APPENDIX B

PART 257(D) CHECKLIST

Row #	Para-graph	Ref.	Ref.	Ref.	Ref.	Federal Requirement	State Requirement	CCR Landfills	
						Existing and New CCR Landfills and All Lateral Expansions of CCR Landfills			
								Existing	New & Lateral Expansions
1						**§ 257.53 Definitions**	**252:517-1-3**		
2						*The owner of operator of the CCR unit must include all definitions*			
3	all					Specify each definition that differs from those listed in section 257.53.			
4						**§ 257.60 Placement Above the Uppermost Aquifer**	**252:517-5-1**		
5						*The owner of operator of the CCR unit must meet all the requirements (a) through (d).*			
6	(a)					The base of CCR unit should be at least 1.52 meters (5 ft.) above the upper limit of the uppermost aquifer, or, the owner must demonstrate that there will not be an intermittent, recurring, or sustained hydraulic connection with uppermost aquifer during normal and seasonal water table fluctuations. The owner or operator must demonstrate by the dates specified in paragraph (c) of this section that the CCR unit meets the minimum requirements for placement above the uppermost aquifer.			
7	(b)					Obtain a certificate from professional engineer, stating that the requirements meet comply with the recordkeeping requirements specified in § 257.105(e).			
8	(c)	(1)				For an existing surface impoundment, the owner or operator of the CCR unit must complete the demonstration required by paragraph (a) no later than October 17, 2018 for an existing CCR surface impoundment.			
9	(c)	(2)				For a new CCR landfill, new CCR impoundment, or any lateral expansion of a CCR unit, the owner or operator of the CCR unit must complete the demonstration required by paragraph (a) no later than the date of initial receipt of CCR in the CCR unit for a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit.			
10	(c)	(3)				The owner or operator has completed the demonstration required by paragraph (a) of this section when the demonstration is placed in the facility's operating record as required by § 257.105(e).			
11	(c)	(4)				An owner or operator of an existing CCR surface impoundment who fails to demonstrate compliance with the requirements of paragraph (a) of this section by the date specified is subject to the requirements of § 257.101(b)(1).			
12	(c)	(5)				An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstration showing compliance with the requirements of paragraph (a) is prohibited from placing CCR in the CCR unit.			

13	(d)					The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(e), the notification requirements specified in § 257.106(e), and the internet requirements specified in § 257.107(e).			
14						**§ 257.61 Wetlands**	**252:517-5-2**		
15						*The owner of operator of the CCR unit must first meet requirements (a) or requirements (a)(1) through (5), in addition to meeting requirements (b) through (d) and all their components.*			
16	(a)					CCR units must not be located in wetlands, as defined in § 232.2 of this chapter, unless the owner or operator demonstrates by the dates specified in paragraph (c) of this section that the CCR unit meets the requirements of paragraphs (a)(1) through (5) of this section.			
						The owner or operator of CCR unit must:			
17	(a)	(1)				Provide a rebuttal of the presumption that an alternative to the CCR unit is reasonably available that does not involve wetlands where applicable under § 404 of the Clean Water Act or applicable state wetlands laws.			
18	(a)	(2)				The construction and operation of the CCR unit will not cause or contribute to violations of the following applicable regulations:			
19	(a)	(2)	(i)			State or federal water quality standard;			
20	(a)	(2)	(ii)			Toxic effluent standard or prohibition under section 307 of the Clean Water Act;			
21	(a)	(2)	(iii)			Endangered or threatened species, or a critical habitat protected under the Endangered Species Act of 1973;			
22	(a)	(2)	(iv)			Marine Protection, Research, and Sanctuaries Act of 1972			
23	(a)	(3)				*The CCR unit will not cause or contribute to significant degradation of wetlands by addressing all of the following factors:*			
24	(a)	(3)	(i)			Erosion, stability and migration potential of native wetland soils used to support the CCR unit;			
25	(a)	(3)	(ii)			Erosion, stability and migration potential of dredged and fill materials used to support the CCR unit;			
26	(a)	(3)	(iii)			The volume and chemical nature of the CCR;			
27	(a)	(3)	(iv)			Impacts on fish, wildlife, other aquatic resources and their habitat from release of CCR;			
28	(a)	(3)	(v)			The potential effects of catastrophic release of CCR to the wetland and the resulting impacts on the environment; and			
29	(a)	(3)	(vi)			Any additional factors, as necessary, to demonstrate sufficient protection of			

						ecological resources in the wetland.			
30	(a)	(4)				The owner or operator of CCR unit must also:			
						Demonstrate that steps have been taken to attempt to achieve no net loss of wetlands (as defined by acreage and function) by first avoiding impacts to wetlands to the maximum extent reasonable as required by paragraphs (a)(1) through (3), then minimizing unavoidable impacts to the maximum extent reasonable, and offsetting remaining unavoidable wetland impacts through all appropriate and reasonable compensatory mitigation actions (e.g., restoration of existing degraded wetlands or creation of man-made wetlands) to the extent required under section 404 of the Clean Water Act or applicable state wetlands laws.			
31	(a)	(5)				Sufficient information is available to make a reasoned determination with respect to the demonstrations in paragraphs (a)(1) through (4).			
32	(b)					The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the demonstration meets the requirements of paragraph (a).			
33	(c)	(1)				The owner or operator of the existing CCR surface impoundment must complete the demonstration by October 17, 2018.			
34	(c)	(2)				The owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit must complete the demonstration no later than the date of initial receipt of CCR in the CCR unit.			
35	(c)	(3)				The owner or operator has completed the demonstration required by paragraph (a) of this section when the demonstration is placed in the facility's operating record as required by § 257.105(e).			
36	(c)	(4)				An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstration showing compliance with the requirements of paragraph (a) is prohibited from placing CCR in the CCR unit.			
37	(c)	(5)				An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstration showing compliance with the requirements of paragraph (a) is prohibited from placing CCR in the CCR unit.			
38	(d)					The owner or operator comply with the recordkeeping requirements specified in § 257.105(e), the notification requirements specified in § 257.106(e), and the internet requirements specified in § 257.107(e).			
39						**§ 257.62 Fault Areas**	**252:517-5-3**		
40						***The owner of operator of the CCR unit must meet all the requirements (a) through (d).***			
41	(a)					CCR unit should be located within 60 meters (200 feet) of the outermost damage zone of a fault that has had displacement in Holocene time, unless the owner or operator demonstrates that an alternative setback distance of less than 60 meters will prevent damage to the structural integrity of the CCR unit.			

42	(b)					The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the demonstration meets these requirements of paragraph (a).			
43	(c)	(1)				The owner or operator of the existing CCR surface impoundment must complete the demonstration by October 17, 2018.			
44	(c)	(2)				The owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit must complete the demonstration no later than the date of initial receipt of CCR in the CCR unit.			
45	(c)	(3)				The owner or operator has completed the demonstration required by paragraph (a) of this section when the demonstration is placed in the facility's operating record as required by § 257.105(e).			
46	(c)	(4)				An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstration showing compliance with the requirements of paragraph (a) is prohibited from placing CCR in the CCR unit.			
47	(c)	(5)				An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstration showing compliance with the requirements of paragraph (a) is prohibited from placing CCR in the CCR unit.			
48	(d)					The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(e), the notification requirements specified in § 257.106(e), and the internet requirements specified in § 257.107(e).			
49						**§ 257.63 Seismic Impact Zones**	**252:517-5-4**		
50						*The owner of operator of the CCR unit must meet all the requirements (a) through (d).*			
51	(a)					CCR units and any expansions must not be located in seismic impact zones, unless the owner or operator demonstrates that all structural components including liners, leachate collection and removal systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site.			
52	(b)					The owner or operator of the CCR unit must: obtain a certification from a qualified professional engineer stating that the demonstration meets the requirements of paragraph (a)			
53	(c)	(1)				The owner or operator of the existing CCR surface impoundment must complete the demonstration by October 17, 2018.			

54	(c)	(2)				The owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit must complete the demonstration no later than the date of initial receipt of CCR in the CCR unit.			
55	(c)	(3)				The owner or operator has completed the demonstration required by paragraph (a) of this section when the demonstration is placed in the facility's operating record as required by § 257.105(e).			
56	(c)	(4)				An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstration showing compliance with the requirements of paragraph (a) is prohibited from placing CCR in the CCR unit.			
57	(c)	(5)				An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstration showing compliance with the requirements of paragraph (a) is prohibited from placing CCR in the CCR unit.			
58	(d)					The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(e), the notification requirements specified in § 257.106(e), and the internet requirements specified in § 257.107(e).			
59						**§ 257.64 Unstable Areas**	**252:517-5-5**		
60						***The owner of operator of the CCR unit must meet all the requirements (a) through (e) and all their components.***			
61	(a)					A CCR unit must not be located in an unstable area, unless the owner or operator demonstrates that recognized and generally accepted good engineering practices have been incorporated into the design of the CCR unit to ensure that the integrity of the structural components of the CCR unit will not be disrupted.			
62	(b)	(1)				***When determining whether an area is unstable or not, the owner or operator must consider, at a minimum, all of the following:***			
						On-site or local soil conditions that may result in significant differential settling;			
64	(b)	(2)				On-site or local geologic or geomorphologic features; and			
65	(b)	(3)				On-site or local human-made features or events (both surface and subsurface).			

66	(c)					The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the demonstration meets the requirements in paragraph (a).			
67	(d)	(1)				The owner or operator of the CCR unit must complete the demonstration required in paragraph (a) no later than October 17, 2018 for existing CCR surface impoundments and existing CCR landfills.			
68	(d)	(2)				The owner or operator of the CCR unit must complete the demonstration required in paragraph (a) no later than the date of initial receipt of CCR in the CCR unit for a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit.			
69	(d)	(3)				The owner or operator has completed the demonstration required by paragraph (a) when the demonstration is placed in the facility's operating record as required by § 257.105(e).			
70	(d)	(4)				An owner or operator of an existing CCR unit who fails to demonstrate compliance with the requirements of paragraph (a) of this section by the date specified is subject to the requirements of § 257.101(b)(1) or (d), respectively.			
71	(d)	(5)				An owner or operator of a new CCR unit, or any lateral expansion of a CCR unit who fails to make the demonstration showing compliance with the requirements of paragraph (a) is prohibited from placing CCR in the CCR unit.			
72	(e)					The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(e), the notification requirements specified in § 257.106(e), and the internet requirements specified in § 257.107(e).			
73						**§ 257.70 Design Criteria for New CCR Landfills and Any Lateral Expansion of a CCR Landfill**	**252:517-11-1**		
74						*The owner of operator of the CCR unit must meet all the requirements (a) through (g) and all their components.* **These requirements do not apply to existing CCR surface impoundments that are incised CCR units, unless incised CCR surface impoundment is subsequen*			
75	(a)	(1)				CCR landfills must be designed, constructed, operated, and maintained with either a composite liner that meets the requirements of paragraph (b) of this section or an alternative composite liner that meets the requirements in paragraph (c) of this section, and a leachate collection and removal system that meets the requirements of paragraph (d) of this section.			
76	(a)	(2)				Prior to construction of an overfill the underlying surface impoundment must meet the requirements of § 257.102(d).			

77	(b)					A composite liner must consist of two components; the upper component consisting of, at a minimum, a 30-mil geomembrane liner (GM), and the lower component consisting of at least a twofoot layer of compacted soil with a hydraulic conductivity of no more than 1 × 10¥7 centimeters per second (cm/sec). GM components consisting of high density polyethylene (HDPE) must be at least 60-mil thick. The GM or upper liner component must be installed in direct and uniform contact with the compacted soil or lower liner component.			
78	(b)	(1)				*The composite liner must be:* Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the CCR or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;			
79	(b)	(2)				Constructed of materials that provide appropriate shear resistance of the upper and lower component interface to prevent sliding of the upper component including on slopes;			
80	(b)	(3)				Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and			
81	(b)	(4)				Installed to cover all surrounding earth likely to be in contact with the CCR or leachate.			
82	(c)	(1)				*If the owner or operator elects to install an alternative composite liner, all of the following requirements must be met:* An alternative composite liner must consist of two components; the upper component consisting of, at a minimum, a 30-mil GM, and a lower component, that is not a geomembrane, with a liquid flow rate no greater than the liquid flow rate of two feet of compacted soil with a hydraulic conductivity of no more than 1 × 10¥7 cm/sec. GM components consisting of high density polyethylene (HDPE) must be at least 60-mil thick. If the lower component of the alternative liner is compacted soil, the GM must be installed in direct and uniform contact with the compacted soil.			

83	(c)	(2)				The owner or operator must obtain certification from a qualified professional engineer that the liquid flow rate through the lower component of the alternative composite liner is no greater than the liquid flow rate through two feet of compacted soil with a hydraulic conductivity of 1 × 10¥7 cm/ sec. The hydraulic conductivity for the two feet of compacted soil used in the comparison shall be no greater than 1 × 10¥7 cm/sec. The hydraulic conductivity of any alternative to the two feet of compacted soil must be determined using recognized and generally accepted methods. The liquid flow rate comparison must be made using Equation 1 of this section, which is derived from Darcy's Law for gravity flow through porous media. Where, Q = flow rate (cubic centimeters/second); A = surface area of the liner (squared centimeters); q = flow rate per unit area (cubic centimeters/ second/squared centimeter); k = hydraulic conductivity of the liner (centimeters/second); h = hydraulic head above the liner (centimeters); and t = thickness of the liner (centimeters).			
84	(c)	(3)				The alternative composite liner must meet the requirements specified in paragraphs (b)(1) through (4) of this section.			
85	(d)	(1)				*The leachate collection and removal system must be designed, constructed, operated, and maintained to collect and remove leachate from the landfill during the active life and post-closure care period. The leachate collection and removal system must be:* Designed and operated to maintain less than a 30-centimeter depth of leachate over the composite liner or alternative composite liner;			
86	(d)	(2)				Constructed of materials that are chemically resistant to the CCR and any non-CCR waste managed in the CCR unit and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying waste, waste cover materials, and equipment used at the CCR unit; and			
87	(d)	(3)				Designed and operated to minimize clogging during the active life and post-closure care period.			
88	(e)					Prior to construction of the CCR landfill or any lateral expansion of a CCR landfill, the owner or operator must obtain a certification from a qualified professional engineer that the design of the composite liner (or, if applicable, alternative composite liner) and the leachate collection and removal system meets the requirements of this section.			

89	(f)					Upon completion of construction of the CCR landfill or any lateral expansion of a CCR landfill, the owner or operator must obtain a certification from a qualified professional engineer that the composite liner (or, if applicable, alternative composite liner) and the leachate collection and removal system has been constructed in accordance with the requirements of this section.			
90	(g)					The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(f), the notification requirements specified in § 257.106(f), and the Internet requirements specified in § 257.107(f).			
91						**§ 257.80 Air Criteria**	**252:517:13-1**		
92						***The owner of operator of the CCR unit must meet all the requirements (a) through (d) and all their components.***			
93	(a)					The owner or operator of a CCR landfill, CCR surface impoundment, or any lateral expansion of a CCR unit must adopt measures that will effectively minimize CCR from becoming airborne at the facility, including CCR fugitive dust originating from CCR units, roads, and other CCR management and material handling activities.			
94	(b)					The owner or operator of the CCR unit must prepare and operate in accordance with a CCR fugitive dust control plan as specified in paragraphs (b)(1) through (7) of this section. This requirement applies in addition to, not in place of, any applicable standards under the Occupational Safety and Health Act.			
95	(b)	(1)				The CCR fugitive dust control plan must identify and describe the CCR fugitive dust control measures the owner or operator will use to minimize CCR from becoming airborne at the facility. The owner or operator must select, and include in the CCR fugitive dust control plan, the CCR fugitive dust control measures that are most appropriate for site conditions, along with an explanation of how the measures selected are applicable and appropriate for site conditions. Examples of control measures that may be appropriate include: Locating CCR inside an enclosure or partial enclosure; operating a water spray or fogging system; reducing fall distances at material drop points; using wind barriers, compaction, or vegetative covers; establishing and enforcing reduced vehicle speed limits; paving and sweeping roads; covering trucks transporting CCR; reducing or halting operations during high wind events; or applying a daily cover.			

