Department of Natural Resources

Five-Year Rule Review Worksheet

Phase 2 - Part C

BASIC INFORMATION

Date Part C Review Concluded: April 1, 2015

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561 ☐ 565 ☐ 567 ☒ 571 ☐ 575 ☐

Chapter[1] Number: 115

Chapter Name: Sanitary Landfills: Industrial Monofills

1. DOES THIS CHAPTER[2] DO THE JOB IT SETS OUT TO DO?

1a. Is this chapter effective at protecting the health, welfare, and safety of Iowans and our natural resources?

Yes ☐ No ☒ **(check or circle)**

1b. Explain how the chapter protects the health, welfare, and safety of Iowans and our natural resources.

The purpose of this administrative chapter is to set forth requirements for the design, construction, operation and monitoring of sanitary landfills that accept only a specific type of industrial waste. While Iowa Code does not define industrial waste, 567 IAC 100.2 defines "Industrial process wastes" as "waste that is generated as a result of manufacturing activities, product processing or commercial activities. It does not include office waste, cafeteria waste, or other types that are not the direct result of production processes." In addition, 567 IAC 113.3 defines "Industrial solid waste" as "solid waste generated by manufacturing or industrial

[1] *If the Phase 1 Worksheet addresses a portion of a chapter, rather than a whole chapter, then this follow-up worksheet should address the same portion of the chapter (e.g. rule or rules, paragraph, etc.).*

[2] *Throughout this worksheet, the word "chapter" is meant to apply to the chapter or portion of a chapter to which the worksheet applies.*

processes that is not a hazardous waste regulated under Subtitle C of RCRA. Such waste may include, but is not limited to, waste resulting from the following manufacturing processes: electric power generation; fertilizer and agricultural chemicals; food and related products and by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing and foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. Industrial solid waste does not include mining waste or oil and gas waste."

It is the DNR's position that the requirements of this administrative chapter fail to address all the minimum provisions of 40 CFR, Part 257 – Criteria For Classification Of Solid Waste Disposal Facilities And Practices. As such, this administrative chapter fails to adequately protect the health, welfare, and safety of Iowans and our natural resources. At the time this administrative chapter was originally drafted, it was believed that any leachate generated from industrial waste landfills was relatively benign, and the design standards were a reflection of this view.

This administrative chapter (i.e., 567 IAC 115.26(1)"d"(2)) provides for a minimum 4-foot recompacted soil (clay) liner (without fate and transport modeling), while more stringent than the 2-foot minimum liner suggested by U.S. Environmental Protection Agency (EPA) guidelines (i.e., Chapter 7 - Section B: Designing and Installing Liners: Technical Considerations for Surface Impoundments, Landfills, and Waste Piles), it's debatable whether either standard is adequately protective of human health and the environment; especially considering the uniqueness of each type of industrial waste. The liner design and groundwater constituents required for construction and sampling need to correspond with the waste disposed to ensure that groundwater is being protected.

2. IS THERE LEGAL AUTHORITY FOR THIS CHAPTER?

2a. Is the chapter intended to implement any **state statutes**?

Yes ☒ No ☐ **(check or circle)**

If this chapter is intended to implement any state statutes, then answer questions 2b and 2c. If not, then proceed to question 2d.

2b. Provide citations for the specific provisions of the Iowa Code implemented by this chapter.

At the conclusion of this administrative chapter there is a chapter implementation sentence that states, "These rules are intended to implement Iowa Code section 455B.304."

Iowa Code section 455B.304 – 455B.304(1), 455B.304(3) through (8) and 455B.304(11)

Iowa Code section 455B.305 – 455B.305(1) and (3)

Iowa Code section 455B.306 – 455B.306(7)“a” through “d” and 455B.306(9)

Iowa Code section 455B.381 – 455B.381(4), (5) and (9)

Iowa Code section 455B.387

Iowa Code section 455E.3 – 455E.3(2) and (5)

Iowa Code section 455E.4

Iowa Code section 455E.5 – 455E.5(1) through (6)

Iowa Code section 455B.172 – 455B.172(7)(a)

Iowa Code section 455B.173 – 455B.173(3)

2c. Provide a narrative summary of how the state statutes are implemented by this chapter.

Given the scope and breadth of the provisions expressed within 567 IAC 115, it was felt that brief bulleted summaries regarding each statutory provision expressed above would be easier to follow and provide greater clarity as to how that statutory provision was being implemented by this administrative chapter. The administrative rule citations below should not be considered inclusive of all that pertain to each statutory provision, but rather examples of how each Iowa Code provision is implemented by this administrative chapter.

Iowa Code section 455B.304(1)

- While there are specific rules within this administrative chapter that have direct statutory authority (e.g., 567 IAC 115.30 – emergency response and remedial action plans (ERRAP) and 567 IAC 115.31 – financial assurance), some requirements are based upon the broad authority given under Iowa Code section 455B.304(1) to adopt rules for the proper administration of Division IV “Solid Waste Disposal,” Part 1 “Solid Waste.” Within the examples given in Iowa Code section 455B.304(1) is the authority to establish rules for "the issuance of permits", “general operations and maintenance” and for the “inspection of sanitary disposal projects” (SDPs).
- 567 IAC 115.2 and 115.4 through 115.11 specify the situations and processes by which the DNR issues, revokes, suspends, modifies, or denies permits for industrial waste landfills. They also provide siting requirements and specify that the landfill will be inspected prior to start-up. 567 IAC 115.12 states the situations that warrant DNR inspections and their frequencies.
- 567 IAC 115.14 through 115.18 describe the minimum standards for a site hydrogeologic investigation report that demonstrates compliance with these requirements.

- 567 IAC 115.26 contains details describing the engineering design and construction standards for all sanitary landfills.
- 567 IAC 115.26(2) and 115.27 describe the operating requirements for all sanitary landfills, and 567 IAC 115.28 establishes specific requirements applicable only to sanitary landfills proposing to accept a specific type of solid waste.
- 567 IAC 115.29 establishes the requirements for a certified landfill operator.
- 567 IAC 115.26(13) and (14), and 115.27(9) describe the minimum design and construction criteria to close a sanitary landfill.

