

1 CHAPTER 101
2 SANITARY DISPOSAL PROJECTS

3
4 **DIVISION IV**
5 **COAL COMBUSTION RESIDUAL LANDFILLS**

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7 **567—101.300(455B) Purpose.** The purpose of this division is to implement Iowa Code Chapter
8 455B, Division IV “Solid Waste Disposal,” for the siting, designing, and operating of a solid waste
9 sanitary landfill accepting only coal combustion residuals.

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11 **567—101.301(455B) Applicability.**

12 **101.301(1)** Pursuant to Iowa Code subsection 455B.305(1), a sanitary landfill shall not be
13 constructed or operated without first obtaining a permit from the department pursuant to this
14 division, the requirements set forth in 567—Chapter 100, and division I of this chapter.

15 **101.301(2)** The issuance of a sanitary landfill permit by the department in no way relieves the
16 applicant of the responsibility of complying with all other local, state, or federal statutes,
17 ordinances, and rules or other requirements applicable to the construction and operation of a
18 sanitary landfill.

19 **101.301(3)** All sanitary landfill permits issued prior to *[effective date of the rule]*, shall remain
20 in effect until the expiration date of the permit in accordance with rules in effect at the time of
21 permit issuance, until the applicant is issued a permit in accordance with this division.

22
23 **567—101.302(455B) Definitions.** For the purposes of this division, the definitions in 567—
24 Chapter 100 and those found in Iowa Code section 455B.301 shall apply.

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26 **567—101.303(455B) Permits.** For purposes of this division, the permit requirements in 567—
27 Chapter 100 shall apply.

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29 **567—101.304(455B) Permit applications.** Unless otherwise authorized by the department, a
30 permit applicant shall submit on a form prescribed by the department, the requirements in 567—
31 Chapter 100, division I of this chapter, and the following information:

32 **101.304(1)** No wastes shall be deposited within 300 feet of an inhabitable residence or a
33 commercial enterprise unless there is a written agreement with the property owner(s) allowing a
34 lesser distance, or within 50 feet of the property boundary. The written agreement shall be filed
35 with the county recorder for abstract of title purposes and a copy shall be submitted to the
36 department.

37 **101.304(2)** A topographic map of the site extending a minimum of 300 feet beyond the
38 permitted property, with contour intervals not exceeding 10 feet, that shows the location of existing
39 conditions, including but not limited to, structures, wells, lakes, roads, drain tiles or similar items

40 **101.304(3)** A minimum of three soil borings for sites of ten acres or less with one additional
41 boring for each additional three acres to determine the hydrogeologic conditions, establish the
42 direction of groundwater flow, the depth to groundwater, and potential contaminant pathways
43 throughout the site.

44 **101.304(4)** An adequate number of representative groundwater sample results, temporal and
45 spatial, to fully characterize the groundwater quality at the site and establish a baseline for the
46 following analytical parameters: arsenic, barium, beryllium, cobalt, copper, iron, lead, magnesium,
47 manganese, selenium, zinc, chlorides, and sulfate.

48 **101.304(5)** A groundwater monitoring network that includes sufficient upgradient and
49 downgradient monitoring wells that adequately monitor the potential contaminant pathways
50 throughout the life of the site and the post-closure period.

Commented [RBL1]: SIDEBAR – Source is current Chapter 103.

Revisions made between Draft2C and Draft3 are noted with a “Draft3” in the sidebar. Draft3.

Draft 4 corrected the numbering from 101.4## to 101.3## after the November 2024 workgroup meeting.

Revisions in Draft 5 are prefixed with an asterisk in the sidebar (i.e. *SIDEBAR).

Commented [BLR2]: *SIDEBAR: All definitions moved to Chapter 100.

Commented [RBL3]: *SIDEBAR: Updated to reflect current division I.

Commented [RBL4]: SIDEBAR – Minor rewording for clarification of current permit/Form 50 requirements. Considering moving to Div 1.

Commented [RBL5]: Sidebar - Reworded to clarify current expectations.

Replaced “temporally and spatially” with “temporal and spatial”. Draft3

Commented [RBL6]: SIDEBAR – Added requirements to reflect current expectations. Added clarification that this include the post-closure period. Draft3.

51 **101.304(6)** Plans and specifications detailing how the sanitary landfill will be constructed,
52 operated, and closed.

53 **101.304(7)** An operations plan and a post-closure plan in accordance with the rules and the
54 permit.
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56 **567—101.305(455B) Design requirements.** In addition to the provisions in rule 567—
57 100.5(455B,455D) and division 1 of this chapter, the design shall include a liner and leachate
58 collection system to protect groundwater and surface water.
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60 **567—101.306(455B) Operating requirements.** Unless otherwise specified within a permit, a
61 sanitary landfill shall be operated in accordance with the provisions of rule 567—
62 100.9(455B,455D), and an operations plan shall be prepared and submitted to the department and
63 include the following:

64 **101.306(1)** An identification of the area(s) to be filled during the period for which a permit is
65 being requested.

66 **101.306(2)** The method(s) that will be utilized to prevent illicit municipal or putrescible solid
67 wastes from being deposited as a result of mixing with authorized waste brought to the site.

