 419 (iv) The location and identification of each underground water use in the area  
420 of review.  
421
- 422 (v) Water quality information, including background water quality data,  
423 ~~which that~~ will facilitate the classification of any groundwater ~~which that~~ may be affected by the  
424 proposed discharge.  
425
- 426 (vi) Plans to monitor:  
427
- 428 (A) Discharge operations;  
429
- 430 (B) Quality parameters and fluid levels of ~~G~~groundwaters of the State  
431 in the vicinity of the discharge operation;  
432
- 433 (C) Groundwater flow in the receiver in order to promptly detect the  
434 arrival of waste or pollution at a monitor well installed for this purpose.  
435
- 436 (vii) Information ~~which that~~ shows that the proposed discharge can be  
437 controlled and will not migrate into other receivers or to the surface through previously drilled  
438 wells; and will not migrate into the water source area for any water supply well.  
439
- 440 (viii) Methods and procedures for inspection of the facility and operations, and  
441 for detecting failure of the well(s) and system as required by the permit.  
442
- 443 (ix) The applicant will affirmatively demonstrate or document mechanical  
444 integrity of the well or system; and that groundwater pollution ~~which that~~ may result from a  
445 special process discharge can be eliminated or reduced to an appropriate level, in conformity  
446 with provisions and standards of Wyoming Water Quality Rules and Regulations.  
447
- 448 (c) A complete application for a permit for the purpose of artificial recharge or a  
449 miscellaneous discharge shall include the following:  
450
- 451 (i) Complete identification including name, address and telephone number of  
452 the owner/operator and the facility, and location of the facility by section, township, range and  
453 county.  
454
- 455 (ii) A map of the area showing the location of the discharge facility in relation  
456 to nearby communities and residences, water wells and other pertinent features, and geology.  
457

- 458 (iii) The name, depth, geology of the receiver; hydrology of an aquifer-  
459 receiver; and fluid chemistry of the receiver, including total dissolved solids.  
460
- 461 (iv) Type, source, and chemical, physical, radiological and toxic characteristics  
462 of the discharge.
- 463 (v) Water quality information, including background water quality data,  
464 ~~which~~ that will facilitate the classification of any groundwater ~~which~~ that may be affected by the  
465 proposed discharge.
- 466
- 467 (vi) Construction and engineering details of the facility, and operating data.  
468
- 469 (vii) Other relevant information ~~which~~ that the Administrator determines  
470 necessary as would be required for an application of Section 6. (a) or (b)  
471

472 **Section 7. Application Processing Procedures; Permit Issuance or Denial;**  
473 **Permit Duration.**  
474

- 475 (a) For any subsurface discharge excepting a special process discharge:  
476
- 477 (i) The applicant shall file three (3) copies of his application at the office of  
478 the Department.
- 479
- 480 (ii) The Administrator will review each application received to determine if  
481 the application:
- 482
- 483 (A) Should be accepted as complete; or  
484
- 485 (I) Requires public notice; or  
486
- 487 (II) Does not require public notice.  
488
- 489 (B) Is incomplete; or  
490
- 491 (C) Should be denied.  
492
- 493 (iii) If a permit is denied, written notice of the action shall be given within 30  
494 days after the determination has been made.  
495
- 496 (iv) For each application determined to be complete, the Administrator shall  
497 have prepared a proposed permit that embodies tentative determinations reached. Proposed  
498 permits shall be provided to the applicant and made available to the public for inspection and  
499 copying. If public notice is not required, the proposed permit will be the final permit.  
500
- 501 (v) Prior to the issuance of a permit for a discharge of commercial, municipal  
502 or industrial wastes, the applicant will affirmatively demonstrate that the pollution or waste can  
503 be contained and will not migrate into other receivers or to the surface. The demonstration may

504 be waived if the applicant submits data ~~which~~ that document that the provisions of this  
505 requirement will be accomplished by the proposed operation. If the demonstration is not waived,  
506 the applicant may apply for a miscellaneous discharge permit in lieu of a permit for a discharge  
507 of commercial, municipal or industrial waste.