Iowa Code section 455B.304(3)

- 567 IAC 115.27(8) specifies that no free liquids or waste containing free liquids shall be disposed of in a sanitary landfill.

Iowa Code sections 455B.304(4) & (5)

- 567 IAC 115.14 through 115.23 and 115.26(3) through (9)set forth the minimum standards and sampling frequencies for the hydrologic monitoring system plan, including soils investigation, hydrogeologic conditions, sampling protocol, monitoring well siting and construction, sampling parameters, laboratory procedures, record keeping and groundwater quality assessments.

Iowa Code section 455B.304(6)

- 567 IAC 115.26(10) and 115.26(14)“d” specify the minimum postclosure groundwater monitoring frequencies and the length of the postclosure period.

Iowa Code section 455B.304(7)

- 567 IAC 115.26(15) establishes environmental monitoring and corrective action requirements for landfill gas when the applicable standards have been exceeded.

Iowa Code section 455B.304(8)

- 567 IAC 115.3(4), 115.13(10), 115.26(1)“g”, 115.26(10) through (14), 115.27(9) and 115.31 establish the minimum closure, postclosure, and financial assurance requirements for sanitary landfills.

Iowa Code section 455B.304(11)

- 567 IAC 115.29 specifies that sanitary landfill operators shall be trained, tested, and certified by a DNR-approved certification program; and establishes the requirements for operator certification.

Iowa Code section 455B.305(1)

- 567 IAC 115.2 and 115.4 through 115.11 specify the situations and processes by which the DNR issues, revokes, suspends, modifies, or denies permits for the construction and operation of sanitary disposal projects. 567 IAC 115.12 and 115.26(11)“d” state the

situations that warrant DNR inspections and their frequencies.

Iowa Code section 455B.305(3)

- 567 IAC 115.26(11) and (12) require all sanitary landfills have a leachate collection system and establish the minimum design criteria.

Iowa Code sections 455B.306(7)"a" through "d"

- 567 IAC 115.13(10) and 115.26(13) and (14) require as part of closure and postclosure care, the development of written closure and postclosure care plans. To evaluate the effectiveness of the leachate collection system, 567 IAC 115.26(1)"g"(3) requires the submittal of a plan for the collection, storage, treatment and disposal of leachate. 567 IAC 115.31(3)"c"(6)"9" and 115.31(4)"c"(6)"10" through "12" require financial consideration be given to the ongoing maintenance of the leachate control system through postclosure. 567 IAC 115.30 requires the completion of an ERRAP.

Iowa Code section 455B.306(9)

- 567 IAC 115.31 sets forth the criteria for establishing and maintaining financial assurance for closure, postclosure care and corrective action at industrial monofills.

Iowa Code sections 455B.381(4), (5) and (9) & Iowa Code section 455B.387

- 567 IAC 115.30 requires sanitary landfills maintain an ERRAP, which describes how the individual permit holder will address certain hazardous conditions, including regulated and hazardous waste spills and releases.
- 567 IAC 115.26(15) specifies how hazardous conditions involving the release of landfill gases are identified and remedied.
- 567 IAC 115.26(3) through (9) specify how hazardous conditions involving leachate or landfill gas releases to groundwater are identified, assessed and remedied.

Iowa Code sections 455E.3(2) and (5)

- 567 IAC 115.14 and 115.16 through 115.24 establish criteria to evaluate site geology, hydrogeologic conditions, monitoring well siting, construction and abandonment.
- 567 IAC 115.26(3) through (9) specify how hazardous conditions involving leachate or landfill gas releases to groundwater are identified, assessed and remedied. If leachate migration occurs, owners must conduct a groundwater quality assessment study to determine the rate of migration and the extent and constituent composition of the release.

Iowa Code section 455E.4 & Iowa Code sections 455E.5(1) through (6)

- 567 IAC 115.26 and 115.27, through its siting and design requirements for sanitary landfills, implements the groundwater protection goal of Iowa Code section 455E.4 and policy in Iowa Code sections 455E.5(1) through (4) by emphasizing prevention of groundwater contamination by sanitary landfills.

- The groundwater and surface water monitoring and response requirements specified in 567 IAC 115.19 and 115.26(3) implement the groundwater protection policies of Iowa Code sections 455E.5(2),(3),(5) and (6).

Iowa Code section 455B.172(7)(a)

- 567 IAC 115.23 specifies the construction and abandonment criteria for groundwater monitoring wells at sanitary landfills.

Iowa Code section 455B.173(3)

- 567 IAC 115.26(1)"m"(4) establishes a prohibition on the construction of a sanitary landfill within 1,000 feet of a potable well or community water supply, and is implementing the statutory water well construction location restrictions. This provision is a restatement of the separation distance established for wells at 567 IAC 43.3(7) and 567 IAC 49.6(1). This provision makes those separation distances reciprocal.

2d. Does the chapter implement any **federal statutes or regulations**?

Yes ☒ No ☐ **(check or circle)**

If this chapter is intended to implement any federal statutes or regulations, then answer questions 2e and 2f. If not, then proceed to question 3.

2e. Provide citations for the specific provisions of federal statutes and regulations implemented by this chapter.

40 CFR, Part 257, Subpart A – CRITERIA FOR CLASSIFICATION OF SOLID WASTE DISPOSAL FACILITIES AND PRACTICES establishes the criteria that classify facilities as open dumps and those practices that constitute open dumping.

2f. Provide a summary of how federal statutes and regulations are implemented by this chapter.