96	(b)	(2)				If the owner or operator operates a CCR landfill or any lateral expansion of a CCR landfill, the CCR fugitive dust control plan must include procedures to emplace CCR as conditioned CCR. Conditioned CCR means wetting CCR with water to a moisture content that will prevent wind dispersal, but will not result in free liquids. In lieu of water, CCR conditioning may be accomplished with an appropriate chemical dust suppression agent.			
97	(b)	(3)				The CCR fugitive dust control plan must include procedures to log citizen complaints received by the owner or operator involving CCR fugitive dust events at the facility.			
98	(b)	(4)				The CCR fugitive dust control plan must include a description of the procedures the owner or operator will follow to periodically assess the effectiveness of the control plan.			
99	(b)	(5)				The owner or operator of a CCR unit must prepare an initial CCR fugitive dust control plan for the facility no later than October 19, 2015, or by initial receipt of CCR in any CCR unit at the facility if the owner or operator becomes subject to this subpart after October 19, 2015. The owner or operator has completed the initial CCR fugitive dust control plan when the plan has been placed in the facility's operating record as required by § 257.105(g)(1).			
100	(b)	(6)				Amendment of the plan. The owner or operator of a CCR unit subject to the requirements of this section may amend the written CCR fugitive dust control plan at any time provided the revised plan is placed in the facility's operating record as required by § 257.105(g)(1). The owner or operator must amend the written plan whenever there is a change in conditions that would substantially affect the written plan in effect, such as the construction and operation of a new CCR unit.			
101	(b)	(7)				The owner or operator must obtain a certification from a qualified professional engineer that the initial CCR fugitive dust control plan, or any subsequent amendment of it, meets the requirements of this section.			

102	(c)					Annual CCR fugitive dust control report. The owner or operator of a CCR unit must prepare an annual CCR fugitive dust control report that includes a description of the actions taken by the owner or operator to control CCR fugitive dust, a record of all citizen complaints, and a summary of any corrective measures taken. The initial annual report must be completed no later than 14 months after placing the initial CCR fugitive dust control plan in the facility's operating record. The deadline for completing a subsequent report is one year after the date of completing the previous report. For purposes of this paragraph (c), the owner or operator has completed the annual CCR fugitive dust control report when the plan has been placed in the facility's operating record as required by § 257.105(g)(2).			
103	(d)					The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(g), the notification requirements specified in § 257.106(g), and the internet requirements specified in § 257.107(g).			
104						**§ 257.81 Run-on and Run-off Controls for CCR Landfills**	**252:517-13-2**		
105						*The owner of operator of the CCR unit must meet all the requirements (a) through (d) and all their components.*			
106	(a)	(1)				*The owner or operator of a CCR landfill or lateral extension must construct, operate, and maintain:* A run-on control system to prevent flow onto the active portion of the CCR unit during the peak discharge from a 24-hour, 25-year storm; and			
107	(a)	(2)				A run-off control system from the active portion of the CCR to collect and control at least to collect and control at least the water volume resulting from a 24-hour, 25-year storm.			
108	(b)					Run-off from the active portion of the CCR unit must be handled in accordance with the surface water requirements under § 257.3–3.			
109	(c)	(1)				The owner or operator must prepare initial and periodic run-on and run-off control system plans for the CCR unit according to the timeframes specified in paragraphs (c)(3) and (4) of this section. These plans must document how the run-on and run-off control systems have been designed and constructed to meet the applicable requirements of this section. Each plan must be supported by appropriate engineering calculations. The owner or operator has completed the initial run-on and run-off control system plan when the plan has been placed in the facility's operating record as required by § 257.105(g)(3).			

110	(c)	(2)				Amendment of the plan. The owner or operator may amend the written run-on and run-off control system plan at any time provided the revised plan is placed in the facility's operating record as required by § 257.105(g)(3). The owner or operator must amend the written run-on and runoff control system plan whenever there is a change in conditions that would substantially affect the written plan in effect.			
111	(c)	(3)	(i)			The owner or operator of an existing CCR unit must prepare the initial run-on and runoff control system plan no later than October 17, 2016, for new units and any lateral expansion of a CCR landfill.			
112	(c)	(3)	(ii)			For a new CCR landfil or any lateral expansion of a landfill, the owner or operator must prepare the initial run-on and run-off control system plan no later than the date of initial receipt of CCR in the CCR unit.			
113	(c)	(4)				Frequency for revising the plan. The owner or operator of the CCR unit must prepare periodic run-on and runoff control system plans required by paragraph (c)(1) of this section every five years. The date of completing the initial plan is the basis for establishing the deadline to complete the first subsequent plan. The owner or operator may complete any required plan prior to the required deadline provided the owner or operator places the completed plan into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing a subsequent plan is based on the date of completing the previous plan. For purposes of this paragraph (c)(4), the owner or operator has completed a periodic run-on and run-off control system plan when the plan has been placed in the facility's operating record as required by § 257.105(g)(3).			
114	(c)	(5)				The owner or operator must obtain a certification from a qualified professional engineer stating that the initial and periodic run-on and run-off control system plans meet the requirements of this section.			
115	(d)					The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(g), the notification requirements specified in § 257.106(g), and the internet requirements specified in § 257.107(g).			
116						**§ 257.84 Inspection Requirements for CCR Landfills**	**252:517-13-5**		
117						***The owner of operator of the CCR unit must meet all the requirements (a) through (c) and all their components.***			
118	(a)	(1)	(i)			***All CCR landfills and any lateral expansion of a CCR landfill must be examined by a qualified person as follows:***			

						At intervals not exceeding seven days, inspect for any appearances of actual or potential structural weakness and other conditions which are disrupting or have the potential to disrupt the operation or safety of the CCR unit; and			
119	(a)	(1)	(ii)			The results of the inspection by a qualified person must be recorded in the facility's operating record as required by § 257.105(g)(8).			
120	(a)	(2)	(i)			Existing CCR landfills. The owner or operator of the CCR unit must initiate the inspections required under paragraph (a) of this section no later than October 19, 2015.			
121	(a)	(2)	(ii)			New CCR landfills and any lateral expansion of a CCR landfill. The owner or operator of the CCR unit must initiate the inspections required under paragraph (a) of this section upon initial receipt of CCR by the CCR unit.			
122	(b)	(1)	(i)			Existing and new CCR landfills and any lateral expansion of a CCR landfill must be inspected on a periodic basis by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards. The inspection must, at a minimum, include:			
123	(b)	(1)	(ii)			A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record (e.g., the results of inspections by a qualified person, and results of previous annual inspections); and			
124	(b)	(1)	(ii)			A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit.			
125	(b)	(2)	(i)			The qualified professional engineer must prepare a report following each inspection that addresses the following: Any changes in geometry of the structure since the previous annual inspection;			
126	(b)	(2)	(ii)			The approximate volume of CCR contained in the unit at the time of the inspection;			
127	(b)	(2)	(iii)			Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit; and			
128	(b)	(2)	(iv)			Any other change(s) which may have affected the stability or operation of the CCR unit since the previous annual inspection.			

129	(b)	(3)	(i)			The owner or operator of the CCR unit must complete the initial inspection required by paragraphs (b)(1) and (2) of this section no later than January 18, 2016.			
130	(b)	(3)	(ii)			New CCR landfills and any lateral expansion of a CCR landfill. The owner or operator of the CCR unit must complete the initial annual inspection required by paragraphs (b)(1) and (2) of this section no later than 14 months following the date of initial receipt of CCR in the CCR unit.			
131	(b)	(4)				Frequency of inspections. The owner or operator of the CCR unit must conduct the inspection required by paragraphs (b)(1) and (2) of this section on an annual basis. The date of completing the initial inspection report is the basis for establishing the deadline to complete the first subsequent inspection. Any required inspection may be conducted prior to the required deadline provided the owner or operator places the completed inspection report into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing subsequent inspection reports is based on the date of completing the previous inspection report. For purposes of this section, the owner or operator has completed an inspection when the inspection report has been placed in the facility's operating record as required by § 257.105(g)(9).			
132	(b)	(5)				If a deficiency or release is identified during an inspection, the owner or operator must remedy the deficiency or release as soon as feasible and prepare documentation detailing the corrective measures taken.			
133	(c)					The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(g), the notification requirements specified in § 257.106(g), and the internet requirements specified in § 257.107(g).			
134						**§ 257.90 Applicability**	**252:517-9-1**		
135						*The owner of operator of the CCR unit must meet all the requirements (a) through (f), and all their components.*			
136	(a)					All CCR landfills, CCR surface impoundments, and lateral expansions of CCR units are subject to the groundwater monitoring and corrective action requirements under §§257.90 through 257.98.			

137	(b)	(1)	(i)			*The owner or operator of an existing CCR landfill and existing CCR surface impoundment must be in compliance with the following groundwater monitoring requirements no later than October 17, 2017:* Install the groundwater monitoring system as required by § 257.91;			
138	(b)	(1)	(ii)			Develop the groundwater sampling and analysis program to include selection of the statistical procedures to be used for evaluating groundwater monitoring data as required by § 257.93;			
139	(b)	(1)	(iii)			Initiate the detection monitoring program to include obtaining a minimum of eight independent samples for each background and downgradient well as required by § 257.94(b); and			
140	(b)	(1)	(iv)			Begin evaluating the groundwater monitoring data for statistically significant increases over background levels for the constituents listed in appendix III of this part as required by § 257.94.			
141	(b)	(2)				Prior to initial receipt of CCR by the CCR unit, the owner or operator of a new CCR landfill, new CCR surface impoundment, and all lateral expansions of CCR units, must be in compliance with the groundwater monitoring requirements specified in paragraph (b)(1)(i) and (ii) of this section. In addition, the owner or operator of the CCR unit must initiate the detection monitoring program to include obtaining a minimum of eight independent samples for each background well as required by § 257.94(b).			
142	(c)					Once a groundwater monitoring system and groundwater monitoring program has been established at the CCR unit as required by this subpart, the owner or operator must conduct groundwater monitoring and, if necessary, corrective action throughout the active life and post-closure care period of the CCR unit.			
143	(d)					In the event of a release from a CCR unit, the owner or operator must immediately take all necessary measures to control the source(s) of releases so as to reduce or eliminate, to the maximum extent feasible, further releases of contaminants into the environment. The owner or operator of the CCR unit must comply with all applicable requirements in §§ 257.96, 257.97, and 257.98.			

144	(e)					The owner or operator of an existing CCR landfill and existing CCR surface impoundment, must prepare an annual groundwater monitoring and corrective action report no later than January 31, 2018, and annually thereafter. For new CCR landfills, new CCR surface impoundments, and all lateral expansions of CCR units, the owner or operator must prepare the initial annual groundwater monitoring and corrective action report no later than January 31 of the year following the calendar year a groundwater monitoring system has been established for such CCR unit as required by this subpart, and annually thereafter. For the preceding calendar year, the annual report must document the status of the groundwater monitoring and corrective action program for the CCR unit, summarize key actions completed, describe any problems encountered, discuss actions to resolve the problems, and project key activities for the upcoming year. For purposes of this section, the owner or operator has prepared the annual report when the report is placed in the facility's operating record as required by § 257.105(h)(1).			
						At a minimum, the annual groundwater monitoring and corrective action report must contain the following information, to the extent available:			
145	(e)	(1)				A map, aerial image, or diagram showing the CCR unit and all background (or upgradient) and downgradient monitoring wells, to include the well identification numbers, that are part of the groundwater monitoring program for the CCR unit;			
146	(e)	(2)				Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken;			
147	(e)	(3)				In addition to all the monitoring data obtained under §§ 257.90 through 257.98, a summary including the number of groundwater samples that were collected for analysis for each background and downgradient well, the dates the samples were collected, and whether the sample was required by the detection monitoring or assessment monitoring programs;			
148	(e)	(4)				A narrative discussion of any transition between monitoring programs (e.g., the date and circumstances for transitioning from detection monitoring to assessment monitoring in addition to identifying the constituent(s) detected at a statistically significant increase over background levels); and			
149	(e)	(5)				Other information required to be included in the annual report as specified in §§ 257.90 through 257.98.			

150	(f)					The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the internet requirements specified in § 257.107(h).			
151						**§ 257.91 Groundwater monitoring systems**	**252:517-9-2**		
152						***The owner of operator of the CCR unit must meet all the requirements (a) through (g) and all their components.***			
153	(a)	(1)				The owner or operator of a CCR unit must install a groundwater monitoring system that consists of a sufficient number of wells, installed at appropriate locations and depths, to yield groundwater samples from the uppermost aquifer that accurately represent the quality of background groundwater that has not been affected by leakage from a CCR unit.			
154	(a)	(1)	(i)			***A determination of background quality may include sampling of wells that are not hydraulically upgradient of the CCR management area where:*** Hydrogeologic conditions do not allow the owner or operator of the CCR unit to determine what wells are hydraulically upgradient; or			
155	(a)	(1)	(ii)			Sampling at other wells will provide an indication of background groundwater quality that is as representative or more representative than that provided by the upgradient wells; and			
156	(a)	(2)				Accurately represent the quality of groundwater passing the waste boundary of the CCR unit. The downgradient monitoring system must be installed at the waste boundary that ensures detection of groundwater contamination in the uppermost aquifer. All potential contaminant pathways must be monitored.			
157	(b)	(1)				The number, spacing, and depths of monitoring systems shall be determined based upon site-specific technical information that must include thorough characterization of: Aquifer thickness, groundwater flow rate, groundwater flow direction including seasonal and temporal fluctuations in groundwater flow; and			
158	(b)	(2)				Saturated and unsaturated geologic units and fill materials overlying the uppermost aquifer, materials comprising the uppermost aquifer, and materials comprising the confining unit defining the lower boundary of the uppermost aquifer, including, but not limited to, thicknesses, stratigraphy, lithology, hydraulic conductivities, porosities and effective porosities.			