508  
509 (vi) Prior to the issuance of a permit for a subsurface discharge and at a  
510 minimum of once every five (5) years thereafter for the life of the permit, the operator shall  
511 demonstrate and/or document, as required by the Administrator, the mechanical integrity of the  
512 well or system.

513  
514 (vii) A permit shall be issued within 60 days after receipt of all information if,  
515 acting upon the complete application of the person applying to discharge, the Administrator has  
516 found and determined that the proposed discharge will not result in violation of Quality  
517 Standards for Wyoming Groundwaters, and a public hearing is not required.

518  
519 (viii) Public notice is required for every application for a permit to discharge to  
520 ~~g~~Groundwater of the State ~~which~~ that is an existing source of water supplies; or for the purpose  
521 of underground management of commercial, municipal and industrial wastes.

522  
523 (A) Notice shall be given pursuant to Section 17 of these regulations.

524  
525 (B) If no objections are received, the permit shall be issued within 20  
526 days following the complete comment period.

527  
528 (C) If written objections are filed during the comment period, the  
529 Council shall hold a public hearing pursuant to Section 18 of these regulations.

530  
531 (D) If a hearing is held, the Council shall issue a decision within 60  
532 days after the final hearing. A permit is then issued or denied by the Director no later than 15  
533 days from receipt of the Council's decision.

534  
535 (ix) Permits may be issued on a well-by-well basis or by discharge facility,  
536 project, field, area or other appropriate method.

537  
538 (x) Every permit issued under these regulations will be issued for the life of  
539 the discharge operation excepting as otherwise specified in these regulations.

540  
541 (A) Each issued permit shall be reviewed at least once every five (5)  
542 years.

543  
544 (B) The permit review shall be an evaluation to determine that the  
545 permittee is in compliance with or has substantially complied with all the terms and conditions of  
546 the permit, that the Department has the most recently updated information of the permittee's  
547 discharge and related pertinent activities including records, reports and notices submitted to the  
548 Department by the permittee; and that the mechanical integrity of the discharge well and facility  
549 is intact.

550  
551 (xi) A permit issued for a discharge described in Section 3.(c) (iii) (H) shall be  
552 for a limited period not to exceed a total of 18 months from the date of issuance, and shall not  
553 affect a discharge area larger than 2½ acres, unless a different time and scope are established by  
554 the Director.

555  
556 (b) Permit processing procedures, issuance or denial and duration for a special  
557 process discharge shall be identical to the procedures for an in situ mining permit or license  
558 meeting the requirements and provisions of Land Quality Rules and Regulations, Chapter ~~24~~ 18,  
559 Section 2(a).

560 (i) An application for a special process discharge/in situ mining permit or  
561 license shall be submitted simultaneously to the Water Quality and Land Quality Divisions. Both  
562 Divisions shall review and evaluate the application for compliance with statutory and regulatory  
563 requirements of the Department.

564  
565 (ii) Upon recommendation by the Administrator of the Land Quality Division  
566 and the Administrator of the Water Quality Division, and pursuant to these regulations, the  
567 Director shall issue a single permit by both Divisions for in situ mining.

568  
569 (iii) Prior to the issuance of a permit for a special process discharge, the  
570 applicant will affirmatively demonstrate that the pollution can be eliminated or reduced to an  
571 appropriate level. The demonstration may be waived if the applicant submits data ~~which~~ that  
572 document that the provisions of this requirement will be accomplished by the proposed oper-  
573 ation. If the demonstration is not waived, the applicant may apply for a miscellaneous discharge  
574 permit in lieu of a special process discharge permit.

575  
576 **Section 8. Permit Conditions and Content. For any subsurface discharge except-**  
577 **ing a special process discharge:**  
578

579 (a) The permittee is required to conduct the operation in accordance with statements,  
580 representations and procedures presented in the complete permit application and supporting  
581 documents, as accepted and approved by the Administrator.