As stated above, 40 CFR, Part 257, Subpart A establishes the criteria that classify facilities as open dumps and those practices that constitute open dumping. Facilities that fail to meet these minimum federal standards are classified as open dumps. 567 IAC 115 incorporates many of these minimum standards as part of industrial landfill design and operation. For example:

- While not verbatim, the definitions for Landfill, Leachate, and Sanitary Landfill expressed in 40 CFR, Part 257.2 are similar to those in 567 IAC 100.2 and utilized throughout 567 IAC 114.
- The federal groundwater characterization and monitoring requirements in 40 CFR, Part 257.3-4 are reflected in 567 IAC 115.14 through 115.24 and 115.26(3) through (9).
- The federal disease vector requirements of 40 CFR, Part 257.3-6 are addressed within 567 IAC 115.27(4) by implementing an effective means to control flies, other insects, rodents and other vermin.
- The open burning provisions of 40 CFR, Part 257.3-7 are addressed in part within the open burning requirements of 567 IAC 115.27(1).

- The explosive gas provisions of 40 CFR, Part 257.3-8(a) are incorporated within 567 IAC 115.26(15).
- The fire provisions of 40 CFR, Part 257.3-8 are addressed within the open burning requirements of 567 IAC 115.27(1).
- The federal bird hazard and aircraft setback provisions of 40 CFR, Part 257.3-8 are addressed within 567 IAC 115.26(1)"r", despite most industrial wastes not being putrescible.
- The site access provisions of 40 CFR, Part 257.3-8 are reflected within 567 IAC 115.26(2)"b".

3. DOES THE CHAPTER GO BEYOND FEDERAL LEGAL REQUIREMENTS?

3a. Is this chapter more stringent than federal statutory or regulatory requirements?

Yes ☒ No ☐ Not Applicable ☐ **(check or circle)**

If the answer is "yes," then answer question 3b. If not, then proceed to question 4.

3b. Provide a narrative statement regarding how this chapter is more stringent than required by federal statutes and regulations, and a short justification of why it is more stringent.

567 IAC 115 contains some variation and addresses necessary areas of regulation not specifically addressed within 40 CFR, Part 257. The federal regulations speak more toward performance goals rather than actual prescriptive design and operating requirements. As such, many of the requirements of 567 IAC 115 could be considered more stringent. However, the determination of whether these provisions are more stringent will vary, depending upon site–specific factors, and may be subjective depending upon the perspective of the reviewer.

To aid in the review, the responses have been broken out below into two categories: 1) those provisions that are more stringent (e.g., Iowa Code requirement), and 2) those provisions not perceived by the DNR as being more stringent (e.g., not more stringent if they merely describe the "manner" to be used to comply with the federal regulation).

More Stringent

- By not allowing the disposal of conditionally exempt small quantity generator (CESQG) waste pursuant to 40 CFR, Part 257, Subpart B, 567 IAC 115 is more restrictive than the federal regulation.
- 567 IAC 115.26(1)"m"(2) specifies a 5 foot separation of waste from groundwater that is not a requirement of 40 CFR, Part 257. The DNR asserts that such separation is necessary for the protection of groundwater pursuant to the goals and policies of the Groundwater Protection Act as stated in Iowa Code sections 455E.3 through 455E.5.
- 567 IAC 115.26(1)"m"(4) specifies a 1,000 foot setback for water supply wells that is not

a requirement of 40 CFR, Part 257. This solid waste rule is a restatement of the separation distance established for wells in 567 IAC 43.3(7) and 567 IAC 49.6(1) (Iowa Code section 455B.173). This provision makes those separation distances reciprocal.

- By applying the sanitary landfill airport siting restrictions for putrescible wastes, when such wastes are not likely present in industrial landfills, 567 IAC 115.26(1)“r” could be considered more stringent than the federal regulation.
- 567 IAC 115.27(3) prohibit scavenging and regulates salvaging at industrial landfills. However, these are not addressed within 40 CFR, Part 257. These requirements have been included for the safety of landfill personnel and patrons.
- 567 IAC 115.27(8) prohibits free liquids or waste containing free liquids from being disposed of in an industrial landfill. While this provision is expressed in Iowa Code section 455B.304(3), it is not expressed within 40 CFR, Part 257.
- 567 IAC 115.29 requires all sanitary landfills have a trained, tested and certified operator on duty during all hours of operations of the landfill. While this operator certification is not required in 40 CFR, Part 257, it is expressed within Iowa Code section 455B.304(11).
- 567 IAC 115.30 requires an ERRAP be maintained to identify possible occurrences that may endanger human health and the environment. While this plan is not required by 40 CFR, Part 257, it is expressed within Iowa Code section 455B.306(7)“d” for all sanitary disposal projects.
- 567 IAC 115.24 specifies the requirements for decommisioning groundwater monitoring wells that are no longer functional. The process and documentation required in 567 IAC 115.24 was adopted to comply with Iowa Code section 455B.190.
- 567 IAC 115.26(5) requires sanitary disposal projects use a laboratory certified by the DNR to analyze surface and groundwater monitoring samples, which is not expressed within 40 CFR, Part 257. This requirement is necessary to ensure the quality of the data received. Specifically, 567 IAC 83.1(1) states that a laboratory certification program is required for laboratories performing analyses of samples which are required to be submitted to the DNR as a result of Iowa Code (i.e., §45B.115) provisions, rules, operation permits, or administrative orders. 567 IAC 83.1(3)“d” states that the requirements of 567 IAC 83 also apply to all laboratories conducting analyses of solid waste parameters pursuant to 567 IAC 100 through 130.
- 567 IAC 115.26(8)“d” requires the submittal of an annual water quality report (AWQR) to the DNR that details the water quality monitoring sampling locations and results. 40 CFR, Part 257.3-4 merely states that a facility or practice shall not contaminate an underground drinking water source beyond the solid waste boundary. Having to submit quarterly monitoring analytical results and an annual report summarizing the effect of the facility on groundwater could be considered more stringent.
- 567 IAC 115.27(9) requires sanitary landfills no longer accepting waste for final disposal to notify all local governments utilizing the facility, and to post a public notice stating their intent to close at least 180 days prior, which is not required by federal regulation. As cities and counties are required to provide waste management services to their

citizens in accordance with Iowa Code section 455B.302, this notification provision is essential to convey timely alternate waste management options.