159	(c)	(1)				The groundwater monitoring system must include the minimum number of monitoring wells necessary to meet the performance standards specified in paragraph (a) of this section, based on the site-specific information specified in paragraph (b) of this section. The groundwater monitoring system must contain: A minimum of one upgradient and three downgradient monitoring wells; and			
160	(c)	(2)				Additional monitoring wells as necessary to accurately represent the quality of background groundwater that has not been affected by leakage from the CCR unit and the quality of groundwater passing the waste boundary of the CCR unit.			
161	(d)	(1)				The owner or operator of multiple CCR units may install a multiunit groundwater monitoring system instead of separate groundwater monitoring systems for each CCR unit.			
162	(d)	(1)	(i)			*The multiunit groundwater monitoring system must be equally as capable of detecting monitored constituents at the waste boundary of the CCR unit as the individual groundwater monitoring system specified in paragraphs (a) through (c) of this section for each CCR unit based on the following factors:*			
						Number, spacing, and orientation of each CCR unit;			
163	(d)	(1)	(ii)			Hydrogeologic setting;			
164	(d)	(1)	(iii)			Site history;			
165	(d)	(1)	(iv)			Engineering design of the CCR unit.			
166	(d)	(2)				If the owner or operator elects to install a multiunit groundwater monitoring system, and if the multiunit system includes at least one existing unlined CCR surface impoundment as determined by § 257.71(a), and if at any time after October 19, 2015 the owner or operator determines in any sampling event that the concentrations of one or more constituents listed in appendix IV to this part are detected at statistically significant levels above the groundwater protection standard established under § 257.95(h) for the multiunit system, then all unlined CCR surface impoundments comprising the multiunit groundwater monitoring system are subject to the closure requirements under § 257.101(a) to retrofit or close.			

167	(e)	(1)				Monitoring wells must be cased in a manner that maintains the integrity of the monitoring well borehole. This casing must be screened or perforated and packed with gravel or sand, where necessary, to enable collection of groundwater samples. The annular space (i.e., the space between the borehole and well casing) above the sampling depth must be sealed to prevent contamination of samples and the groundwater. The owner or operator of the CCR unit must document and include in the operating record the design, installation, development, and decommissioning of any monitoring wells, piezometers and other measurement, sampling, and analytical devices. The qualified professional engineer must be given access to this documentation when completing the groundwater monitoring system certification required under paragraph (f) of this section.			
168	(e)	(2)				The monitoring wells, piezometers, and other measurement, sampling, and analytical devices must be operated and maintained so that they perform to the design specifications throughout the life of the monitoring program.			
169	(f)					The owner or operator must obtain a certification from a qualified professional engineer stating that the groundwater monitoring system has been designed and constructed to meet the requirements of this section. If the groundwater monitoring system includes the minimum number of monitoring wells specified in paragraph (c)(1) of this section, the certification must document the basis supporting this determination.			
170	(g)					The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the internet requirements specified in § 257.107(h).			
171						**§ 257.93 Groundwater Sampling and Analysis Requirements**	**252:517-9-4**		
172						***The owner of operator of the CCR unit must meet all the requirements (a) through (j) and all their components.***			
173	(a)					The groundwater monitoring program must include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide an accurate representation of groundwater quality at the background and downgradient wells required by § 257.91.			
174	(a)	(1)				***The owner or operator of the CCR unit must develop a sampling and analysis program that includes procedures and techniques for:***			
						Sample collection;			
175	(a)	(2)				Sample preservation and shipment;			
176	(a)	(3)				Analytical procedures;			

177	(a)	(4)				Chain of custody control; and			
178	(a)	(5)				Quality assurance and quality control.			
179	(b)					The groundwater monitoring program must include sampling and analytical methods that are appropriate for groundwater sampling and that accurately measure hazardous constituents and other monitoring parameters in groundwater samples. For purposes of §§ 257.90 through 257.98, the term constituent refers to both hazardous constituents and other monitoring parameters listed in either appendix III or IV of this part.			
180	(c)					Groundwater elevations must be measured in each well immediately prior to purging, each time groundwater is sampled. The owner or operator of the CCR unit must determine the rate and direction of groundwater flow each time groundwater is sampled. Groundwater elevations in wells which monitor the same CCR management area must be measured within a period of time short enough to avoid temporal variations in groundwater flow which could preclude accurate determination of groundwater flow rate and direction.			
181	(d)					The owner or operator of the CCR unit must establish background groundwater quality in a hydraulically upgradient or background well(s) for each of the constituents required in the particular groundwater monitoring program that applies to the CCR unit as determined under § 257.94(a) or § 257.95(a). Background groundwater quality may be established at wells that are not located hydraulically upgradient from the CCR unit if it meets the requirements of § 257.91(a)(1).			
182	(e)					The number of samples collected when conducting detection monitoring and assessment monitoring (for both downgradient and background wells) must be consistent with the statistical procedures chosen under paragraph (f) of this section and the performance standards under paragraph (g) of this section. The sampling procedures shall be those specified under § 257.94(b) through (d) for detection monitoring, § 257.95(b) through (d) for assessment monitoring, and § 257.96(b) for corrective action.			
183	(f)	(1)				*The owner or operator of the CCR unit must select one of the statistical methods specified in paragraphs (f)(1) through (5) of this section to be used in evaluating groundwater monitoring data for each specified constituent. The statistical test chosen shall be conducted separately for each constituent in each monitoring well.*			

						A parametric analysis of variance followed by multiple comparison procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's mean and the background mean levels for each constituent.			
184	(f)	(2)				An analysis of variance based on ranks followed by multiple comparison procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's median and the background median levels for each constituent.			
185	(f)	(3)				A tolerance or prediction interval procedure, in which an interval for each constituent is established from the distribution of the background data and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit.			
186	(f)	(4)				A control chart approach that gives control limits for each constituent.			
187	(f)	(5)				Another statistical test method that meets the performance standards of paragraph (g) of this section.			
188	(f)	(6)				The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the selected statistical method is appropriate for evaluating the groundwater monitoring data for the CCR management area. The certification must include a narrative description of the statistical method selected to evaluate the groundwater monitoring data.			
						Any statistical method chosen under paragraph (f) of this section shall comply with the following performance standards, as appropriate, based on the statistical test method used:			
189	(g)	(1)				The statistical method used to evaluate groundwater monitoring data shall be appropriate for the distribution of constituents. Normal distributions of data values shall use parametric methods. Non-normal distributions shall use non-parametric methods. If the distribution of the constituents is shown by the owner or operator of the CCR unit to be inappropriate for a normal theory test, then the data must be transformed or a distribution-free (non-parametric) theory test must be used. If the distributions for the constituents differ, more than one statistical method may be needed.			

190	(g)	(2)				If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentrations or a groundwater protection standard, the test shall be done at a Type I error level no less than 0.01 for each testing period. If a multiple comparison procedure is used, the Type I experiment wise error rate for each testing period shall be no less than 0.05; however, the Type I error of no less than 0.01 for individual well comparisons must be maintained. This performance standard does not apply to tolerance intervals, prediction intervals, or control charts.			
191	(g)	(3)				If a control chart approach is used to evaluate groundwater monitoring data, the specific type of control chart and its associated parameter values shall be such that this approach is at least as effective as any other approach in this section for evaluating groundwater data. The parameter values shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.			
192	(g)	(4)				If a tolerance interval or a predictional interval is used to evaluate groundwater monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval must contain, shall be such that this approach is at least as effective as any other approach in this section for evaluating groundwater data. These parameters shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.			
193	(g)	(5)				The statistical method must account for data below the limit of detection with one or more statistical procedures that shall at least as effective as any other approach in this section for evaluating groundwater data. Any practical quantitation limit that is used in the statistical method shall be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.			
194	(g)	(6)				If necessary, the statistical method must include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.			
195	(h)					The owner or operator of the CCR unit must determine whether or not there is a statistically significant increase over background values for each constituent required in the particular groundwater monitoring program that applies to the CCR unit, as determined under § 257.94(a) or § 257.95(a).			

196	(h)	(1)				In determining whether a statistically significant increase has occurred, the owner or operator must compare the groundwater quality of each constituent at each monitoring well designated pursuant to § 257.91(a)(2) or (d)(1) to the background value of that constituent, according to the statistical procedures and performance standards specified under paragraphs (f) and (g) of this section.			
197	(h)	(2)				Within 90 days after completing sampling and analysis, the owner or operator must determine whether there has been a statistically significant increase over background for any constituent at each monitoring well.			
198	(i)					The owner or operator must measure "total recoverable metals" concentrations in measuring groundwater quality. Measurement of total recoverable metals captures both the particulate fraction and dissolved fraction of metals in natural waters. Groundwater samples shall not be field filtered prior to analysis.			
199	(j)					The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the Internet requirements specified in § 257.107(h).			
200						**§ 257.94 Detection Monitoring Program**	**252:517-9-5**		
201						***The owner of operator of the CCR unit must meet all the requirements (a) through (f) and all their components.***			
202	(a)					The owner or operator of a CCR unit must conduct detection monitoring at all groundwater monitoring wells consistent with this section. At a minimum, a detection monitoring program must include groundwater monitoring for all constituents listed in appendix III to this part.			
203	(b)					Except as provided in paragraph (d) of this section, the monitoring frequency for the constituents listed in appendix III to this part shall be at least semiannual during the active life of the CCR unit and the post-closure period. For existing CCR landfills and existing CCR surface impoundments, a minimum of eight independent samples from each background and downgradient well must be collected and analyzed for the constituents listed in appendix III and IV to this part no later than October 17, 2017. For new CCR landfills, new CCR surface impoundments, and all lateral expansions of CCR units, a minimum of eight independent samples for each background well must be collected and analyzed for the constituents listed in appendices III and IV to this part during the first six months of sampling.			

204	(c)					The number of samples collected and analyzed for each background well and downgradient well during subsequent semiannual sampling events must be consistent with § 257.93(e), and must account for any unique characteristics of the site, but must be at least one sample from each background and downgradient well.			
205	(d)	(1)				The owner or operator of a CCR unit may demonstrate the need for an alternative monitoring frequency for repeated sampling and analysis for constituents listed in appendix III to this part during the active life and the post-closure care period based on the availability of groundwater. If there is not adequate groundwater flow to sample wells semiannually, the alternative frequency shall be no less than annual. The need to vary monitoring frequency must be evaluated on a site-specific basis. The demonstration must be supported by, at a minimum, the information specified in paragraphs (d)(1) and (2) of this section.			
206	(d)	(1)	(i)			*The alternative frequency must be based on consideration of the following factors:*			
						Lithology of the aquifer and unsaturated zone;			
207	(d)	(1)	(ii)			Hydraulic conductivity of the aquifer and unsaturated zone; and			
208	(d)	(1)	(iii)			Groundwater flow rates.			
209	(d)	(2)				Information documenting that the alternative frequency will be no less effective in ensuring that any leakage from the CCR unit will be discovered within a timeframe that will not materially delay establishment of an assessment monitoring program.			
210	(d)	(3)				The owner or operator must obtain a certification from a qualified demonstration for an alternative groundwater sampling and analysis frequency meets the requirements of this section. The owner or operator must include the demonstration providing the basis for the alternative monitoring frequency and the certification by a qualified professional engineer in the annual groundwater monitoring and corrective action report required by § 257.90(e).			
211	(e)	(1)				*If the owner or operator of the CCR unit determines, pursuant to § 257.93(h) that there is a statistically significant increase over background levels for one or more of the constituents listed in appendix III to this part at any monitoring well at the waste boundary specified under § 257.91(a)(2), the owner or operator must:*			

						Except as provided for in paragraph (e)(2) of this section, within 90 days of detecting a statistically significant increase over background levels for any constituent, establish an assessment monitoring program meeting the requirements of § 257.95.			
212	(e)	(2)				The owner or operator may demonstrate that a source other than the CCR unit caused the statistically significant increase over background levels for a constituent or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. The owner or operator must complete the written demonstration within 90 days of detecting a statistically significant increase over background levels to include obtaining a certification from a qualified professional engineer verifying the accuracy of the information in the report. If a successful demonstration is completed within the 90-day period, the owner or operator of the CCR unit may continue with a detection monitoring program under this section. If a successful demonstration is not completed within the 90-day period, the owner or operator of the CCR unit must initiate an assessment monitoring program as required under § 257.95. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by § 257.90(e), in addition to the certification by a qualified professional engineer.			
213	(e)	(3)				The owner or operator of a CCR unit must prepare a notification stating that an assessment monitoring program has been established. The owner or operator has completed the notification when the notification is placed in the facility's operating record as required by § 257.105(h)(5).			
214	(f)					The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the Internet requirements specified in § 257.107(h).			
215						**§ 257.95 Assessment Monitoring Program**	**252:517-9-6**		
216						***The owner of operator of the CCR unit must meet all the requirements (a) through (h) and all their components.***			
217	(a)					Assessment monitoring is required whenever a statistically significant increase over background levels has been detected for one or more of the constituents listed in appendix III to this part.			

218	(b)					Within 90 days of triggering an assessment monitoring program, and annually thereafter, the owner or operator of the CCR unit must sample and analyze the groundwater for all constituents listed in appendix IV to this part. The number of samples collected and analyzed for each well during each sampling event must be consistent with § 257.93(e), and must account for any unique characteristics of the site, but must be at least one sample from each well.			
219	(c)	(1)				The owner or operator of a CCR unit may demonstrate the need for an alternative monitoring frequency for repeated sampling and analysis for constituents listed in appendix IV to this part during the active life and the post-closure care period based on the availability of groundwater. If there is not adequate groundwater flow to sample wells semiannually, the alternative frequency shall be no less than annual. The need to vary monitoring frequency must be evaluated on a site-specific basis. The demonstration must be supported by, at a minimum, the information specified in paragraphs (c)(1) and (2) of this section. Information documenting that the need for less frequent sampling.			
220	(c)	(1)	(i)			*The alternative frequency must be based on consideration of the following factors:*			
						Lithology of the aquifer and unsaturated zone;			
221	(c)	(1)	(ii)			Hydraulic conductivity of the aquifer and unsaturated zone; and			
222	(c)	(1)	(iii)			Groundwater flow rates.			
223	(c)	(2)				Information documenting that the alternative frequency will be no less effective in ensuring that any leakage from the CCR unit will be discovered within a timeframe that will not materially delay the initiation of any necessary remediation measures.			
224	(c)	(3)				The owner or operator must obtain a certification from a qualified professional engineer stating that the demonstration for an alternative groundwater sampling and analysis frequency meets the requirements of this section. The owner or operator must include the demonstration providing the basis for the alternative monitoring frequency and the certification by a qualified professional engineer in the annual groundwater monitoring and corrective action report required by § 257.90(e).			
222	(d)	(1)				*After obtaining the results from the initial and subsequent sampling events required in paragraph (b) of this section, the owner or operator must:*			

						Within 90 days of obtaining the results, and on at least a semiannual basis thereafter, resample all wells that were installed pursuant to the requirements of § 257.91, conduct analyses for all parameters in appendix III to this part and for those constituents in appendix IV to this part that are detected in response to paragraph (b) of this section, and record their concentrations in the facility operating record. The number of samples collected and analyzed for each background well and downgradient well during subsequent semiannual sampling events must be consistent with § 257.93(e), and must account for any unique characteristics of the site, but must be at least one sample from each background and downgradient well;			
223	(d)	(2)				Establish groundwater protection standards for all constituents detected pursuant to paragraph (b) or (d) of this section. The groundwater protection standards must be established in accordance with paragraph (h) of this section; and			
224	(d)	(3)				Include the recorded concentrations required by paragraph (d)(1) of this section, identify the background concentrations established under § 257.94(b), and identify the groundwater protection standards established under paragraph (d)(2) of this section in the annual groundwater monitoring and corrective action report required by § 257.90(e).			
225	(e)					If the concentrations of all constituents listed in appendices III and IV to this part are shown to be at or below background values, using the statistical procedures in § 257.93(g), for two consecutive sampling events, the owner or operator may return to detection monitoring of the CCR unit. The owner or operator must prepare a notification stating that detection monitoring is resuming for the CCR unit. The owner or operator has completed the notification when the notification is placed in the facility's operating record as required by § 257.105(h)(7).			
226	(f)					If the concentrations of any constituent in appendices III and IV to this part are above background values, but all concentrations are below the groundwater protection standard established under paragraph (h) of this section, using the statistical procedures in § 257.93(g), the owner or operator must continue assessment monitoring in accordance with this section.			