582  
583 (b) The subsurface discharge authorized by permit shall be consistent with the  
584 conditions and content of the permit; any modifications ~~which~~ that will result in a violation of  
585 permit conditions shall be reported by submission of a new or amended permit application and  
586 shall not be implemented until a new or modified permit has been issued.

587  
588 (c) After notice and opportunity for a hearing, a permit may be modified, suspended  
589 or revoked in whole or part during its term for cause ~~which~~ that includes, but is not limited to,  
590 any of the following:

591  
592 (i) Violation of the permit;

593  
594 (ii) Obtaining a permit by misrepresentation or failure to fully disclose all  
595 relevant facts;

596  
597  
598  
599  
600  
601  
602  
603  
604  
605  
606  
607  
608  
609  
610  
611  
612  
613  
614  
615  
616  
617  
618  
619  
620  
621  
622  
623  
624  
625  
626  
627  
628  
629  
630  
631  
632  
633  
634  
635  
636  
637  
638  
639

(iii) A change in any condition ~~which~~ that indicates failure of the discharge well or system.

(d) A permit may be modified in whole or part in order to apply more, or less, stringent standards; or prohibitions for a toxic or other substance present in the permittee's discharge, as may be ordered by the Council.

(e) All issued permits shall contain the following:

(i) Authorization for the Director or his representative, upon presentation of his credentials and during normal working hours, to enter the permittee's premises, inspect the discharge and related facilities, review and copy reports and records required by the permit, collect fluid samples for analyses, measure and record water levels and perform any other function authorized by law or regulation.

(ii) Authorization for the permittee to discharge into an identified receiver during a subsurface discharge operation.

(iii) A requirement that each discharge well and associated discharge facilities have mechanical integrity, determined by methods or procedures approved by the Administrator ~~which~~ that demonstrate the unimpaired condition of the facility or the absence of leaks in casing and tubing, and mechanical integrity of all wells and systems be maintained continuously. An approved method or procedure shall reflect the current state of the art in the monitoring of mechanical integrity, in an economically viable manner.

(iv) A requirement that the operation of any well or system ~~which~~ that does not have mechanical integrity, or is in disrepair, be discontinued until mechanical integrity has been restored.

(v) A requirement that immediately following the permanent cessation of subsurface discharge or related activity, or where a well is not completed, the applicant shall notify the Director and follow the procedures prescribed by the Director for plugging and abandonment or discontinuance of related activities.

(vi) A requirement that the discharge or injection pressure be controlled to prevent fracturing of the confining strata above and below the discharge zone.

(vii) A requirement that the discharge or injection pressure, and annulus pressure, of a pressure-operated discharge well be monitored on a continuous basis.

(viii) A requirement that water quality of any groundwater in the area of review be monitored at regular intervals.



640 (ix) Provisions for such measures as the Director finds necessary to ~~assure~~  
641 ensure the availability of adequate financial resources for dealing with discharge wells or sys-  
642 tems ~~which that~~ either are improperly abandoned or may otherwise cause pollution and  
643 contamination of groundwater sources, and with incomplete or inadequate groundwater pollution  
644 reduction or elimination.

645

646 **Section 9. Special Permit Conditions.**

647

648 (a) A permit for a discharge of commercial, municipal or industrial wastes shall  
649 include the following requirements, in addition to the requirements of Section 8:

650

651 (i) A requirement that the Administrator be notified as soon as possible but  
652 no later than 24 hours after either a significant leak in the casing or tubing, or fluid movement  
653 out of the discharge zone has been detected and verified.

654

655 (ii) A condition that pollution or waste ~~which that~~ migrates into an aquifer  
656 containing a useable gGroundwater of the State is a violation of the permit.

657

658 (iii) A condition that the subsurface discharge or operations will terminate  
659 immediately if mechanical integrity of the well or system fails and/or a leak or unauthorized  
660 fluid movement occurs.

661

662 (b) A permit for a discharge for the purpose of artificial recharge or a miscellaneous  
663 discharge shall include the following requirements in addition to the requirements of Section 8:

664

665 (i) A requirement that the Administrator be notified as soon as possible, but  
666 no later than 24 hours after mechanical integrity of the well or system has failed or groundwater  
667 pollution is detected and verified.