- 40 CFR, Part 257 requires compliance with NPDES and other Clean Water Act statutes, whereas 567 IAC 115 also has its own surface water monitoring, reporting and cleanup requirements expressed in 567 IAC 115.19, 115.20(9), 115.26(4)“c”, 115.26(5) and 115.26(8)“d”.
- 567 IAC 115.27(1) prohibits open burning except when permitted by 567 IAC 23. Any burning to be conducted at the site shall be at a location that is separate and distinct from the operating area. In addition, Iowa Code section 455D.9(6) prohibits the open burning of yard waste within the permitted boundary at an SDP. These state provisions are more stringent than 40 CFR, Part 257.3-7.
- 567 IAC 115.3(4), 115.13(10), 115.26(1)“g”, 115.26(10), 115.26(13) and (14), 115.27(9) and 115.31, establish the minimum closure, postclosure, and financial assurance requirements for industrial landfills. 40 CFR, Part 257 does not require financial assurance be maintained. Financial assurance is included to address the statutory requirements of Iowa Code section 455B.304(8) and 455B.306(9).

Not Perceived By The DNR As More Stringent

- 40 CFR, Part 257 does not contain a liner design, but rather a broad performance standard to not contaminate groundwater. Because 567 IAC 115.26(1)“d” and “e” set forth prescriptive liner design requirements, this could be considered more stringent than the federal regulation.
- 567 IAC 115.19 and 115. 20, and 115.26 (3) through (9) establish minimum groundwater monitoring requirements that are more specific than the broad performance standard expressed in 40 CFR, Part 257, and therefore could be considered more stringent than the federal regulation.
- 567 IAC 115.26(1)“e”(1) specifies the point of compliance for an alternative liner system, and that it must be designed to ensure that contaminants escaping the sanitary landfill do not exceed the specified concentration levels for parameters sampled at an established “point of compliance.” This rule establishes the point of compliance within 50 feet of the solid waste boundary or planned liner. 40 CFR, Part 257.3-4(b)(2) authorizes the State to establish an alternate relevant point of compliance in lieu of the solid waste boundary, but does not specify the distance. Based upon the known soil types and hydrology of this state, the DNR maintains that a groundwater monitoring system must be within 50 feet of the solid waste boundary in order to ensure that contamination can be discovered and addressed in a timely manner.

4. DOES THIS CHAPTER HAVE UNINTENDED CONSEQUENCES?

4a. Does the chapter result in the equitable treatment of those required to comply with it?

Yes ☒ No ☐ **(check or circle)**

4b. Provide a narrative summary of your response.

For any public or private entity deemed to require a SDP permit for their industrial waste disposal activities, the provisions of this administrative chapter are applied equally to all. The requirements of this administrative chapter are based upon federal open dumping regulations in 40 CFR, Part 257. Some industrial waste generators may choose to send their waste to a municipal solid waste sanitary landfill (MSWLF) instead of an industrial landfill.

4c. Does the chapter result in the inequitable treatment of anyone affected by the chapter but not required to comply with it?

Yes ☒ No ☐ **(check or circle)**

4d. Provide a narrative summary of your response.

Operators of MSWLFs that accept industrial wastes are at a competitive disadvantage due to the lower cost of operation (e.g., liner design and leachate control requirements) allowed for within this administrative chapter.

4e. Are there known negative unintended consequences of this chapter?

Yes ☒ No ☐ **(check or circle)**

If the answer is "yes," then answer question 4f. If not, then proceed to question 5.

4f. Specifically state the nature of any negative unintended consequences.

The industrial landfill liner requirements (i.e., non-composite) may not be adequate to prevent the leaching of contaminants to groundwater, which is compounded by the fact that industrial wastes encompass a wide-range of materials with varying degrees of possible contamination. Leachate releases to groundwater have been documented at several industrial monofills in Iowa that contain a clay-only liner, which may have been prevented with a composite liner and other requirements that are in place for MSWLFs.

Facilities complying with this administrative chapter are not treated equally when compared to mine reclamation projects approved pursuant to 567 IAC 108, or other types of sanitary landfills approved pursuant to 567 IAC 113 and 114. Mine reclamation utilizing industrial waste and landfill disposal are comparable activities, however, mine reclamation is not considered disposal and therefore not subject to sanitary disposal project permitting requirements.

A negative unintended consequence is that entities that perhaps should be constructing an industrial waste monofill for the management of their waste, are looking to 567 IAC 108 and its universally-approved beneficial fill allowances as a means of management for their large volumes of material. The beneficial fill projects authorized pursuant to 567 IAC 108 were never intended to encompass ongoing large-scale disposal operations. The environmental controls required of these beneficial fill operations are significantly less than those of a permitted sanitary monofill, and the resulting substantial cost avoidance has resulted in industrial wastes

(e.g., foundry sand, coal combustion by-products, water treatment lime) management activities that are not as environmentally protective as a properly designed and constructed monofill.

5. CAN THE GOALS OF THE CHAPTER BE ACHIEVED IN A MORE EFFICIENT OR STREAMLINED MANNER?

5a. Is the chapter broader than necessary to accomplish its purpose or objective?

Yes ☐ No ☒ **(check or circle)**

5b. Provide a narrative summary of your response.

While the provisions of this administrative chapter apply only to industrial waste landfills, there are several opportunities to expand the requirements to provide the regulated public with greater clarification regarding what's being required. Given the uncertainty regarding the adequacy of the current liner design and the listing of parameters for groundwater monitoring, the issue with this administrative chapter isn't that it is overly broad in scope, but rather that it lacks the desired specificity to ensure such facilities are adequately protective of human health and the environment.

5c. Is the purpose of this chapter achieved in the least restrictive manner?