227	(g)					If one or more constituents in appendix IV to this part are detected at statistically significant levels above the groundwater protection standard established under paragraph (h) of this section in any sampling event, the owner or operator must prepare a notification identifying the constituents in appendix IV to this part that have exceeded the groundwater protection standard. The owner or operator has completed the notification when the notification is placed in the facility's operating record as required by § 257.105(h)(8).			
						The owner or operator of the CCR unit also must:			
228	(g)	(1)	(i)			Characterize the nature and extent of the release and any relevant site conditions that may affect the remedy ultimately selected. The characterization must be sufficient to support a complete and accurate assessment of the corrective measures necessary to effectively clean up all releases from the CCR unit pursuant to § 257.96. Characterization of the release includes the following minimum measures: Install additional monitoring wells necessary to define the contaminant plume(s);			
230	(g)	(1)	(ii)			Collect data on the nature and estimated quantity of material released including specific information on the constituents listed in appendix IV of this part and the levels at which they are present in the material released;			
231	(g)	(1)	(iii)			Install at least one additional monitoring well at the facility boundary in the direction of contaminant migration and sample this well in accordance with paragraph (d)(1) of this section; and			
232	(g)	(1)	(iv)			Sample all wells in accordance with paragraph (d)(1) of this section to characterize the nature and extent of the release.			
233	(g)	(2)				Notify all persons who own the land or reside on the land that directly overlies any part of the plume of contamination if contaminants have migrated off-site if indicated by sampling of wells in accordance with paragraph (g)(1) of this section.			
234	(g)	(2)	(i)			The owner or operator has completed the notifications when they are placed in the facility's operating record as required by § 257.105(h)(8).			
235	(g)	(3)	(i)			*Within 90 days of finding that any of the constituents listed in appendix IV to this part have been detected at a statistically significant level exceeding the groundwater protection standards the owner or operator must either:*			
						Initiate an assessment of corrective measures as required by § 257.96; or			

236	(g)	(3)	(ii)			Demonstrate that a source other than the CCR unit caused the contamination, or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Any such demonstration must be supported by a report that includes the factual or evidentiary basis for any conclusions and must be certified to be accurate by a qualified professional engineer. If a successful demonstration is made, the owner or operator must continue monitoring in accordance with the assessment monitoring program pursuant to this section, and may return to detection monitoring if the constituents in appendices III and IV to this part are at or below background as specified in paragraph (e) of this section. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by § 257.90(e), in addition to the certification by a qualified professional engineer.			
237	(g)	(4)				If a successful demonstration has not been made at the end of the 90 day period provided by paragraph (g)(3)(ii) of this section, the owner or operator of the CCR unit must initiate the assessment of corrective measures requirements under § 257.96.			
238	(g)	(5)				If an assessment of corrective measures is required under § 257.96 by either paragraph (g)(3)(i) or (g)(4) of this section, and if the CCR unit is an existing unlined CCR surface impoundment as determined by § 257.71(a), then the CCR unit is subject to the closure requirements under § 257.101(a) to retrofit or close. In addition, the owner or operator must prepare a notification stating that an assessment of corrective measures has been initiated.			
239	(h)					The owner or operator of the CCR unit must establish a groundwater protection standard for each constituent in appendix IV to this part detected in the groundwater.			
						The groundwater protection standard shall be:			
240	(h)	(1)				The owner or operator of the CCR unit must establish a groundwater protection standard for each constituent in appendix IV to this part detected in the groundwater. The groundwater protection standard shall be: For constituents for which a maximum contaminant level (MCL) has been established under §§ 141.62 and 141.66 of this title, the MCL for that constituent;			
241	(h)	(2)				For constituents for which an MCL has not been established, the background concentration for the constituent established from wells in accordance with § 257.91; or			

242	(h)	(3)				For constituents for which the background level is higher than the MCL identified under paragraph (h)(1) of this section, the background concentration. (i) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the Internet requirements specified in § 257.107(h).			
243						**§ 257.96 Assessment of Corrective Measures**	**252:517-9-7**		
244						*The owner of operator of the CCR unit must meet all the requirements (a) through (f) and all their components.*			
245	(a)					Within 90 days of finding that any constituent listed in appendix IV to this part has been detected at a statistically significant level exceeding the groundwater protection standard defined under § 257.95(h), or immediately upon detection of a release from a CCR unit, the owner or operator must initiate an assessment of corrective measures to prevent further releases, to remediate any releases and to restore affected area to original conditions. The assessment of corrective measures must be completed within 90 days, unless the owner or operator demonstrates the need for additional time to complete the assessment of corrective measures due to site-specific conditions or circumstances. The owner or operator must obtain a certification from a qualified professional engineer attesting that the demonstration is accurate. The 90-day deadline to complete the assessment of corrective measures may be extended for no longer than 60 days. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by § 257.90(e), in addition to the certification by a qualified professional engineer.			
246	(b)					The owner or operator of the CCR unit must continue to monitor groundwater in accordance with the assessment monitoring program as specified in § 257.95.			
247	(c)	(1)				*The assessment under paragraph (a) of this section must include an analysis of the effectiveness of potential corrective measures in meeting all of the requirements and objectives of the remedy as described under § 257.97 addressing at least the following:*			
						The performance, reliability, ease of implementation, and potential impacts of appropriate potential remedies, including safety impacts, cross-media impacts, and control of exposure to any residual contamination;			
248	(c)	(2)				The time required to begin and complete the remedy;			
249	(c)	(3)				The institutional requirements, such as state or local permit requirements or other environmental or public health requirements that may substantially affect implementation of the remedy(s).			

250	(d)					The owner or operator must place the completed assessment of corrective measures in the facility's operating record. The assessment has been completed when it is placed in the facility's operating record as required by § 257.105(h)(10).			
251	(e)					The owner or operator must discuss the results of the corrective measures assessment at least 30 days prior to the selection of remedy, in a public meeting with interested and affected parties.			
252	(f)					The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the Internet requirements specified in § 257.107(h).			
253						**§ 257.97 Selection of Remedy**	**252:517-9-8**		
254						***The owner of operator of the CCR unit must meet all the requirements (a) through (e) and all their components.***			
255	(a)					Based on the results of the corrective measures assessment conducted under § 257.96, the owner or operator must, as soon as feasible, select a remedy that, at a minimum, meets the standards listed in paragraph (b) of this section. This requirement applies to, not in place of, any applicable standards under the Occupational Safety and Health Act. The owner or operator must prepare a semiannual report describing the progress in selecting and designing the remedy. Upon selection of a remedy, the owner or operator must prepare a final report describing the selected remedy and how it meets the standards specified in paragraph (b) of this section. The owner or operator must obtain a certification from a qualified professional engineer that the remedy selected meets the requirements of this section. The report has been completed when it is placed in the operating record as required by § 257.105(h)(12).			
256	(b)	(1)				***Remedies must:*** Be protective of human health and the environment;			
257	(b)	(2)				Attain the groundwater protection standard as specified pursuant to § 257.95(h);			
258	(b)	(3)				Control the source(s) of releases so as to reduce or eliminate, to the maximum extent feasible, further releases of constituents in appendix IV to this part into the environment;			
259	(b)	(4)				Remove from the environment as much of the contaminated material that was released from the CCR unit as is feasible, taking into account factors such as avoiding inappropriate disturbance of sensitive ecosystems;			
260	(b)	(5)				Comply with standards for management of wastes as specified in § 257.98(d).			

261	(c)					*In selecting a remedy that meets the standards of paragraph (b) of this section, the owner or operator of the CCR unit shall consider the following evaluation factors:*			
						The long- and short-term effectiveness and protectiveness of the potential remedy(s), along with the degree of certainty that the remedy will prove successful.			
262	(c)	(1)	(i)			*The remedy will prove successful based on consideration of the following:*			
						Magnitude of reduction of existing risks;			
263	(c)	(1)	(ii)			Magnitude of residual risks in terms of likelihood of further releases due to CCR remaining following implementation of a remedy;			
264	(c)	(1)	(iii)			The type and degree of long-term management required, including monitoring, operation, and maintenance;			
265	(c)	(1)	(iv)			Short-term risks that might be posed to the community or the environment during implementation of such a remedy, including potential threats to human health and the environment associated with excavation, transportation, and redisposal of contaminant;			
266	(c)	(1)	(v)			Time until full protection is achieved;			
267	(c)	(1)	(vi)			Potential for exposure of humans and environmental receptors to remaining wastes, considering the potential threat to human health and the environment associated with excavation, transportation, re-disposal, or containment;			
268	(c)	(1)	(vii)			Long-term reliability of the engineering and institutional controls; and (viii) Potential need for replacement of the remedy.			
269	(c)	(2)	(i)			*The effectiveness of the remedy in controlling the source to reduce further releases based on consideration of the following factors:*			
						The extent to which containment practices will reduce further releases; and			
270	(c)	(2)	(ii)			The extent to which treatment technologies may be used.			
271	(c)	(3)	(i)			*The ease or difficulty of implementing a potential remedy(s) based on consideration of the following types of factors:*			
						Degree of difficulty associated with constructing the technology;			
272	(c)	(3)	(ii)			Expected operational reliability of the technologies;			
273	(c)	(3)	(iii)			Need to coordinate with and obtain necessary approvals and permits from other agencies;			

274	(c)	(3)	(iv)			Availability of necessary equipment and specialists; and			
275	(c)	(3)	(v)			Available capacity and location of needed treatment, storage, and disposal services.			
276	(c)	(4)				The degree to which community concerns are addressed by a potential remedy(s).			
277	(d)					The owner or operator must specify as part of the selected remedy a schedule(s) for implementing and completing remedial activities. Such a schedule must require the completion of remedial activities within a reasonable period of time taking into consideration the factors set forth in paragraphs (d)(1) through (6) of this section.			
278	(d)	(1)				*The owner or operator of the CCR unit must consider the following factors in determining the schedule of remedial activities:* Extent and nature of contamination, as determined by the characterization required under § 257.95(g);			
279	(d)	(2)				Reasonable probabilities of remedial technologies in achieving compliance with the groundwater protection standards established under § 257.95(h) and other objectives of the remedy;			
280	(d)	(3)				Availability of treatment or disposal capacity for CCR managed during implementation of the remedy;			
281	(d)	(4)				Potential risks to human health and the environment from exposure to contamination prior to completion of the remedy;			
282	(d)	(5)	(i)			Resource value of the aquifer including: Current and future uses;			
283	(d)	(5)	(ii)			Proximity and withdrawal rate of users;			
284	(d)	(5)	(iii)			Groundwater quantity and quality;			
285	(d)	(5)	(iv)			The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to CCR constituents;			
286	(d)	(5)	(v)			The hydrogeologic characteristic of the facility and surrounding land; and (vi) The availability of alternative water supplies; and			
287	(d)	(6)				Other relevant factors.			
288	(e)					The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the Internet requirements specified in § 257.107(h).			

289						**§ 257.98 Implementation of the Corrective Action Program**	**252:517-9-9**		
290						*The owner of operator of the CCR unit must meet all the requirements (a) through (f) and all their components.*			
291	(a)					Within 90 days of selecting a remedy under § 257.97, the owner or operator must initiate remedial activities.			
292	(a)	(1)				*Based on the schedule established under § 257.97(d) for implementation and completion of remedial activities the owner or operator must:* Establish and implement a corrective action groundwater monitoring program.			
293	(a)	(1)	(i)			*The corrective action groundwater monitoring program must:* At a minimum, meets the requirements of an assessment monitoring program under § 257.95;			
294	(a)	(1)	(ii)			Documents the effectiveness of the corrective action remedy; and			
295	(a)	(1)	(iii)			Demonstrates compliance with the groundwater protection standard pursuant to paragraph (c) of this section.			
296	(a)	(2)				Implement the corrective action remedy selected under § 257.97; and			
297	(a)	(3)				Take any interim measures necessary to reduce the contaminants leaching from the CCR unit, and/or potential exposures to human or ecological receptors. Interim measures must, to the greatest extent feasible, be consistent with the objectives of and contribute to the performance of any remedy that may be required pursuant to § 257.97.			
298	(a)	(3)	(i)			*The following factors must be considered by an owner or operator in determining whether interim measures are necessary:* Time required to develop and implement a final remedy;			
299	(a)	(3)	(ii)			Actual or potential exposure of nearby populations or environmental receptors to any of the constituents listed in appendix IV of this part;			
300	(a)	(3)	(iii)			Actual or potential contamination of drinking water supplies or sensitive ecosystems;			
301	(a)	(3)	(iv)			Further degradation of the groundwater that may occur if remedial action is not initiated expeditiously;			
302	(a)	(3)	(v)			Weather conditions that may cause any of the constituents listed in appendix IV to this part to migrate or be released;			

303	(a)	(3)	(vi)			Potential for exposure to any of the constituents listed in appendix IV to this part as a result of an accident or failure of a container or handling system; and			
304	(a)	(3)	(vii)			Other situations that may pose threats to human health and the environment.			
305	(b)					If an owner or operator of the CCR unit, determines, at any time, that compliance with the requirements of § 257.97(b) is not being achieved through the remedy selected, the owner or operator must implement other methods or techniques that could feasibly achieve compliance with the requirements.			
306	(c)	(1)				*Remedies selected pursuant to § 257.97 shall be considered complete when:* The owner or operator of the CCR unit demonstrates compliance with the groundwater protection standards established under § 257.95(h) has been achieved at all points within the plume of contamination that lie beyond the groundwater monitoring well system established under § 257.91.			
307	(c)	(2)				Compliance with the groundwater protection standards established under § 257.95(h) has been achieved by demonstrating that concentrations of constituents listed in appendix IV to this part have not exceeded the groundwater protection standard(s) for a period of three consecutive years using the statistical procedures and performance standards in § 257.93(f) and (g).			
308	(c)	(3)				All actions required to complete the remedy have been satisfied.			
309	(d)					All CCR that are managed pursuant to a remedy required under § 257.97, or an interim measure required under paragraph (a)(3) of this section, shall be managed in a manner that complies with all applicable RCRA requirements.			
310	(e)					Upon completion of the remedy, the owner or operator must prepare a notification stating that the remedy has been completed. The owner or operator must obtain a certification from a qualified professional engineer attesting that the remedy has been completed in compliance with the requirements of paragraph (c) of this section. The report has been completed when it is placed in the operating record as required by § 257.105(h)(13).			
311	(f)					The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the internet requirements specified in § 257.107(h).			
312						**§ 257.101 Closure or Retrofit of CCR Units**	**252:517-15-6**		
313						*The owner of operator of the CCR unit must meet all the requirements (a) through (d) and all their components.*			

314	(a)	(1)				The owner or operator of an existing unlined CCR surface impoundment, as determined under § 257.71(a), is subject to the requirements of paragraph (a)(1) of this section. Except as provided by paragraph (a)(3) of this section, if at any time after October 19, 2015 an owner or operator of an existing unlined CCR surface impoundment determines in any sampling event that the concentrations of one or more constituents listed in appendix IV to this part are detected at statistically significant levels above the groundwater protection standard established under § 257.95(h) for such CCR unit, within six months of making such determination, the owner or operator of the existing unlined CCR surface impoundment must cease placing CCR and non-CCR wastestreams into such CCR surface impoundment and either retrofit or close the CCR unit in accordance with the requirements of § 257.102.			
315	(a)	(2)				An owner or operator of an existing unlined CCR surface impoundment that closes in accordance with paragraph (a)(1) of this section must include a statement in the notification required under § 257.102(g) or (k)(5) that the CCR surface impoundment is closing or retrofitting under the requirements of paragraph (a)(1) of this section.			
316	(a)	(3)				The timeframe specified in paragraph (a)(1) of this section does not apply if the owner or operator complies with the alternative closure procedures specified in § 257.103.			
317	(a)	(4)				At any time after the initiation of closure under paragraph (a)(1) of this section, the owner or operator may cease closure activities and initiate a retrofit of the CCR unit in accordance with the requirements of § 257.102(k).			
318	(b)	(1)				The owner or operator of an existing CCR surface impoundment is subject to the requirements of paragraph (b)(1) of this section. Except as provided by paragraph (b)(4) of this section, within six months of determining that an existing CCR surface impoundment has not demonstrated compliance with any location standard specified in §§ 257.60(a), 257.61(a), 257.62(a), 257.63(a), and 257.64(a), the owner or operator of the CCR surface impoundment must cease placing CCR and non-CCR wastestreams into such CCR unit and close the CCR unit in accordance with the requirements of § 257.102.			