668

669 (ii) A condition that pollution or waste resulting from a miscellaneous  
670 discharge, excepting a discharge or operation of limited time and scope described in Section 3.  
671 (c) (iii) (H) of these regulations, ~~which that~~ migrates into an aquifer containing useable  
672 gGroundwater of the State is a violation of the permit.

673

674 (iii) A condition that a discharge or operation of limited time and scope be  
675 evaluated periodically by the Administrator for permit compliance; non-compliance is a permit  
676 violation.

677

678 (iv) A condition that the subsurface discharge or operation can be terminated  
679 by authority of the Administrator for one or more permit violations.

680

681 **Section 10. Environmental Monitoring Program for Groundwaters of the State.**

682

683 (a) Whenever the discharge of any pollution or wastes into gGroundwaters of the  
684 State is caused, threatened or allowed; or the physical, chemical, radiological, biological or

685 bacteriological properties of any ~~g~~Groundwaters of the State may be altered by man's actions, a  
686 monitoring program shall be required and shall be adequate to insure knowledge of migration  
687 and behavior of the pollution or wastes.

688  
689 (i) Monitoring may be required for any circumstance where ~~g~~Groundwaters  
690 of the State could be affected.

691  
692 (ii) The extent and design of a monitoring system will be influenced by the  
693 pollution potential of the proposed discharge or activity.

694  
695 (b) A monitoring program will consist of any or all of the following:

696  
697 (i) Pre-discharge or pre-operational monitoring;

698  
699 (ii) Operational monitoring;

700  
701 (iii) Post-discharge or post-operational monitoring;

702  
703 (iv) Record-keeping and reporting;

704  
705 (v) Such additional requirements established by the Administrator as required  
706 to meet the purposes of the Act.

707  
708 (c) A monitoring program shall include maps and cross-sections, where appropriate,  
709 showing the location of each monitoring site.

710  
711 (d) The discharger or operator is responsible for properly installing, operating,  
712 maintaining and removing all necessary monitoring equipment.

713  
714 **Section 11. Sample Collection and Analysis.** Acceptable procedures and methods for  
715 sample collection and analysis shall be implemented by the applicant or permittee.

716  
717 (a) The procedures used to collect groundwater samples shall ensure that the samples  
718 are representative of the groundwaters being sampled.

719  
720 (b) Sampling shall be of such frequency and of such variety (season, time, location,  
721 depth, etc.) as to properly describe the groundwater.

722  
723 (c) Sampling shall be accomplished by methods and procedures described in the EPA  
724 SW-616 manual, Procedures Manual for Groundwater Monitoring at Solid Waste Disposal  
725 Facilities, August, 1977, unless alternate methods and procedures are approved by the Adminis-  
726 trator.

727  
728 (d) Analysis will be pursuant to provisions of Water Quality Rules and Regulations.

729

730           **Section 12. Records and Reports.** For any subsurface discharge excepting a special  
731 process discharge:

732  
733           (a)     The permittee shall maintain records of all information resulting from monitoring  
734 activities required of him by the permit.

735  
736           (b)     Data obtained as a result of monitoring discharge operations shall be submitted to  
737 the Administrator as requested.

738  
739           (c)     Data obtained as a result of monitoring quality parameters and levels of fluids  
740 shall be submitted to the Administrator as requested.

741  
742           (d)     Upon request by the Administrator, the permittee shall submit construction,  
743 completion and logging data of any discharge, monitor or operational well(s) constructed.

744  
745           (e)     The permittee shall submit a written report to the Administrator of all remedial  
746 work concerning the failure of equipment or operational procedures ~~which~~ that resulted in a  
747 permit violation, at the completion of the remedial work.

748  
749           (f)     Annual reports shall be submitted as required to the Administrator within 30 days  
750 following the anniversary date of the permit.