Yes ☐ No ☒ **(check or circle)**

5d. Provide a narrative summary of your response.

The requirements of this administrative chapter are not restrictive, however, they also do not achieve the purpose of the administrative chapter. In this case, being less restrictive is surpassed by the administrative chapter's deficient design and groundwater monitoring requirements. Therefore, a case could be made that due to this lack of standard environmental controls, 567 IAC 115 doesn't meet the goals expressed in 40 CFR, Part 257 and Iowa Code section 455B.

5e. What, if any, reasonable and practical alternatives to this chapter are available by the agency?

Rather than making revisions to the current administrative chapter, a viable alternative may be to eliminate 567 IAC 115 altogether and regulate the disposal of industrial waste pursuant to 567 IAC 113; with allowances for waste-specific groundwater monitoring and certain design modifications considering the physical make-up of the waste being disposed. This option recognizes the inefficiencies of maintaining and enforcing a separate set of administrative rules for a limited number of sites statewide, when the design and operating standards are comparable to those of 567 IAC 113. Consolidating the sanitary landfill administrative chapters into one comprehensive chapter would help eliminate duplication, resolve conflicting requirements, and lessen confusion (e.g., standardizing application/reporting forms) as to what needs to be submitted by applicants to obtain and maintain a permit.

5f. How do the economic and social costs of various alternatives to this chapter, if known,

appear to compare to the known economic costs of this chapter?

Elimination of this administrative chapter in favor of regulating the disposal of industrial waste under rules similar to municipal solid waste would impose some additional design and monitoring costs on facilities that desire to continue accepting only a specific type of industrial waste. However, the added environmental protections afforded by rules for municipal solid waste would also reduce the potential for environmental contamination and the costs incurred in any remediation effort. The consolidation of the sanitary landfill administrative chapters would not only streamline and standardize the permitting process for both the applicant and the DNR, but would likely result in reduced staff time and associated costs to obtain and maintain a permit.

5g. Do the known economic costs of the chapter outweigh the known economic and social benefits?

Despite the noted environmental control deficiencies (e.g., liner design, comprehensive groundwater monitoring, detail corrective action), the known economic costs of this administrative chapter do not outweigh its benefits. However, the view remains that this administrative chapter lacks appropriate environmental controls that warrant revision to ensure adequate environmental protections from the disposal of industrial waste.

6. DOES THE CHAPTER AFFECT BUSINESS OR INDUSTRY?

6a. Does the chapter affect businesses operating in Iowa?

Yes ☒ No ☐ **(check or circle)**

If the answer is "yes," then answer questions 6b through 6i as applicable. If not, then proceed to question 6f.

6b. What kinds of businesses are affected by this chapter?

Industrial landfills and any public or private entity within Iowa that generates industrial wastes that are not recycled or used beneficially, would be affected at some level by the requirements of this administrative chapter.

6c. Does this chapter create a burden for businesses?

Yes ☐ No ☒ **(check or circle)**

6d. Explain your response to question 6c.

The provisions of this administrative chapter were intended to ensure the safe management and disposal of industrial wastes. This administrative chapter provides an alternative management option besides disposal in an MSWLF.

If the answer to question 6c is "yes," then answer question 6e. If not, then proceed to questions 6f through 6i.

6e. If this rule does create a burden for businesses, what options are available to address those burdens?

Given certain design and operational standards for industrial landfills are specified by federal regulation (i.e., 40 CFR, Part 257) and Iowa statute, many of these costs are fixed. However, the DNR offers several programs that provide businesses with grant money and technical assistance to facilitate waste reduction, and programs that help facilitate beneficial reuse of waste by-products. These assistance programs can greatly reduce businesses' waste management and disposal costs.

6f. Do industry standards affect the subject matter of this chapter?

Yes ☒ No ☐ **(check or circle)**

If the answer is "yes," answer questions 6g through 6i as applicable. If not, proceed to question 7.

6g. Have industry standards changed since the adoption of this chapter?

Yes ☒ No ☐ **(check or circle)**

If the answer is "yes," answer questions 6g and 6h. If not, proceed to question 7.

6h. What industry standards have changed since the adoption of this chapter?

The analysis of sampling data in 567 IAC 115.26(6) has historically resulted in false-positive indications of groundwater contamination at industrial waste landfills due to the simplicity of the statistical methods applied to determine whether contamination is occurring. The adoption of statistical methods to evaluate groundwater monitoring data pursuant to 40 CFR, Part 258.53, and the utilization of the 2009 U.S. EPA guidance document titled, "Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities" would result in an improved ability to detect contamination. The statistical procedures, methodologies and applications listed in 40 CFR, Part 258.53 and this guidance document improve the ability of sanitary landfills to detect groundwater contamination, and are commonly used by permit holders to analyze the collected data. This guidance document could be adopted by reference in 567 IAC 115 to provide greater clarity to the statistical evaluation process for permit holders and the DNR, which would lead to quicker data analysis and an improved ability to determine the appropriate responses to identified contamination.

567 IAC 115.26(4) 567 requires the collection of dissolved metals data, which reflects an incomplete approach to understanding metals transport in groundwater. Metals naturally exist in groundwater in many phases other than dissolved: precipitated, polymeric or adsorbed to colloids. In order to collect dissolved metals data, the groundwater is passed through a filter (the rules do not specify a filter size). However, filtering the samples removes a significant portion of the colloids, polymers and precipitated metals, which may erase any indication of a metals release from the landfill. Additionally, depending on the filter size, some colloids may pass through so the results are not actually representative of dissolved metals in groundwater either. It should also be noted that the U.S. EPA's Maximum Contaminant Level (MCL) is based

upon total metals exposure and not dissolved metals exposure.

Monitoring well construction practices have changed to favor a submerged well screen rather than a well screen bisected by the water table, as the current regulations (i.e., 567 IAC 115.23(3)) require. In addition, the specifications in 567 IAC 115.23(4) regarding how the filter pack is sized is outdated and difficult to comply with given the time needed to perform the sieve analysis, determine the 50% grain size of the screened interval, and then order the appropriately-sized filter pack.