319	(b)	(2)				Within six months of either failing to complete the initial or any subsequent periodic safety factor assessment required by § 257.73(e) by the deadlines specified in § 257.73(f)(1) through (3) or failing to document that the calculated factors of safety for the existing CCR surface impoundment achieve the minimum safety factors specified in § 257.73(e)(1)(i) through (iv), the owner or operator of the CCR surface impoundment must cease placing CCR and non-CCR wastestreams into such CCR unit and close the CCR unit in accordance with the requirements of § 257.102.			
320	(b)	(3)				An owner or operator of an existing CCR surface impoundment that closes in accordance with paragraphs (b)(1) or (2) of this section must include a statement in the notification required under § 257.102(g) that the CCR surface impoundment is closing under the requirements of paragraphs (b)(1) or (2) of this section.			
321	(b)	(4)				The timeframe specified in paragraph (b)(1) of this section does not apply if the owner or operator complies with the alternative closure procedures specified in § 257.103.			
322	(c)	(1)				The owner or operator of a new CCR surface impoundment is subject to the requirements of paragraph (c)(1) of this section. Within six months of either failing to complete the initial or any subsequent periodic safety factor assessment required by § 257.74(e) by the deadlines specified in § 257.74(f)(1) through (3) or failing to document that the calculated factors of safety for the new CCR surface impoundment achieve the minimum safety factors specified in § 257.74(e)(1)(i) through (v), the owner or operator of the CCR surface impoundment must cease placing CCR and non-CCR wastestreams into such CCR unit and close the CCR unit in accordance with the requirements of § 257.102.			
323	(c)	(2)				An owner or operator of an new CCR surface impoundment that closes in accordance with paragraph (c)(1) of this section must include a statement in the notification required under § 257.102(g) that the CCR surface impoundment is closing under the requirements of paragraph (c)(1) of this section.			

324	(d)	(1)				The owner or operator of an existing CCR landfill is subject to the requirements of paragraph (d)(1) of this section. Except as provided by paragraph (d)(3) of this section, within six months of determining that an existing CCR landfill has not demonstrated compliance with the location restriction for unstable areas specified in § 257.64(a), the owner or operator of the CCR unit must cease placing CCR and non-CCR waste streams into such CCR landfill and close the CCR unit in accordance with the requirements of § 257.102.			
325	(d)	(2)				An owner or operator of an existing CCR landfill that closes in accordance with paragraph (d)(1) of this section must include a statement in the notification required under § 257.102(g) that the CCR landfill is closing under the requirements of paragraph (d)(1) of this section.			
326	(d)	(3)				The timeframe specified in paragraph (d)(1) of this section does not apply if the owner or operator complies with the alternative closure procedures specified in § 257.103.			
327						**§ 257.102 Criteria for Conducting the Closure or Retrofit of CCR Units**	**252:517-15-7**		
328						*The owner of operator of the CCR unit must meet all the requirements (a) through (k) and all their components.*			
329	(a)					Closure of a CCR landfill, CCR surface impoundment, or any lateral expansion of a CCR unit must be completed either by leaving the CCR in place and installing a final cover system or through removal of the CCR and decontamination of the CCR unit, as described in paragraphs (b) through (j) of this section. Retrofit of a CCR surface impoundment must be completed in accordance with the requirements in paragraph (k) of this section.			
330	(b)	(1)				The owner or operator of a CCR unit must prepare a written closure plan that describes the steps necessary to close the CCR unit at any point during the active life of the CCR unit consistent with recognized and generally accepted good engineering practices.			
331	(b)	(1)	(i)			*The written closure plan must include, at a minimum, the information specified in paragraphs (b)(1)(i) through (vi) of this section:* A narrative description of how the CCR unit will be closed in accordance with this section.			
332	(b)	(1)	(ii)			If closure of the CCR unit will be accomplished through removal of CCR from the CCR unit, a description of the procedures to remove the CCR and decontaminate the CCR unit in accordance with paragraph (c) of this section.			

333	(b)	(1)	(iii)			If closure of the CCR unit will be accomplished by leaving CCR in place, a description of the final cover system, designed in accordance with paragraph (d) of this section, and the methods and procedures to be used to install the final cover. The closure plan must also discuss how the final cover system will achieve the performance standards specified in paragraph (d) of this section.			
334	(b)	(1)	(iv)			An estimate of the maximum inventory of CCR ever on-site over the active life of the CCR unit.			
335	(b)	(1)	(v)			An estimate of the largest area of the CCR unit ever requiring a final cover as required by paragraph (d) of this section at any time during the CCR unit's active life.			
336	(b)	(1)	(v)			A schedule for completing all activities necessary to satisfy the closure criteria in this section, including an estimate of the year in which all closure activities for the CCR unit will be completed. The schedule should provide sufficient information to describe the sequential steps that will be taken to close the CCR unit, including identification of major milestones such as coordinating with and obtaining necessary approvals and permits from other agencies, the dewatering and stabilization phases of CCR surface impoundment closure, or installation of the final cover system, and the estimated timeframes to complete each step or phase of CCR unit closure. When preparing the written closure plan, if the owner or operator of a CCR unit estimates that the time required to complete closure will exceed the timeframes specified in paragraph (f)(1) of this section, the written closure plan must include the site-specific information, factors and considerations that would support any time extension sought under paragraph (f)(2) of this section.			
337	(b)	(2)	(i)			The owner or operator ofan existing CCR landfill and existing CCR surface impoundment must prepare an initial written closure plan consistent with the requirements specified in paragraph (b)(1) of this section, no later than October 17, 2016.			
338	(b)	(2)	(ii)			For new CCR landfills and new CCR surface impoundments, and any lateral expansion of a CCR unit, the owner or operator must prepare an initial written closure plan consistent with the requirements specified in paragraph (b)(1) of this section, no later than the date of the initial receipt of CCR in the CCR unit.			
339	(b)	(2)	(iii)			The owner or operator has completed the written closure plan when the plan, including the certification required by paragraph (b)(4) of this section, has been placed in the facility's operating record as required by § 257.105(i)(4).			
340	(b)	(3)	(i)			The owner or operator may amend the initial or any subsequent written closure plan developed pursuant to paragraph (b)(1) of this section at any time.			

341	(b)	(3)	(ii)	(A)		*The owner or operator must amend the written closure plan whenever:* There is a change in the operation of the CCR unit that would substantially affect the written closure plan in effect; or			
342	(b)	(3)	(ii)	(B)		Before or after closure activities have commenced, unanticipated events necessitate a revision of the written closure plan.			
343	(b)	(3)	(iii)			The owner or operator must amend the closure plan at least 60 days prior to a planned change in the operation of the facility or CCR unit, or no later than 60 days after an unanticipated event requires the need to revise an existing written closure plan. If a written closure plan is revised after closure activities have commenced for a CCR unit, the owner or operator must amend the current closure plan no later than 30 days following the triggering event.			
344	(b)	(4)				The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the initial and any amendment of requirements of this section.			
345	(c)					An owner or operator may elect to close a CCR unit by removing and decontaminating all areas affected by releases from the CCR unit. CCR removal and decontamination of the CCR unit are complete when constituent concentrations throughout the CCR unit and any areas affected by releases from the CCR unit have been removed and groundwater monitoring concentrations do not exceed the groundwater protection standard established pursuant to § 257.95(h) for constituents listed in appendix IV to this part.			
346	(d)	(1)	(i)			*The owner or operator of a CCR unit must ensure that, at a minimum, the CCR unit is closed in a manner that will:* Control, minimize or eliminate, to the maximum extent feasible, postclosure infiltration of liquids into the waste and releases of CCR, leachate, or contaminated run-off to the ground or surface waters or to the atmosphere;			
347	(d)	(1)	(ii)			Preclude the probability of future impoundment of water, sediment, or slurry;			
348	(d)	(1)	(iii)			Include measures that provide for major slope stability to prevent the sloughing or movement of the final cover system during the closure and post-closure care period;			
349	(d)	(1)	(iv)			Minimize the need for further maintenance of the CCR unit; and			
350	(d)	(1)	(v)			Be completed in the shortest amount of time consistent with recognized and generally accepted good engineering practices.			

351	(d)	(2)	(i)			*The owner or operator of a CCR surface impoundment or any lateral expansion of a CCR surface impoundment must meet the requirements of paragraphs (d)(2)(i) and (ii) of this section prior to installing the final cover system required under paragraph (d)(3) of this section.* Free liquids must be eliminated by removing liquid wastes or solidifying the remaining wastes and waste residues.			
352	(d)	(2)	(ii)			Remaining wastes must be stabilized sufficient to support the final cover system.			
353	(d)	(3)				If a CCR unit is closed by leaving CCR in place, the owner or operator must install a final cover system that is designed to minimize infiltration and erosion, and at a minimum, meets the requirements of paragraph (d)(3)(i) of this section, or the requirements of the alternative final cover system specified in paragraph (d)(3)(ii) of this section.			
354	(d)	(3)	(i)			The final cover system must be designed and constructed to meet the criteria in paragraphs (d)(3)(i)(A) through (D) of this section.			
355	(d)	(3)	(i)	(A)		*The design of the final cover system must be included in the written closure plan required by paragraph (b) of this section.* The permeability of the final cover system must be less than or equal to the permeability of any bottom liner system or natural subsoils present, or a permeability no greater than 1 × 10¥5 cm/sec, whichever is less.			
356	(d)	(3)	(i)	(B)		The infiltration of liquids through the closed CCR unit must be minimized by the use of an infiltration layer that contains a minimum of 18 inches of earthen material.			
357	(d)	(3)	(i)	(C)		The erosion of the final cover system must be minimized by the use of an erosion layer that contains a minimum of six inches of earthen material that is capable of sustaining native plant growth.			
358	(d)	(3)	(i)	(D)		The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.			
359	(d)	(3)	(ii)			The owner or operator may select an alternative final cover system design, provided the alternative final cover system is designed and constructed to meet the criteria in paragraphs (f)(3)(ii)(A) through (D) of this section.			
360	(d)	(3)	(ii)	(A)		*The design of the final cover system must be included in the written closure plan required by paragraph (b) of this section.*			

						The design of the final cover system must include an infiltration layer that achieves an equivalent reduction in infiltration as the infiltration layer specified in paragraphs (d)(3)(i)(A) and (B) of this section.			
361	(d)	(3)	(ii)	(B)		The design of the final cover system must include an erosion layer that provides equivalent protection from wind or water erosion as the erosion layer specified in paragraph (d)(3)(i)(C) of this section.			
362	(d)	(3)	(ii)	(C)		The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.			
363	(d)	(3)	(iii)			The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the design of the final cover system meets the requirements of this section.			
364	(e)					Except as provided for in paragraph (e)(4) of this section and § 257.103, the owner or operator of a CCR unit must commence closure of the CCR unit no later than the applicable timeframes specified in either paragraph (e)(1) or (2) of this section.			
365	(e)	(1)	(i)			*The owner or operator must commence closure of the CCR unit no later than 30 days after the date on which the CCR unit either:* Receives the known final receipt of waste, either CCR or any non-CCR waste stream; or			
366	(e)	(1)	(ii)			Removes the known final volume of CCR from the CCR unit for the purpose of beneficial use of CCR.			
367	(e)	(2)	(i)			Except as provided by paragraph (e)(2)(ii) of this section, the owner or operator must commence closure of a CCR unit that has not received CCR or any non-CCR waste stream or is no longer removing CCR for the purpose of beneficial use within two years of the last receipt of waste or within two years of the last removal of CCR material for the purpose of beneficial use.			

368	(e)	(2)	(ii)			Notwithstanding paragraph (e)(2)(i) of this section, the owner or operator of the CCR unit may secure an additional two years to initiate closure of the idle unit provided the owner or operator provides written documentation that the CCR unit will continue to accept wastes or will start removing CCR for the purpose of beneficial use. The documentation must be supported by, at a minimum, the information specified in paragraphs (e)(2)(ii)(A) and (B) of this section. The owner or operator may obtain two-year extensions provided the owner or operator continues to be able to demonstrate that there is reasonable likelihood that the CCR unit will accept wastes in the foreseeable future or will remove CCR from the unit for the purpose of beneficial use. The owner or operator must place each completed demonstration, if more than one time extension is sought, in the facility's operating record as required by § 257.105(i)(5) prior to the end of any two-year period.			
369	(e)	(2)	(ii)	(A)		Information documenting that the CCR unit has remaining storage or disposal capacity or that the CCR unit can have CCR removed for the purpose of beneficial use; and			
370	(e)	(2)	(ii)	(B)		Information demonstrating that that there is a reasonable likelihood that the CCR unit will resume receiving CCR or non-CCR waste streams in the foreseeable future or that CCR can be removed for the purpose of beneficial use. The narrative must include a best estimate as to when the CCR unit will resume receiving CCR or non-CCR waste streams. The situations listed in paragraphs (e)(2)(ii)(B)(1) through (4) of this section are examples of situations that would support a determination that the CCR unit will resume receiving CCR or non-CCR waste streams in the foreseeable future.			
371	(e)	(2)	(ii)	(B)	(1)	Normal plant operations include periods during which the CCR unit does not receive CCR or non-CCR waste streams, such as the alternating use of two or more CCR units whereby at any point in time one CCR unit is receiving CCR while CCR is being removed from a second CCR unit after its dewatering.			
372	(e)	(2)	(ii)	(B)	(2)	The CCR unit is dedicated to a coal-fired boiler unit that is temporarily idled (e.g., CCR is not being generated) and there is a reasonable likelihood that the coal-fired boiler will resume operations in the future.			
373	(e)	(2)	(ii)	(B)	(3)	The CCR unit is dedicated to an operating coal-fired boiler (i.e., CCR is being generated); however, no CCR are being placed in the CCR unit because the CCR are being entirely diverted to beneficial uses, but there is a reasonable likelihood that the CCR unit will again be used in the foreseeable future.			
374	(e)	(2)	(ii)	(B)	(4)	The CCR unit currently receives only non-CCR waste streams and those non-CCR waste streams are not generated for an extended period of time, but there is a reasonable likelihood that the CCR unit will again receive non-CCR waste streams in the future.			