751  
752           (g)     A comprehensive report shall be submitted for any aborted or curtailed subsurface  
753 discharge operation within 30 days of complete termination of the discharge or associated  
754 activity, in lieu of an annual report.

755  
756           **Section 13. Prohibitions.**

757  
758           (a)     No person, except when authorized by a permit issued pursuant to the Act and  
759 these regulations, shall engage in any subsurface discharge operation ~~which~~ that may:

760  
761                 (i)     Cause, threaten or allow the discharge of any pollution or wastes into any  
762 ~~g~~Groundwaters of the State; or

763  
764                 (ii)    Alter the physical, chemical, radiological, biological or bacteriological  
765 properties of any ~~g~~Groundwaters of the State; or shall

766  
767                 (iii)   Construct, install or operate any discharge system capable of causing or  
768 contributing to pollution of ~~g~~Groundwaters of the State.

769  
770           (b)     No zone or interval other than that represented as the discharge zone in the  
771 complete approved application shall be used as a receiver for the discharge.

772  
773           (c)     No uncased hole may be used as a conduit for the discharge, excepting that  
774 portion of a hole in the discharge zone.

775

776 (d) No annular space between the wall of the hole and casing in the hole may be used  
777 as a conduit for the discharge, excepting in that portion of a hole in the discharge zone.  
778

779 **Section 14. Permit Revocation.** For any subsurface discharge excepting a special  
780 process discharge:  
781

782 (a) The Director shall revoke a permit if at any time he determines that the permit  
783 holder intentionally misstated or failed to provide information that would have resulted in the  
784 denial of a permit and ~~which~~ that good faith compliance with the policies, purposes and  
785 provisions of the Act would have required him to provide.  
786

787 (b) Unless an emergency exists, the revocation of a permit shall become effective  
788 upon 30 days notice to the operator. In case of an emergency, a special meeting of the Council  
789 may cause such revocation to become effective immediately upon receipt of notice thereof by the  
790 permit holder.  
791

792 (c) The Director has the power to issue emergency orders pursuant to W.S. 35-11-  
793 115.  
794

795 **Section 15. Responsibility; Transfer of Responsibility.** For any subsurface discharge  
796 excepting a special process discharge:  
797

798 The owner/operator of record is always responsible for permit compliance. A permit  
799 holder desiring to transfer his permit shall apply to the Administrator; and the potential transferee  
800 shall agree, in a written statement to the Administrator, to be bound by all the terms and  
801 conditions of the original permit. No transfer of a permit will be allowed if the current permit  
802 holder is in violation of the Act or the permit, unless the transferee agrees to bring the permit into  
803 compliance. Upon notification of transfer approval by the Director to both the old and new  
804 operators, the new operator becomes the operator of record.  
805

806 **Section 16. Public Information.** All information received on or with the permit  
807 application shall be made available to the public for inspection and copying except such  
808 information as has been determined to constitute trade secrets or confidential information  
809 pursuant to W.S. 35-11-1101. The Administrator shall provide facilities for inspection and  
810 copying of all non-confidential documents. Copying shall be at the expense of the person  
811 requesting copies.  
812

813 **Section 17. Public Participation.** If public notice of any complete subsurface  
814 discharge permit application other than for a special process discharge is required, public notice  
815 shall be given within ten (10) days after the applicant has been notified that the application is  
816 complete, and in the following manner:  
817

818 (a) Notice shall be circulated by one or more of the following methods:  
819

820 (i) Posting in the post office and other public places of the municipality  
821 nearest the premises;