Liner components (e.g., plastic liners and geocomposite drainage layers) have improved since these rules were promulgated. In addition, increased recycling and reuse programs in many industries, often assisted by DNR programs, have helped reduce the amount of waste being sent to Iowa's industrial landfills.

6i. Would revision of the chapter be useful in implementing the purposes of the chapter in light of any industry standard revisions? (Cite the portions of the chapter that could be revised.)

There are several provisions within this administrative chapter that should be revisited given recent changes to industry standards, such as:

- 567 IAC 115.23 regarding well construction standards. Monitoring well construction practices have changed to favor a submerged well screen rather than a well screen bisected by the water table. In addition, the specifications regarding how the filter pack is sized is outdated and difficult to comply with given the time needed to perform the sieve analysis, determine the 50% grain size of the screened interval and order the appropriately-sized filter pack.
- 567 IAC 115.26(6) regarding the adoption of statistical methods to evaluate groundwater monitoring data and the U.S. EPA's 2009 statistical guidance document
- 567 IAC 115.26(15) should be expanded to ensure that design and construction requirements control migrating landfill gases. When 40 CFR Part 257 was promulgated, monitoring and design requirements were focused on protecting groundwater from the impacts of leachate releases. However, gas releases from landfills also have the ability to contaminate groundwater. Parts of the chapter should be revised to address threats to groundwater from both leachate and gas releases.

7. DOES THIS CHAPTER AFFECT JOB CREATION?

7a. Does the chapter affect job creation?

Yes ☐ No ☒ **(check or circle)**

If the answer is "yes," then answer questions 7b and 7c. If not, then proceed to question 8.

7b. If this chapter affects job creation, in what manner does that occur?

Not Applicable

7c. If this chapter is required by state or federal statutes, or federal regulations, how has the department minimized negative job impacts?

Not Applicable

8. IS THERE ANY DOCUMENTATION OR PAPERWORK REQUIRED BY THIS CHAPTER?

8a. Is there any documentation or paperwork required by this chapter?

Yes ☒ No ☐ **(check or circle)**

If documentation or paperwork is required, then answer questions 8b through 8e. If not, then proceed to question 9.

8b. What is the purpose of the documentation or paperwork?

The rules within this administrative chapter that require the submittal of paperwork pertain to minimum SDP permit application requirements and subsequent permitting actions (e.g., development and operations plan, tonnage reporting, certification, AWQR, financial assurance). Such documentation demonstrates that the sanitary landfill is sited, constructed and operated in compliance with requirements of this administrative chapter; and what impact the sanitary landfill may be having on groundwater. The documentation required generally changes as the industrial landfill is developed. The documentation consists of:

- The various permit types, permit renewal and permit amendment documentation is submitted pursuant to 567 IAC 115.3, 115.4, 115.8 and 115.13, and pursuant to Iowa Code section 455B.305.
- The primary plan requirements expressed in 567 IAC 115.13 provide detail regarding how the facility will be designed and operated in compliance with the requirements of this administrative chapter. Iowa Code section 455B.304(1) provides the general requirements that must be satisfied by these plans and Iowa Code section 455B.306 requires the submission of plans to the DNR.
- Pursuant to 567 IAC 115.17, industrial waste landfills are required to maintain and submit a hydrologic monitoring system planning report, which presents the results of the hydrologic investigations required in 567 IAC 115.16. The consideration of soils and geology, as required by Iowa Code section 455B.304(1), is demonstrated by this report.
- Pursuant to 567 IAC 115.19, industrial waste landfills are required to maintain and submit a hydrologic monitoring system plan, which outlines the methods by which the facility will comply with this chapter's groundwater monitoring requirements, which in

turn satisfy the requirements of Iowa Code sections 455B.304(4) and 455B.304(5).

- As part of the hydrologic monitoring system planning report in 567 IAC 115.17, industrial waste landfills are required to submit a monitoring well maintenance and performance reevaluation plan pursuant to 567 IAC 115.21, to ensure all monitoring points remain reliable.
- Sanitary landfill design, construction plans, specifications and related analyses are required to be maintained and submitted to the DNR pursuant to 567 IAC 115.26(1). These documents enable the DNR to evaluate the liner design, leachate control system, adherence to siting restrictions, final elevation grades and proposed land use upon site closure.
- Pursuant to 567 IAC 115.26(2), sanitary landfills are required to maintain and submit an operations plan as part of the permit application process. This plan records how the sanitary landfill will implement general and unique operating procedures (e.g., site access, all-weather fill area, annual engineer inspection report, permeable materials notification, leachate collection records) at the site to protect human health and the environment.
- Pursuant to 567 IAC 115.26(3), a hydrologic monitoring system plan is to be submitted, which provides detail regarding how the facility will install and maintain a sufficient number of groundwater monitoring wells to adequately determine the quality of the groundwater and the impact the landfill is having on the groundwater adjacent to the site. This plan also serves to meet to requirements of Iowa Code sections 455B.304(4) and (5).
- Pursuant to 567 IAC 115.26(6), the analytical results for an upgradient or downgradient monitoring point that do not fall within the control limits of two standard deviations above the mean parameter(s) level in a corresponding upgradient monitoring point shall be submitted to the DNR within 30 days of receipt of the analytical results. This requirement serves to address to provisions of Iowa Code section 455B.304(5).
- Pursuant to 567 IAC 115.26(8), sanitary landfills are required to submit water quality data and analyses which summarize the impact the facility is having on the environment. This documentation serves to meet the requirements of Iowa Code sections 455B.304(4) and (5).
- Pursuant to 567 IAC 115.26(9),sanitary landfills are required to develop and submit a groundwater quality assessment plan. Upon identification of an adverse impact on the environment, the assessment plan provides detail regarding how the magnitude of that impact will be determined, in accordance with the objectives of Iowa Code sections 455B.304(4) and (5).
- Pursuant to 567 IAC 115.26(10), sanitary landfills are required to submit a plan to the DNR detailing a 30-year postclosure monitoring program, which in turn satisfies the requirements of Iowa Code sections 455B.304(4) and (6).