375	(e)	(2)	(iii)			In order to obtain additional time extension(s) to initiate closure of a CCR unit beyond the two years provided by paragraph (e)(2)(i) of this section, the owner or operator of the CCR unit must include with the demonstration required by paragraph (e)(2)(ii) of this section the following statement signed by the owner or operator or an authorized representative: I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.			
376	(e)	(3)	(i)			*For purposes of this subpart, closure of the CCR unit has commenced if the owner or operator has ceased placing waste and completes any of the following actions or activities:*			
						Taken any steps necessary to implement the written closure plan required by paragraph (b) of this section;			
377	(e)	(3)	(ii)			Submitted a completed application for any required state or agency permit or permit modification; or			
378	(e)	(3)	(iii)			Taken any steps necessary to comply with any state or other agency standards that are a prerequisite, or are otherwise applicable, to initiating or completing the closure of a CCR unit.			
379	(e)	(4)	(ii)			An owner or operator of an existing unlined CCR surface impoundment closing the CCR unit as required by § 257.101(a);			
380	(e)	(4)	(iii)			An owner or operator of an existing CCR surface impoundment closing the CCR unit as required by § 257.101(b);			
381	(e)	(4)	(iv)			An owner or operator of a new CCR surface impoundment closing the CCR unit as required by § 257.101(c); or			
382	(f)					An owner or operator of an existing CCR landfill closing the CCR unit as required by § 257.101(d). (f) Completion of closure activities.			
383	(f)	(1)	(i)			*Except as provided for in paragraph (f)(2) of this section, the owner or operator must complete closure of the CCR unit:*			
						For existing and new CCR landfills and any lateral expansion of a CCR landfill, within six months of commencing closure activities.			

384	(f)	(1)	(ii)			For existing and new CCR surface impoundments and any lateral expansion of a CCR surface impoundment, within five years of commencing closure activities.			
385	(f)	(2)	(i)			The timeframes for completing closure of a CCR unit specified under paragraphs (f)(1) of this section may be extended if the owner or operator can demonstrate that it was not feasible to complete closure of the CCR unit within the required timeframes due to factors beyond the facility's control. If the owner or operator is seeking a time extension beyond the time specified in the written closure plan as required by paragraph (b)(1) of this section, the demonstration must include a narrative discussion providing the basis for additional time beyond that specified in the closure plan. The owner or operator must place each completed demonstration, if more than one time extension is sought, in the facility's operating record as required by § 257.105(i)(6) prior to the end of any two-year period.			
						Factors that may support such a demonstration include:			
386	(f)	(2)	(i)	(A)		Complications stemming from the climate and weather, such as unusual amounts of precipitation or a significantly shortened construction season;			
387	(f)	(2)	(i)	(B)		Time required to dewater a surface impoundment due to the volume of CCR contained in the CCR unit or the characteristics of the CCR in the unit;			
388	(f)	(2)	(i)	(C)		The geology and terrain surrounding the CCR unit will affect the amount of material needed to close the CCR unit; or			
389	(f)	(2)	(i)	(D)		Time required or delays caused by the need to coordinate with and obtain necessary approvals and permits from a state or other agency.			
390	(f)	(2)	(ii)	(A)		CCR surface impoundments of 40 acres or smaller may extend the time to complete closure by no longer than two years.			
391	(f)	(2)	(ii)	(B)		CCR surface impoundments larger than 40 acres may extend the timeframe to complete closure of the CCR unit multiple times, in two-year increments. For each two-year extension sought, the owner or operator must substantiate the factual circumstances demonstrating the need for the extension. No more than a total of five two-year extensions may be obtained for any CCR surface impoundment.			

392	(f)	(2)	(ii)	(C)		CCR landfills may extend the timeframe to complete closure of the CCR unit multiple times, in one-year increments. For each one-year extension sought, the owner or operator must substantiate the factual circumstances demonstrating the need for the extension. No more than a total of two one-year extensions may be obtained for any CCR landfill.			
393	(f)	(2)	(iii)			*In order to obtain additional time extension(s) to complete closure of a CCR unit beyond the times provided by paragraph (f)(1) of this section, the owner or operator of the CCR unit must include with the demonstration required by paragraph (f)(2)(i) of this section the following statement signed by the owner or operator or an authorized representative:* I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.			
394	(f)	(3)				Upon completion, the owner or operator of the CCR unit must obtain a certification from a qualified professional engineer verifying that closure has been completed in accordance with the closure plan specified in paragraph (b) of this section and the requirements of this section.			
395	(g)					No later than the date the owner or operator initiates closure of a CCR unit, the owner or operator must prepare a notification of intent to close a CCR unit. The notification must include the certification by a qualified professional engineer for the design of the final cover system as required by § 257.102(d)(3)(iii), if applicable. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by § 257.105(i)(7).			
396	(h)					Within 30 days of completion of closure of the CCR unit, the owner or operator must prepare a notification of closure of a CCR unit. The notification must include the certification by a qualified professional engineer as required by § 257.102(f)(3). The owner or operator has completed the notification when it has been placed in the facility's operating record as required by § 257.105(i)(8).			
397	(i)	(1)				Except as provided by paragraph (i)(4) of this section, following closure of a CCR unit, the owner or operator must record a notation on the deed to the property, or some other instrument that is normally examined during title search.			

398	(i)	(2)	(i)			*The notation on the deed must in perpetuity notify any potential purchaser of the property that:*			
399	(i)	(2)	(ii)			The land has been used as a CCR unit; and			
400	(i)	(3)				Its use is restricted under the postclosure care requirements as provided by § 257.104(d)(1)(iii).			
401	(i)	(4)				Within 30 days of recording a notation on the deed to the property, the owner or operator must prepare a notification stating that the notation has been recorded. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by § 257.105(i)(9).			
402	(j)					An owner or operator that closes a CCR unit in accordance with paragraph (c) of this section is not subject to the requirements of paragraphs (i)(1) through (3) of this section.			
403	(k)	(1)	(i)			The owner or operator of the CCR unit must comply with the closure recordkeeping requirements specified in § 257.105(i), the closure notification requirements specified in § 257.106(i), and the closure Internet requirements specified in § 257.107(i).			
404	(k)	(1)	(ii)			*To retrofit an existing CCR surface impoundment, the owner or operator must:*			
405	(k)	(1)	(iii)			First remove all CCR, including any contaminated soils and sediments from the CCR unit; and			
406	(k)	(2)	(i)			Comply with the requirements in § 257.72.			
407	(k)	(2)	(i)	(A)		A CCR surface impoundment undergoing a retrofit remains subject to all other requirements of this subpart, including the requirement to conduct any necessary corrective action.			
408	(k)	(2)	(i)	(B)		The owner or operator must prepare a written retrofit plan that describes the steps necessary to retrofit the CCR unit consistent with recognized and generally accepted good engineering practices.			
						The written retrofit plan must include, at a minimum, all of the following information:			
						A narrative description of the specific measures that will be taken to retrofit the CCR unit in accordance with this section.			
						A description of the procedures to remove all CCR and contaminated soils and sediments from the CCR unit.			

409	(k)	(2)	(i)	(C)		An estimate of the maximum amount of CCR that will be removed as part of the retrofit operation.			
410	(k)	(2)	(i)	(D)		An estimate of the largest area of the CCR unit that will be affected by the retrofit operation.			
411	(k)	(2)	(i)	(E)		A schedule for completing all activities necessary to satisfy the retrofit criteria in this section, including an estimate of the year in which retrofit activities of the CCR unit will be completed.			
412	(k)	(2)	(ii)	(A)		Timeframes for preparing the initial written retrofit plan. No later than 60 days prior to date of initiating retrofit activities, the owner or operator must prepare an initial written retrofit plan consistent with the requirements specified in paragraph (k)(2) of this section.			
413	(k)	(2)	(ii)	(A)	(1)	*For purposes of this subpart, initiation of retrofit activities has commenced if the owner or operator has ceased placing waste in the unit and completes any of the following actions or activities:*			
						Taken any steps necessary to implement the written retrofit plan;			
414	(k)	(2)	(ii)	(A)	(2)	Submitted a completed application for any required state or agency permit or permit modification; or			
415	(k)	(2)	(ii)	(A)	(3)	Taken any steps necessary to comply with any state or other agency standards that are a prerequisite, or are otherwise applicable, to initiating or completing the retrofit of a CCR unit.			
416	(k)	(2)	(ii)	(B)		The owner or operator has completed the written retrofit plan when the plan, including the certification required by paragraph (k)(2)(iv) of this section, has been placed in the facility's operating record as required by § 257.105(j)(1).			
417	(k)	(2)	(iii)	(A)		The owner or operator may amend the initial or any subsequent written retrofit plan at any time.			
418	(k)	(2)	(iii)	(B)	(1)	*The owner or operator must amend the written retrofit plan whenever:*			
						There is a change in the operation of the CCR unit that would substantially affect the written retrofit plan in effect; or			
419	(k)	(2)	(iii)	(B)	(2)	Before or after retrofit activities have commenced, unanticipated events necessitate a revision of the written retrofit plan.			

420	(k)	(2)	(iii)	(C)		The owner or operator must amend the retrofit plan at least 60 days prior to a planned change in the operation of the facility or CCR unit, or no later than 60 days after an unanticipated event requires the revision of an existing written retrofit plan. If a written retrofit plan is revised after retrofit activities have commenced for a CCR unit, the owner or operator must amend the current retrofit plan no later than 30 days following the triggering event.			
421	(k)	(2)	(iv)			The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the activities outlined in the written retrofit plan, including any amendment of the plan, meet the requirements of this section.			
422	(k)	(3)				Deadline for completion of activities related to the retrofit of a CCR unit. Any CCR surface impoundment that is being retrofitted must complete all retrofit activities within the same time frames and procedures specified for the closure of a CCR surface impoundment in § 257.102(f) or, where applicable, § 257.103.			
423	(k)	(4)				Upon completion, the owner or operator must obtain a certification from a qualified professional engineer verifying that the retrofit activities have been completed in accordance with the retrofit plan specified in paragraph (k)(2) of this section and the requirements of this section.			
424	(k)	(5)				No later than the date the owner or operator initiates the retrofit of a CCR unit, the owner or operator must prepare a notification of intent to retrofit a CCR unit. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by § 257.105(j)(5).			
425	(k)	(6)				Within 30 days of completing the retrofit activities specified in paragraph (k)(1) of this section, the owner or operator must prepare a notification of completion of retrofit activities. The notification must include the certification by a qualified professional engineer as required by paragraph (k)(4) of this section. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by § 257.105(j)(6).			
426	(k)	(7)				At any time after the initiation of a CCR unit retrofit, the owner or operator may cease the retrofit and initiate closure of the CCR unit in accordance with the requirements of § 257.102.			
427	(k)	(8)				The owner or operator of the CCR unit must comply with the retrofit recordkeeping requirements specified in § 257.105(j), the retrofit notification requirements specified in § 257.106(j), and the retrofit Internet requirements specified in § 257.107(j).			
428						**§ 257.103 Alternative Closure Requirements**	**252:517-15-8**		
429						***The owner of operator of the CCR unit must meet either requirement (a) and all its components or (b) and all its components, in addition to requirements (c) through (d).***			

430	(a)	(1)				The owner or operator of a CCR landfill, CCR surface impoundment, or any lateral expansion of a CCR unit that is subject to closure pursuant to § 257.101(a), (b)(1), or (d) may continue to receive CCR in the unit provided the owner or operator meets the requirements of either paragraph (a) or (b) of this section. Notwithstanding the provisions of § 257.101(a), (b)(1), or (d), a CCR unit may continue to receive CCR if the owner or operator of the CCR unit certifies that the CCR must continue to be managed in that CCR unit due to the absence of alternative disposal capacity both on-site and off-site of the facility.			
431	(a)	(1)	(i)			*To qualify under this paragraph (a)(1), the owner or operator of the CCR unit must document that all of the following conditions have been met:* No alternative disposal capacity is available on-site or off-site. An increase in costs or the inconvenience of existing capacity is not sufficient to support qualification under this section;			
432	(a)	(1)	(ii)			The owner or operator has made, and continues to make, efforts to obtain additional capacity. Qualification under this subsection lasts only as long as no alternative capacity is available. Once alternative capacity is identified, the owner or operator must arrange to use such capacity as soon as feasible;			
433	(a)	(1)	(iii)			The owner or operator must remain in compliance with all other requirements of this subpart, including the requirement to conduct any necessary corrective action; and			
434	(a)	(1)	(iv)			The owner or operator must prepare an annual progress report documenting the continued lack of alternative capacity and the progress towards the development of alternative CCR disposal capacity.			
435	(a)	(2)				Once alternative capacity is available, the CCR unit must cease receiving CCR and initiate closure following the timeframes in § 257.102(e) and (f).			
436	(a)	(3)				If no alternative capacity is identified within five years after the initial certification, the CCR unit must cease receiving CCR and close in accordance with the timeframes in § 257.102(e) and (f).			

437	(b)	(1)				Notwithstanding the provisions of § 257.101(a), (b)(1), and (d), a CCR unit may continue to receive CCR if the owner or operator certifies that the facility will cease operation of the coalfired boilers within the timeframes specified in paragraphs (b)(2) through (4) of this section, but in the interim period (prior to closure of the coal-fired boiler), the facility must continue to use the CCR unit due to the absence of alternative disposal capacity both onsite and off-site of the facility.			
438	(b)	(1)	(i)			*To qualify under this paragraph (b)(1), the owner or operator of the CCR unit must document that all of the following conditions have been met:* No alternative disposal capacity is available on-site or off-site. An increase in costs or the inconvenience of existing capacity is not sufficient to support qualification under this section.			
439	(b)	(1)	(ii)			The owner or operator must remain in compliance with all other requirements of this subpart, including the requirement to conduct any necessary corrective action; and			
440	(b)	(1)	(iii)			The owner or operator must prepare an annual progress report documenting the continued lack of alternative capacity and the progress towards the closure of the coal-fired boiler.			
441	(b)	(2)				For a CCR surface impoundment that is 40 acres or smaller, the coal-fired boiler must cease operation and the CCR surface impoundment must have completed closure no later than October 17, 2023.			
442	(b)	(3)				For a CCR surface impoundment that is larger than 40 acres, the coalfired boiler must cease operation, and the CCR surface impoundment must complete closure no later than October 17, 2028.			
443	(b)	(4)				For a CCR landfill, the coal-fired boiler must cease operation, and the CCR landfill must complete closure no later than April 19, 2021.			