68 **101.306(3)** The frequency, extent, and method of spreading and compacting the waste; the
69 optimum layer thickness; and the size and slope of the operating face.

70 **101.306(4)** A description of the operating procedures from the arrival of waste to the site
71 through unloading, placing, and through closure to control fugitive dust, erosion, and contact water.
72 If the methods used do not adequately control dust, contact water, and erosion, the department may
73 require site-specific controls including a soil cover.

74 **101.306(5)** Detailed procedures for the removal of waste from the sanitary landfill for
75 beneficial reuse, if applicable.

76 **101.306(6)** Operating procedures for stormwater, contact water, and leachate management
77 systems.
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79 **567—101.307(455B) Groundwater monitoring and reporting.** Unless otherwise specified
80 within a permit, the groundwater at a sanitary landfill shall be monitored and reported in accordance
81 with this rule.

82 **101.307(1)** For all new solid waste units, the groundwater monitoring network shall be installed
83 before waste placement.

84 **101.307(2)** Quarterly sampling of all monitoring wells and analysis for the parameters specified
85 in subrule 101.304(3) shall commence within one year of initiating waste placement for the purpose
86 of establishing the average baseline concentrations for each well.

87 **101.307(3)** Annual sampling of all monitoring wells for the parameters specified in subrule
88 101.304(3) shall commence within one year of completing the quarterly baseline monitoring.

89 **101.307(4)** Additional sampling or a site assessment may be required by the department when
90 there is an exceedance of any primary or secondary Maximum Contaminant Level (MCL), the
91 Health Advisory Level (HAL), or the Drinking Water Standards and Health Advisories of the
92 federal Environmental Protection Agency.

93 **101.307(5)** When an MCL or HAL does not exist for a parameter, then the statewide standard
94 for a protected drinking water source shall be used. If no statewide standard exists, then if a sample
95 analysis exceeds the average value for that parameter for the most recent two years of data, the
96 department will require the collection and analysis of a sample for three consecutive months. If the
97 average result of those sample analyses equals or exceeds the value that required the monthly
98 samples to be collected, the department may require a site assessment.

99 *a.* The purpose of a site assessment is to determine the extent of groundwater impact from the
100 site. A site assessment may include but is not limited to further hydrogeologic investigation, plume
101 delineation, installation and monitoring of additional wells, expanded sampling parameters, a

Commented [RBL7]: SIDEBAR – Added to list what is currently expected.

Commented [RBL8]: *SIDEBAR – This rule was revised following receipt of written comments to reflect current practice.

Commented [RBL9]: SIDEBAR – Items moved here from design requirements and current expectations and/or permit conditions.

Commented [RBL10]: SIDEBAR – Reworded for clarity.

Commented [RBL11]: SIDEBAR – Reworded for clarity.

Commented [RBL12]: SIDEBAR – Added current expectations and/or permit conditions.

Commented [RBL13R12]: *SIDEBAR: This subrule is only intended to require submittal of the landfill's procedures and not dictate whether these sources are managed individually or combined.

Commented [RBL14]: SIDEBAR – Updated to reflect current permit requirements.

Commented [RBL15]: SIDEBAR – Added current expectations and/or permit conditions.

Commented [RBL16]: SIDEBAR – Added current expectations as allowed in our permitting authority.

Commented [RBL17R16]: *SIDEBAR: Moved under applicable subrule.

receptor survey, and analysis of data.

b. If the site assessment determines the facility is the source of the groundwater impact, a remedial action/mitigation plan may be required to alleviate or reduce the contamination.

101.307(6) A report of the groundwater monitoring results, including a site inspection, shall be submitted to the department by the end of the first year's operation and annually thereafter.

101.307(7) A minimum of one sample from each monitoring well shall be collected annually during the post-closure period and analyzed for the parameters specified in the permit. The results shall be included in the annual report.

567—101.308(455B) Closure and post-closure requirements. Unless otherwise specified within a permit, a sanitary landfill shall close in accordance with the following:

101.308(1) A closure and post-closure plan shall be prepared and submitted to the department and include the actions that will be taken to close the site, the final site contours and final cover design, stormwater controls and management, groundwater monitoring and reporting, permanent survey control, annual inspections, and contact information for post-closure monitoring and maintenance.

101.308(2) The final cover shall consist of not less than two feet of compacted soil and one foot of uncompacted soil capable of sustaining the growth of native vegetation. The slope of the final cover after closure shall be not less than 3 percent or more than 25 percent.

567—101.309(455B) Financial assurance requirements. The owner or operator of a coal combustion residual sanitary landfill must establish financial assurance for closure, post-closure, and remedial action/mitigation plan, if applicable, in accordance with 567—Chapter 101, division VIII.

These rules are intended to implement Iowa Code section 455B.304.

567—101.310 to 101.399 Reserved.

Commented [RBL18]: SIDEBAR: Deleted statistical. Draft3.

Commented [RBL19]: SIDEBAR – Not currently in this rule but it is within our regulatory authority to request this and something we have required.

Commented [RBL20R19]: *SIDEBAR: Moved under applicable subrule.

Commented [RBL21]: SIDEBAR – Added since is part of current permit conditions.

Commented [RBL22]: SIDEBAR – Expanded to include current expectations and/or permit conditions. Considering moving this to Div I.