- Pursuant to 567 IAC 115.26(11)“a”(6), sanitary landfills shall submit documentation to the DNR that includes methods and specifications for cleaning of the leachate collection pipes, chemical compatibility of the pipes, and calculations and specifications for pipe strength to satisfy Iowa Code section 455B.304(8).
- Pursuant to 567 IAC 115.26(11)“a”(8), the leachate collection system shall be cleaned out once every three years, or more frequently if leachate head or the volume of leachate collected indicates cleanout is necessary. A report of the methods and results of the cleanout shall be submitted at the time of permit renewal, which satisfies Iowa Code section 455B.304(8).
- Pursuant to 567 IAC 115.26(11)“d”, sanitary landfills are required to submit a leachate control system construction certification report to the DNR. This report provides documentation of the quality control procedures that were utilized during the construction process, thereby ensuring the proper construction of the leachate collection system.
- Pursuant to 567 IAC 115.26(12), sanitary landfills are required to submit a leachate control plan that addresses the collection and management of leachate within existing and proposed fill areas.
- Pursuant to 567 IAC 115.26(14)“g”, sanitary landfills are required to submit semiannual inspection reports that document the facility is being properly maintained during the postclosure period.
- Pursuant to 567 IAC 115.26(15)“b”, sanitary landfills are required to submit an annual gas monitoring report that summarizes the results and indicates whether or not the facility is producing methane at levels that could present an explosion risk.
- Pursuant to 567 IAC 115.27(9)“d”, sanitary disposal projects are required to submit closure documentation to demonstrate that the facility was closed in accordance with the closure plan required by 567 IAC 115.13(10) and Iowa Code section 455B.306(7)“a”.
- Pursuant to 567 IAC 115.28, industrial waste landfills are required to included as part of the operations plan required in 567 IAC 115.26(2), further detail regarding waste distribution and compaction processes, and various cover material criteria.
- Pursuant to 567 IAC 115.29, sanitary landfill operators must be certified through a DNR-approved certification program. The operator certification application process enables the landfill operators to obtain training and demonstrate competency in this field to the DNR, as required by Iowa Code section 455B.304(11).
- Pursuant to 567 IAC 115.30 and Iowa Code section 455B.306(7)“d”, sanitary landfills are required to maintain and submit an ERRAP at the time of permit renewal or modification that incorporates facility changes that will impact the ERRAP. The ERRAP outlines detailed measures to reduce impacts of emergency situations to human health and the environment.

- Any cost estimates and financial assurance documentation is required by 567 IAC 115.31, 115.26(13)“j”, Iowa Code sections 455B.304(8), 455B.306(7)“c” and 455B.306(9). Financial assurance protects the citizens of Iowa from incurring unforeseen costs if a sanitary disposal project owner is unable or unwilling to pay for proper site closure, by requiring that funds be set aside prior to permit issuance. Submittal of the cost estimates and annual financial statements ensure that the amount of financial assurance will be sufficient to cover the closure and postclosure care costs of each landfill.

8c. Who reviews the paperwork required by the chapter?

DNR central office program staff (e.g., environmental engineers, environmental specialists), DNR field office staff, and groundwater scientists employed by the DNR review the paperwork noted above to ensure compliance with regulations and to ensure such activities are protective of human health and the environment. All records are available online for public review.

8d. How is the documentation or paperwork required by this chapter informative or useful for the public?

Because all paperwork is made public at no cost, it provides transparency and a level playing field for all required to comply with this administrative chapter. The minimum permit application and management plans required in this administrative chapter provide the DNR and the public with information on who, what and how solid waste materials are being managed at a site. These application requirements are vital to the permitting process to ensure these facilities are appropriately designed and constructed, and that all solid waste management activities are conducted in a manner that is protective of human health and the environment. Furthermore, because of the public’s sensitivity regarding solid waste disposal, due to the potential long-term threat to groundwater posed by the amount of material deposited within sanitary landfills, continuous oversight and demonstration of compliance are needed to gain and hold public trust.

8e. How, if possible, can the documentation or paperwork requirements be reduced?

Opportunities exist to restructure and simplify the required plans that must accompany each permit application, and opportunities to reduce paperwork through streamlining and standardizing reporting requirements (e.g., online application and reporting, financial assurance). Consideration of a lifetime permit, rather than a 5-year term permit, could further reduce the level of paperwork required to maintain an industrial landfill permit. There are plan components listed in this administrative chapter that do not appear to be necessary (e.g., organizational chart, equipment used, local soil conservation district commissioner review, sand pocket excavation documentation, quarterly groundwater sampling analytical results, and special waste authorization records in the annual water quality report) that may reduce further documentation. In addition, the soil and hydrogeological investigation requirements are very prescriptive and in some cases may result in the collection of data that is of little value to the DNR or the permit holder (e.g., prescribed number of soil borings in 567 IAC 115.15(1), grain size analyses in 567 IAC 115.15(3)“b”, and blow counts in 567 IAC 115.15(2)) . However, some

permit holders prefer prescriptive requirements as it gives them more certainty. Consideration should be given to allowing permit holders to request alternative methods for the hydrogeological investigation if the permit holder can demonstrate that the alternative provides an equivalent amount of environmental protection. Lastly, some of the alternatives provided in response to questions 5e and 10b could also reduce the paperwork required by this administrative chapter.

9. DO OTHER STATE AGENCIES REGULATE THE ISSUES ADDRESSED BY THIS CHAPTER?

9a. Do any other state agencies regulate any issue(s) addressed by this chapter?