444	(c)	(1)				Required notices and progress reports. An owner or operator of a CCR unit that closes in accordance with paragraphs (a) or (b) of this section must complete the notices and progress reports specified in paragraphs (c)(1) through (3) of this section. Within six months of becoming subject to closure pursuant to § 257.101(a), (b)(1), or (d), the owner or operator must prepare and place in the facility's operating record a notification of intent to comply with the alternative closure requirements of this section. The notification must describe why the CCR unit qualifies for the alternative closure provisions under either paragraph (a) or (b) of this section, in addition to providing the documentation and certifications required by paragraph (a) or (b) of this section.			
445	(c)	(2)				The owner or operator must prepare the periodic progress reports required by paragraphs (a)(1)(iv) or (b)(1)(iii), in addition to describing any problems encountered and a description of the actions taken to resolve the problems.			
446	(c)	(2)	(i)			*The annual progress reports must be completed according to the following schedule:* The first annual progress report must be prepared no later than 13 months after completing the notification of intent to comply with the alternative closure requirements required by paragraph (c)(1) of this section.			
447	(c)	(2)	(ii)			The second annual progress report must be prepared no later than 12 months after completing the first annual progress report. Additional annual progress reports must be prepared within 12 months of completing the previous annual progress report.			
448	(c)	(2)	(iii)			The owner or operator has completed the progress reports specified in paragraph (c)(2) of this section when the reports are placed in the facility's operating record as required by § 257.105(i)(10).			
449	(c)	(3)				An owner or operator of a CCR unit must also prepare the notification of intent to close a CCR unit as required by § 257.102(g).			

450	(d)					The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(i), the notification requirements specified in § 257.106(i), and the Internet requirements specified in § 257.107(i).			
451						**§ 257.104 Post-Closure Care Requirements**	**252:517:15-9**		
452						***The owner of operator of the CCR unit must meet all the requirements (a) through (f) and all their components.***			
453	(a)	(1)				Except as provided by paragraph (a)(2) of this section, §257.104 applies to the owners or operators of CCR landfills, CCR surface impoundments, and all lateral expansions of CCR units that are subject to the closure criteria under §257.102.			
454	(a)	(2)				An owner or operator of a CCR unit that elects to close a CCR unit by removing CCR as provided by § 257.102(c) is not subject to the postclosure care criteria under this section.			
455	(b)	(1)				***Following closure of the CCR unit, the owner or operator must conduct post-closure care for the CCR unit, which must consist of at least the following:*** Maintaining the integrity and effectiveness of the final cover system, including making repairs to the final cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding or otherwise damaging the final cover;			
456	(b)	(2)				If the CCR unit is subject to the design criteria under § 257.70, maintaining the integrity and effectiveness of the leachate collection and removal system and operating the leachate collection and removal system in accordance with the requirements of § 257.70; and			
457	(b)	(3)				Maintaining the groundwater monitoring system and monitoring the groundwater in accordance with the requirements of §§ 257.90 through 257.98.			
458	(c)	(1)				Except as provided by paragraph (c)(2) of this section, the owner or operator of the CCR unit must conduct post-closure care for 30 years.			

459	(c)	(2)				If at the end of the post-closure care period the owner or operator of the CCR unit is operating under assessment monitoring in accordance with § 257.95, the owner or operator must continue to conduct post-closure care until the owner or operator returns to detection monitoring in accordance with § 257.95.			
460	(d)	(1)	(i)			*The owner or operator of a CCR unit must prepare a written post-closure plan that includes, at a minimum, the information specified in paragraphs (d)(1)(i) through (iii) of this section.* A description of the monitoring and maintenance activities required in paragraph (b) of this section for the CCR unit, and the frequency at which these activities will be performed;			
461	(d)	(1)	(ii)			The name, address, telephone number, and email address of the person or office to contact about the facility during the post-closure care period; and			
462	(d)	(1)	(iii)			A description of the planned uses of the property during the post-closure period. Post-closure use of the property shall not disturb the integrity of the final cover, liner(s), or any other component of the containment system, or the function of the monitoring systems unless necessary to comply with the requirements in this subpart. Any other disturbance is allowed if the owner or operator of the CCR unit demonstrates that disturbance of the final cover, liner, or other component of the containment system, including any removal of CCR, will not increase the potential threat to human health or the environment. The demonstration must be certified by a qualified professional engineer, and notification shall be provided to the State Director that the demonstration has been placed in the operating record and on the owners or operator's publicly accessible Internet site.			
463	(d)	(2)	(i)			The owner or operator of an existing CCR landfill and existing CCR surface impoundment must prepare an initial written post-closure plan consistent with the requirements specified in paragraph (d)(1) of this section no later than October 17, 2016.			

464	(d)	(2)	(ii)			The owner or operator of a new CCR landfill, new CCR surface impoundment, and any lateral expansion of a CCR unit must prepare an initial written postclosure plan consistent with the requirements specified in paragraph (d)(1) of this section no later than the date of the initial receipt of CCR in the CCR unit.			
465	(d)	(2)	(iii)			The owner or operator has completed the written post-closure plan when the plan, including the certification required by paragraph (d)(4) of this section, has been placed in the facility's operating record as required by § 257.105(i)(4).			
466	(d)	(3)	(i)			The owner or operator may amend the initial or any subsequent written post-closure plan developed pursuant to paragraph (d)(1) of this section at any time.			
467	(d)	(3)	(ii)	(A)		*The owner or operator must amend the written closure plan whenever:* There is a change in the operation of the CCR unit that would substantially affect the written post-closure plan in effect; or			
468	(d)	(3)	(ii)	(B)		After post-closure activities have commenced, unanticipated events necessitate a revision of the written post-closure plan.			
469	(d)	(3)	(iii)			The owner or operator must amend the written post-closure plan at least 60 days prior to a planned change in the operation of the facility or CCR unit, or no later than 60 days after an unanticipated event requires the need to revise an existing written post-closure plan. If a written post-closure plan is revised after post-closure activities have commenced for a CCR unit, the owner or operator must amend the written post-closure plan no later than 30 days following the triggering event.			
470	(d)	(4)				The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the initial and any amendment of the written post-closure plan meets the requirements of this section.			

471	(e)						Notification of completion of postclosure care period. No later than 60 days following the completion of the post-closure care period, the owner or operator of the CCR unit must prepare a notification verifying that post-closure care has been completed. The notification must include the certification by a qualified professional engineer verifying that post-closure care has been completed in accordance with the closure plan specified in paragraph (d) of this section and the requirements of this section. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by § 257.105(i)(13).			
472	(f)						The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(i), the notification requirements specified in § 257.106(i), and the Internet requirements specified in § 257.107(i).			
473							**§ 257.105 Recordkeeping Requirements**	**252:517-19-1**		
474							*The owner of operator of the CCR unit must meet all the requirements (a) through (j) and all their components.*			
475	(a)						Each owner or operator of a CCR unit subject to the requirements of this subpart must maintain files of all information required by this section in a written operating record at their facility.			
476	(b)						Unless specified otherwise, each file must be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, record, or study.			
477	(c)						An owner or operator of more than one CCR unit subject to the provisions of this subpart may comply with the requirements of this section in one recordkeeping system provided the system identifies each file by the name of each CCR unit. The files may be maintained on microfilm, on a computer, on computer disks, on a storage system accessible by a computer, on magnetic tape disks, or on microfiche.			

478	(d)					The owner or operator of a CCR unit must submit to the State Director and/or appropriate Tribal authority any demonstration or documentation required by this subpart, if requested, when such information is not otherwise available on the owner or operator's publicly accessible Internet site.			
479	(e)					The owner or operator of a CCR unit subject to this subpart must place the demonstrations documenting whether or not the CCR unit is in compliance with the requirements under §§ 257.60(a), 257.61(a), 257.62(a), 257.63(a), and 257.64(a), as it becomes available, in the facility's operating record.			
480	(f)	(1)				*The owner or operator of a CCR unit subject to this subpart must place the following the facility's operating record:* The design and construction certifications as required by § 257.70(e) and (f).			
481	(f)	(2)				The documentation of liner type as required by § 257.71(a).			
482	(f)	(3)				The design and construction certifications as required by § 257.72(c) and (d).			
483	(f)	(4)				Documentation prepared by the owner or operator stating that the permanent identification marker was installed as required by §§ 257.73(a)(1) and 257.74(a)(1).			
484	(f)	(5)				The initial and periodic hazard potential classification assessments as required by §§ 257.73(a)(2) and 257.74(a)(2).			
485	(f)	(6)				The emergency action plan (EAP), and any amendment of the EAP, as required by §§ 257.73(a)(3) and 257.74(a)(3), except that only the most recent EAP must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this section.			

486	(f)	(7)				Documentation prepared by the owner or operator recording the annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR unit and the local emergency responders as required by §§ 257.73(a)(3)(i)(E) and 257.74(a)(3)(i)(E).			
487	(f)	(8)				Documentation prepared by the owner or operator recording all activations of the emergency action plan as required by §§ 257.73(a)(3)(v) and 257.74(a)(3)(v).			
488	(f)	(9)				The history of construction, and any revisions of it, as required by § 257.73(c), except that these files must be maintained until the CCR unit completes closure of the unit in accordance with § 257.102.			
489	(f)	(10)				The initial and periodic structural stability assessments as required by §§ 257.73(d) and 257.74(d).			
490	(f)	(11)				Documentation detailing the corrective measures taken to remedy the deficiency or release as required by §§ 257.73(d)(2) and 257.74(d)(2).			
491	(f)	(12)				The initial and periodic safety factor assessments as required by §§ 257.73(e) and 257.74(e).			
492	(f)	(13)				The design and construction plans, and any revisions of it, as required by § 257.74(c), except that these files must be maintained until the CCR unit completes closure of the unit in accordance with § 257.102.			
493	(g)	(1)				*The owner or operator of a CCR unit subject to this subpart must place the following information, as it becomes available, in the facility's operating record:* The CCR fugitive dust control plan, and any subsequent amendment of the plan, required by § 257.80(b), except that only the most recent control plan must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this section.			
494	(g)	(2)				The annual CCR fugitive dust control report required by § 257.80(c).			
495	(g)	(3)				The initial and periodic run-on and run-off control system plans as required by § 257.81(c).			

496	(g)	(4)				The initial and periodic inflow design flood control system plan as required by § 257.82(c).			
497	(g)	(5)				Documentation recording the results of each inspection and instrumentation monitoring by a qualified person as required by § 257.83(a).			
498	(g)	(6)				The periodic inspection report as required by § 257.83(b)(2).			
499	(g)	(7)				Documentation detailing the corrective measures taken to remedy the deficiency or release as required by §§ 257.83(b)(5) and 257.84(b)(5).			
500	(g)	(8)				Documentation recording the results of the weekly inspection by a qualified person as required by § 257.84(a).			
501	(g)	(9)				The periodic inspection report as required by § 257.84(b)(2).			
502	(h)	(1)				*The owner or operator of a CCR unit subject to this subpart must place the following information, as it becomes available, in the facility's operating record:* The annual groundwater monitoring and corrective action report as required by § 257.90(e).			
503	(h)	(2)				Documentation of the design, installation, development, and decommissioning of any monitoring wells, piezometers and other measurement, sampling, and analytical devices as required by § 257.91(e)(1).			
504	(h)	(3)				The groundwater monitoring system certification as required by § 257.91(f).			
505	(h)	(4)				The selection of a statistical method certification as required by § 257.93(f)(6).			
506	(h)	(5)				Within 30 days of establishing an assessment monitoring program, the notification as required by § 257.94(e)(3).			
507	(h)	(6)				The results of appendices III and IV to this part constituent concentrations as required by § 257.95(d)(1).			
508	(h)	(7)				Within 30 days of returning to a detection monitoring program, the notification as required by § 257.95(e).			

509	(h)	(8)				Within 30 days of detecting one or more constituents in appendix IV to this part at statistically significant levels above the groundwater protection standard, the notifications as required by § 257.95(g).			
510	(h)	(9)				Within 30 days of initiating the assessment of corrective measures requirements, the notification as required by § 257.95(g)(5).			
511	(h)	(10)				The completed assessment of corrective measures as required by § 257.96(d).			
512	(h)	(11)				Documentation prepared by the owner or operator recording the public meeting for the corrective measures assessment as required by § 257.96(e).			
513	(h)	(12)				The semiannual report describing the progress in selecting and designing the remedy and the selection of remedy report as required by § 257.97(a), except that the selection of remedy report must be maintained until the remedy has been completed.			
514	(h)	(13)				Within 30 days of completing the remedy, the notification as required by § 257.98(e).			
515	(i)	(1)				*The owner or operator of a CCR unit subject to this subpart must place the following information, as it becomes available, in the facility's operating record:* The notification of intent to initiate closure of the CCR unit as required by § 257.100(c)(1).			
516	(i)	(2)				The annual progress reports of closure implementation as required by § 257.100(c)(2)(i) and (ii).			
517	(i)	(3)				The notification of closure completion as required by § 257.100(c)(3).			
518	(i)	(4)				The written closure plan, and any amendment of the plan, as required by § 257.102(b), except that only the most recent closure plan must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this section.			

519	(i)	(5)				The written demonstration(s), including the certification required by § 257.102(e)(2)(iii), for a time extension for initiating closure as required by § 257.102(e)(2)(ii).			
520	(i)	(6)				The written demonstration(s), including the certification required by § 257.102(f)(2)(iii), for a time extension for completing closure as required by § 257.102(f)(2)(i).			
521	(i)	(7)				The notification of intent to close a CCR unit as required by § 257.102(g).			
522	(i)	(8)				The notification of completion of closure of a CCR unit as required by § 257.102(h).			
523	(i)	(9)				The notification recording a notation on the deed as required by § 257.102(i).			
524	(i)	(10)				The notification of intent to comply with the alternative closure requirements as required by § 257.103(c)(1).			
525	(i)	(11)				The annual progress reports under the alternative closure requirements as required by § 257.103(c)(2).			
526	(i)	(12)				The written post-closure plan, and any amendment of the plan, as required by § 257.104(d), except that only the most recent closure plan must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this section.			
527	(i)	(13)				The notification of completion of post-closure care period as required by § 257.104(e).			
528	(j)	(1)				*The owner or operator of a CCR unit subject to this subpart must place the following information, as it becomes available, in the facility's operating record:* The written retrofit plan, and any amendment of the plan, as required by § 257.102(k)(2), except that only the most recent retrofit plan must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this section.			
529	(j)	(2)				The notification of intent that the retrofit activities will proceed in accordance with the alternative procedures in § 257.103.			

530	(j)	(3)				The annual progress reports required under the alternative requirements as required by § 257.103.			
531	(j)	(4)				The written demonstration(s), including the certification in § 257.102(f)(2)(iii), for a time extension for completing retrofit activities as required by § 257.102(k)(3).			
532	(j)	(5)				The notification of intent to initiate retrofit of a CCR unit as required by § 257.102(k)(5).			
533	(j)	(6)				The notification of completion of retrofit activities as required by § 257.102(k)(6).			
534						**§ 257.106 Notification Requirements**	**252:517-19-2**		
535						*The owner of operator of the CCR unit must meet all the requirements (a) through (j) and all their components.*			
536	(a)					The notifications required under paragraphs (e) through (i) of this section must be sent to the relevant State Director and/or appropriate Tribal authority before the close of business on the day the notification is required to be completed. For purposes of this section, before the close of business means the notification must be postmarked or sent by electronic mail (email). If a notification deadline falls on a weekend or federal holiday, the notification deadline is automatically extended to the next business day.			
537	(b)					If any CCR unit is located in its entirety within Indian Country, the notifications of this section must be sent to the appropriate Tribal authority. If any CCR unit is located in part within Indian Country, the notifications of this section must be sent both to the appropriate State Director and Tribal authority.			
538	(c)					Notifications may be combined as long as the deadline requirement for each notification is met.			
539	(d)					Unless otherwise required in this section, the notifications specified in this section must be sent to the State Director and/or appropriate Tribal authority within 30 days of placing in the operating record the information required by § 257.105.			