- 822  
823 (ii) Posting near the entrance to the applicant's premises;  
824  
825 (iii) Publication in local newspapers.  
826  
827 (b) Notice shall be mailed to the applicant and, upon request, to any other person or  
828 group.  
829  
830 (c) The Administrator shall provide a period of not less than 30 days following the  
831 date of public notice during which interested persons may submit their views on the permit  
832 application.  
833  
834 (d) The contents of the public notice described herein shall include the following:  
835  
836 (i) Name of the Division with addresses and phone numbers at which  
837 interested persons may obtain further information and inspect and copy Wyoming Groundwater  
838 Pollution Control Permit forms and related documents.  
839  
840 (ii) Name and address of the applicant and brief description of the location of  
841 the discharge.  
842  
843 (iii) Nature of the applicant's activities or operations ~~which~~ that result in the  
844 discharge.  
845  
846 (iv) A physical, chemical and biological description of the discharge, and a  
847 brief description of proposed discharge procedures.  
848  
849 (v) Depth and geologic name of the receiver.  
850  
851 (vi) A statement of the tentative determination concerning the permit with a  
852 brief explanation of the reasons for the determination. If the tentative determination is to issue  
853 the permit, the proposed date of issuance and a brief description of any proposed special  
854 conditions of the permit.  
855  
856 (vii) A brief description of the procedures used in the permit administration  
857 process, including information relating to the opportunity for public participation in that process.  
858  
859 (viii) Notification of the right to request, in writing, a public hearing, informa-  
860 tion as to how such a request may be made and the final date after which no such request will be  
861 entertained. Such final date shall be the 30th day after provision of notice under this section.  
862

863 **Section 18. Public Hearing.**

- 864  
865 (a) The Administrator shall provide an opportunity for the applicant or any interested  
866 person to request a public hearing with respect to any permit application of Section 17 above.  
867 Any such request shall be filed during the comment period specified in Section 17. (c) and shall

868 indicate the interest of the party and the reasons why a hearing is warranted. If the Administrator  
869 finds that there is a significant degree of public interest in holding the hearing, he will request  
870 that the Council hold such a hearing in the geographic area wherein the proposed discharge is  
871 located, or other appropriate area.

872  
873 (b) Public notice of a hearing held pursuant to paragraph (a) above will be circulated  
874 utilizing any or all of the methods available for notice of the permit application set out in Section  
875 17 (a), and such notice will be provided no less than 30 days in advance of the hearing. The  
876 contents of the public notice will consist of the following:

- 877  
878 (i) Name, address and phone number of the Division;  
879  
880 (ii) Name and address of each applicant whose application will be considered  
881 at the hearing;  
882  
883 (iii) Name of receiver to which each discharge is made and description of the  
884 location of each existing discharge to the receiver in the area of review;  
885  
886 (iv) Brief reference to the public notice issued for each permit application  
887 including identification number and date of issuance;  
888  
889 (v) Information regarding the time and location of the hearing;  
890  
891 (vi) The purpose of the hearing;  
892  
893 (vii) A concise statement of the issues raised by the persons requesting the  
894 hearing;  
895  
896 (viii) A statement that a copy of the proposed permit and other information is  
897 available at the address specified in paragraph (i) above;  
898  
899 (ix) A brief description of the nature of the hearing, including applicable rules  
900 and procedures to be followed in accordance with the Wyoming Administrative Procedure Act;  
901 and  
902  
903 (x) The Administrator shall make available at the hearing, as reasonable,  
904 copies of the subject permit application.

905  
906 **Section 19. Special Process Discharge/In Situ Mining; Permit Conditions an**  
907 **Content; Records and Reports; Permit Revocation; Responsibility; Public Participation;**  
908 **Public Hearing.** The following provisions for a special process discharge shall conform to or be  
909 identical with the same or similar provisions established for in situ mining by Land Quality  
910 Rules and Regulations, Chapter ~~24~~ [18, Section 2\(a\)](#):  
911

- 912 (a) Permit conditions and content;  
913

- 914 (b) Records and reports;
- 915
- 916 (c) Permit revocation;
- 917
- 918 (d) Transfer of responsibility;
- 919
- 920 (e) Public participation; and
- 921
- 922 (f) Public hearing.
- 923

924 **Section 20. Civil or Criminal Remedy.** Nothing in this Chapter shall in any way limit  
925 any existing civil or criminal remedy for any wrongful action arising out of violation of any  
926 provision of the Wyoming Environmental Quality Act or any rule, regulation, standard, permit,  
927 license or variance or order adopted thereunder.