540	(e)					Location restrictions. The owner or operator of a CCR unit subject to the requirements of this subpart must notify the State Director and/or appropriate Tribal authority that each demonstration specified under § 257.105(e) has been placed in the operating record and on the owner or operator's publicly accessible internet site.			
541	(f)					The owner or operator of a CCR unit subject to this subpart must notify the State Director and/or appropriate Tribal authority when information has been placed in the operating record and on the owner or operator's publicly accessible internet site.			
						The owner or operator must:			
542	(f)	(1)				Within 60 days of commencing construction of a new CCR unit, provide notification of the availability of the design certification specified under § 257.105(f)(1) or (3). If the owner or operator of the CCR unit elects to install an alternative composite liner, the owner or operator must also submit to the State Director and/or appropriate Tribal authority a copy of the alternative composite liner design.			
543	(f)	(2)				No later than the date of initial receipt of CCR by a new CCR unit, provide notification of the availability of the construction certification specified under § 257.105(f)(1) or (3).			
544	(f)	(3)				Provide notification of the availability of the documentation of liner type specified under § 257.105(f)(2).			
545	(f)	(4)				Provide notification of the availability of the initial and periodic hazard potential classification assessments specified under § 257.105(f)(5).			
546	(f)	(5)				Provide notification of the availability of emergency action plan (EAP), and any revisions of the EAP, specified under § 257.105(f)(6).			
547	(f)	(6)				Provide notification of the availability of documentation prepared by the owner or operator recording the annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR unit and the local emergency responders specified under § 257.105(f)(7).			

548	(f)	(7)				Provide notification of documentation prepared by the owner or operator recording all activations of the emergency action plan specified under § 257.105(f)(8).			
549	(f)	(8)				Provide notification of the availability of the history of construction, and any revision of it, specified under § 257.105(f)(9).			
550	(f)	(9)				Provide notification of the availability of the initial and periodic structural stability assessments specified under § 257.105(f)(10).			
551	(f)	(10)				Provide notification of the availability of the documentation detailing the corrective measures taken to remedy the deficiency or release specified under § 257.105(f)(11).			
552	(f)	(11)				Provide notification of the availability of the initial and periodic safety factor assessments specified under § 257.105(f)(12).			
553	(f)	(12)				Provide notification of the availability of the design and construction plans, and any revision of them, specified under § 257.105(f)(13).			
554	(g)					The owner or operator of a CCR unit subject to this subpart must notify the State Director and/or appropriate Tribal authority when information has been placed in the operating record and on the owner or operator's publicly accessible internet site.			
555	(g)	(1)				*The owner or operator must:* Provide notification of the availability of the CCR fugitive dust control plan, or any subsequent amendment of the plan, specified under § 257.105(g)(1).			
556	(g)	(2)				Provide notification of the availability of the annual CCR fugitive dust control report specified under § 257.105(g)(2).			
557	(g)	(3)				Provide notification of the availability of the initial and periodic run-on and run-off control system plans specified under § 257.105(g)(3).			
558	(g)	(4)				Provide notification of the availability of the initial and periodic inflow design flood control system plans specified under § 257.105(g)(4).			
559	(g)	(5)				Provide notification of the availability of the periodic inspection reports specified under § 257.105(g)(6).			

560	(g)	(6)				Provide notification of the availability of the documentation detailing the corrective measures taken to remedy the deficiency or release specified under § 257.105(g)(7).			
561	(g)	(7)				Provide notification of the availability of the periodic inspection reports specified under § 257.105(g)(9).			
562	(h)					The owner or operator of a CCR unit subject to this subpart must notify the State Director and/or appropriate Tribal authority when information has been placed in the operating record and on the owner or operator's publicly accessible internet site.			
563	(h)	(1)				*The owner or operator must:* Provide notification of the availability of the annual groundwater specified under § 257.105(h)(1).			
564	(h)	(2)				Provide notification of the availability of the groundwater monitoring system certification specified under § 257.105(h)(3).			
565	(h)	(3)				Provide notification of the availability of the selection of a statistical method certification specified under § 257.105(h)(4).			
566	(h)	(4)				Provide notification that an assessment monitoring programs has been established specified under § 257.105(h)(5).			
567	(h)	(5)				Provide notification that the CCR unit is returning to a detection monitoring program specified under § 257.105(h)(7).			
568	(h)	(6)				Provide notification that one or more constituents in appendix IV to this part have been detected at statistically significant levels above the groundwater protection standard and the notifications to land owners specified under § 257.105(h)(8).			
569	(h)	(7)				Provide notification that an assessment of corrective measures has been initiated specified under § 257.105(h)(9).			
570	(h)	(8)				Provide notification of the availability of assessment of corrective measures specified under § 257.105(h)(10).			

571	(h)	(9)				Provide notification of the availability of the semiannual report describing the progress in selecting and designing the remedy and the selection of remedy report specified under § 257.105(h)(12).			
572	(h)	(10)				Provide notification of the completion of the remedy specified under § 257.105(h)(13).			
573	(i)					The owner or operator of a CCR unit subject to this subpart must notify the State Director and/or appropriate Tribal authority when information has been placed in the operating record and on the owner or operator's publicly accessible Internet site.			
						The owner or operator must:			
574	(i)	(1)				Provide notification of the intent to initiate closure of the CCR unit specified under § 257.105(i)(1).			
575	(i)	(2)				Provide notification of the availability of the annual progress reports of closure implementation specified under § 257.105(i)(2).			
576	(i)	(3)				Provide notification of closure completion specified under § 257.105(i)(3).			
577	(i)	(4)				Provide notification of the availability of the written closure plan, and any amendment of the plan, specified under § 257.105(i)(4).			
578	(i)	(5)				Provide notification of the availability of the demonstration(s) for a time extension for initiating closure specified under § 257.105(i)(5).			
579	(i)	(6)				Provide notification of the availability of the demonstration(s) for a time extension for completing closure specified under § 257.105(i)(6).			
580	(i)	(7)				Provide notification of intent to close a CCR unit specified under § 257.105(i)(7).			
581	(i)	(8)				Provide notification of completion of closure of a CCR unit specified under § 257.105(i)(8).			
582	(i)	(9)				Provide notification of the deed notation as required by § 257.105(i)(9).			
583	(i)	(10)				Provide notification of intent to comply with the alternative closure requirements specified under § 257.105(i)(10).			
584	(i)	(11)				The annual progress reports under the alternative closure requirements as required by § 257.105(i)(11).			

585	(i)	(12)				Provide notification of the availability of the written post-closure plan, and any amendment of the plan, specified under § 257.105(i)(12).			
586	(i)	(13)				Provide notification of completion of post-closure care specified under § 257.105(i)(13).			
587	(j)					The owner or operator of a CCR unit subject to this subpart must notify the State Director and/or appropriate Tribal authority when information has been placed in the operating record and on the owner or operator's publicly accessible Internet site.			
						The owner or operator must:			
588	(j)	(1)				Provide notification of the availability of the written retrofit plan, and any amendment of the plan, specified under § 257.105(j)(1).			
589	(j)	(2)				Provide notification of intent to comply with the alternative retrofit requirements specified under § 257.105(j)(2).			
590	(j)	(3)				The annual progress reports under the alternative retrofit requirements as required by § 257.105(j)(3).			
591	(j)	(4)				Provide notification of the availability of the demonstration(s) for a time extension for completing retrofit activities specified under § 257.105(j)(4).			
592	(j)	(5)				Provide notification of intent to initiate retrofit of a CCR unit specified under § 257.105(j)(5).			
593	(j)	(6)				Provide notification of completion of retrofit activities specified under § 257.105(j)(6).			
594						**§ 257.107 Publicly Accessible Internet Site Requirements**	**252:517:19-3**		
595						*The owner of operator of the CCR unit must meet all the requirements (a) through (j) and all their components.*			
596	(a)					Each owner or operator of a CCR unit subject to the requirements of this subpart must maintain a publicly accessible Internet site (CCR Web site) containing the information specified in this section. The owner or operator's Web site must be titled "CCR Rule Compliance Data and Information."			

597	(b)					An owner or operator of more than one CCR unit subject to the provisions of this subpart may comply with the requirements of this section by using the same Internet site for multiple CCR units provided the CCR Web site clearly delineates information by the name or identification number of each unit.			
598	(c)					Unless otherwise required in this section, the information required to be posted to the CCR Web site must be made available to the public for at least five years following the date on which the information was first posted to the CCR Web site.			
599	(d)					Unless otherwise required in this section, the information must be posted to the CCR Web site within 30 days of placing the pertinent information required by § 257.105 in the operating record.			
600	(e)					Location restrictions. The owner or operator of a CCR unit subject to this subpart must place each demonstration specified under § 257.105(e) on the owner or operator's CCR Web site.			
601	(f)	(1)				*The owner or operator of a CCR unit subject to this subpart must place the following information on the owner or operator's CCR Web site:* Within 60 days of commencing construction of a new unit, the design certification specified under § 257.105(f)(1) or (3).			
602	(f)	(2)				No later than the date of initial receipt of CCR by a new CCR unit, the construction certification specified under § 257.105(f)(1) or (3).			
603	(f)	(3)				The documentation of liner type specified under § 257.105(f)(2).			
604	(f)	(4)				The initial and periodic hazard potential classification assessments specified under § 257.105(f)(5).			
605	(f)	(5)				The emergency action plan (EAP) specified under § 257.105(f)(6), except that only the most recent EAP must be maintained on the CCR Web site irrespective of the time requirement specified in paragraph (c) of this section.			

606	(f)	(6)				Documentation prepared by the owner or operator recording the annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR unit and the local emergency responders specified under § 257.105(f)(7).			
607	(f)	(7)				Documentation prepared by the owner or operator recording any activation of the emergency action plan specified under § 257.105(f)(8).			
608	(f)	(8)				The history of construction, and any revisions of it, specified under § 257.105(f)(9).			
609	(f)	(9)				The initial and periodic structural stability assessments specified under § 257.105(f)(10).			
610	(f)	(10)				The documentation detailing the corrective measures taken to remedy the § 257.105(f)(11).			
611	(f)	(11)				The initial and periodic safety factor assessments specified under § 257.105(f)(12).			
612	(f)	(12)				The design and construction plans, and any revisions of them, specified under § 257.105(f)(13).			
613	(g)	(1)				*The owner or operator of a CCR unit subject to this subpart must place the following information on the owner or operator's CCR Web site:* The CCR fugitive dust control plan, or any subsequent amendment of the plan, specified under § 257.105(g)(1) except that only the most recent plan must be maintained on the CCR Web site irrespective of the time requirement specified in paragraph (c) of this section.			
614	(g)	(2)				The annual CCR fugitive dust control report specified under § 257.105(g)(2).			
615	(g)	(3)				The initial and periodic run-on and run-off control system plans specified under § 257.105(g)(3).			
616	(g)	(4)				The initial and periodic inflow design flood control system plans specified under § 257.105(g)(4).			
617	(g)	(5)				The periodic inspection reports specified under § 257.105(g)(6).			

618	(g)	(6)				The documentation detailing the corrective measures taken to remedy the deficiency or release specified under § 257.105(g)(7).			
619	(g)	(7)				The periodic inspection reports specified under § 257.105(g)(9).			
620	(h)	(1)				*The owner or operator of a CCR unit subject to this subpart must place the following information on the owner or operator's CCR Web site:* The annual groundwater monitoring and corrective action report specified under § 257.105(h)(1).			
621	(h)	(2)				The groundwater monitoring system certification specified under § 257.105(h)(3).			
622	(h)	(3)				The selection of a statistical method certification specified under § 257.105(h)(4).			
623	(h)	(4)				The notification that an assessment monitoring programs has been established specified under § 257.105(h)(5).			
624	(h)	(5)				The notification that the CCR unit is returning to a detection monitoring program specified under § 257.105(h)(7).			
625	(h)	(6)				The notification that one or more constituents in appendix IV to this part have been detected at statistically significant levels above the groundwater protection standard and the notifications to land owners specified under § 257.105(h)(8).			
626	(h)	(7)				The notification that an assessment of corrective measures has been initiated specified under § 257.105(h)(9).			
627	(h)	(8)				The assessment of corrective measures specified under § 257.105(h)(10).			
628	(h)	(9)				The semiannual reports describing the progress in selecting and designing remedy and the selection of remedy report specified under § 257.105(h)(12), except that the selection of the remedy report must be maintained until the remedy has been completed.			
629	(h)	(10)				The notification that the remedy has been completed specified under § 257.105(h)(13).			
630	(i)	(1)				*The owner or operator of a CCR unit subject to this subpart must place the following information on the owner or operator's CCR Web site:*			

						The notification of intent to initiate closure of the CCR unit specified under § 257.105(i)(1).			
631	(i)	(2)				The annual progress reports of closure implementation specified under § 257.105(i)(2).			
632	(i)	(3)				The notification of closure completion specified under § 257.105(i)(3).			
633	(i)	(4)				The written closure plan, and any amendment of the plan, specified under § 257.105(i)(4).			
634	(i)	(5)				The demonstration(s) for a time extension for initiating closure specified under § 257.105(i)(5).			
635	(i)	(6)				The demonstration(s) for a time extension for completing closure specified under § 257.105(i)(6).			
636	(i)	(7)				The notification of intent to close a CCR unit specified under § 257.105(i)(7).			
637	(i)	(8)				The notification of completion of closure of a CCR unit specified under § 257.105(i)(8).			
638	(i)	(9)				The notification recording a notation on the deed as required by § 257.105(i)(9).			
639	(i)	(10)				The notification of intent to comply with the alternative closure requirements as required by § 257.105(i)(10).			
640	(i)	(11)				The annual progress reports under the alternative closure requirements as required by § 257.105(i)(11).			
641	(i)	(12)				The written post-closure plan, and any amendment of the plan, specified under § 257.105(i)(12).			
642	(i)	(13)				The notification of completion of post-closure care specified under § 257.105(i)(13).			
643	(j)	(1)				*The owner or operator of a CCR unit subject to this subpart must place the following information on the owner or operator's CCR Web site:* The written retrofit plan, and any amendment of the plan, specified under § 257.105(j)(1).			

644	(j)	(2)				The notification of intent to comply with the alternative retrofit requirements as required by § 257.105(j)(2).			
645	(j)	(3)				The annual progress reports under the alternative retrofit requirements as required by § 257.105(j)(3).			
646	(j)	(4)				The demonstration(s) for a time extension for completing retrofit activities specified under § 257.105(j)(4).			
647	(j)	(5)				The notification of intent to retrofit a CCR unit specified under § 257.105(j)(5).			
648	(j)	(6)				The notification of completion of retrofit activities specified under § 257.105(j)(6).			