Yes ☐ No ☒ **(check or circle)**

If the answer is "yes," then answer questions 9b to 9e. If not, then proceed to question 10.

9b. If other state agencies regulate any issue(s) addressed by this chapter, provide the name of each agency, a description of how each agency is involved, and specify the subject matter regulated by each agency.)

Not Applicable

9c. Is there a need for more than one set of rules?

Yes ☐ No ☒ **(check or circle)**

If the answer is "yes," then proceed to question 9d. If not, then proceed to question 9e.

9d. If any other state agencies regulate any issue(s) addressed by this chapter and one or more of the other sets of rules are necessary, explain why.

Not Applicable

9e. If this chapter or a portion thereof is duplicative, explain how and why.

Not Applicable

10. IS THE CHAPTER USER FRIENDLY?

10a. Is the chapter written and organized in a clear and concise manner so that those to whom it applies can readily understand it?

Yes ☐ No ☒ **(check or circle)**

If the answer is "no," then answer question 10b. If not, then proceed to question 11.

10b. If not, explain what changes can be made to improve readability, eliminate ambiguity, or

increase understanding. Be specific, to the extent possible.

This administrative chapter is disorganized and difficult to locate specific provisions, which are often spread throughout the entire chapter and located in unrelated sections. For example, there are requirements related to facility closure located in no less than four different locations (i.e., 567 IAC 115.3(4), 115.13(10), 115.26(13) and 115.27(9)). All related topics should be located in the same section of the administrative chapter. Another example of this chapter's disorganization is in 567 IAC 114.28(2) which states in part, "The sanitary landfill shall be operated in conformance with rules 115.2(455B) through 115.13 (455B), 115.27(455B), 115.29(455B), and 115.30(455B), subrule115.26(2) and the standards approved by the department." This implies that the remainder of the administrative chapter does not apply to industrial waste landfills; however, sanitary landfills that accept a specific type of industrial waste are the only facilities this administrative chapter is to apply to (See 567 IAC 115.1 - Scope and applicability). Reorganizing this chapter to follow the general outline contained in the municipal solid waste rules (i.e., 567 IAC 113) would result in a substantial improvement in readability and understanding.

A more fundamental issue is that this administrative chapter was to be applicable those sanitary landfills accepting only a specific type of industrial waste. However, the provisions contained within this administrative chapter repeatedly speak to "requirements for all sanitary disposal projects" or "general requirements for all sanitary landfills" or even to outdated specific design requirements (i.e., nonmunicipal landfill liner design in 567 IAC 115.26(1)"d"(1)) for sanitary landfills that are not restricted to one type of waste. Given there is so much overlap within this administrative chapter to provisions that are to be applicable to all sanitary landfills, it raises the question of whether the provisions specific to industrial waste should be incorporated into a single sanitary landfill administrative chapter.

567 IAC 115.26(10)"c" states, "The commission may adopt rules on a site-specific basis identifying additional monitoring requirements for sanitary landfills for which the postclosure monitoring period is to be extended." Having an administrative provision that authorizes the commission to adopt rules on a site-specific basis seems more appropriate in Iowa Code. As Iowa Code section 455B.304(6) already affords the commission such authority (i.e., 567 IAC 115.3(4) implies such authority already exists), this statement is redundant and could be struck from the chapter.

There are also some state and federal provisions that have been omitted from 567 IAC 115 that should be included within any subsequent revision. Examples include:

- The federal endangered species requirements in 40 CFR, Part 257.3(2) 40 CFR, Part 257.3-2 are not listed in 567 IAC 115.
- The federal requirements in 40 CFR, Part 257.3-7 to not violate a Clean Air Act State Implementation Plan is not included in 567 IAC 115.
- The minimum federal floodplain restrictions in 40 CFR, Part 257.3-1 are not reflected in

the general requirements of 567 IAC 115. 114.26(1)“m”(3).

- Industrial waste landfills shall obtain local siting approval prior to the DNR reviewing a new permit application pursuant to Iowa Code section 455B.305A.
- Iowa Code section 455D.9(6) prohibits the open burning of yard waste within the permitted boundary at a SDP. However, 567 IAC 115.27(1) prohibits open burning except when permitted by 567 IAC 23.2. Any burning to be conducted at the site shall be at a location that is separate and distinct from the operating area. Additional clarification is needed in 567 IAC 115 to address the open burning of yard waste at industrial waste landfills to ensure there is no conflict between 567 IAC 23.2(3) and the statutory prohibition.
- The minimum federal wetland restrictions in 40 CFR, Part 257.9 are not reflected in the general requirements of 567 IAC 115.26.
- 567 IAC Chapter 115 does not allow for Conditionally Exempt Small Quantity Generator (CESQG) Wastes to be accepted in accordance with 40 CFR 257.9.
- 567 IAC Chapter 115 does not contain detailed procedures for Groundwater Monitoring and Corrective Action as found in 40 CFR 257.21.
- Pursuant to Iowa Code section 455B.306(9)“b”, all sanitary landfills are required to maintain closure and postclosure accounts as part of complying with financial assurance provisions. The only type of sanitary landfill that has received a statutory exemption from this requirement is sanitary landfills owned by an electric generating facility and used exclusively for the disposal of coal combustion resdue (i.e., Iowa Code section 455B.306(12)). Failure to require such accounts be maintated within this administrative chapter is a direct statutory conflict.
- The calculation of costs to be assured in 567 IAC 115.31(6)“e”(5) and 115.31(6)“f”(4)“2” fail to reference the same listing of federal regulations. The financial assurance provisions for all sanitary disposal projects are derived form those expressed in 40 CFR 258.74, and should be consistent across all sanitary disposal project chapters.

11. ARE THE CITATIONS IN THE CHAPTER ACCURATE?

11a. If this chapter contains Iowa Code citations, are those citations proper and current?

Yes ☐ No ☒ Not Applicable ☐ **(check or circle one option)**

If the answer is “no,” then answer question 11b. If not, then proceed to question 11c.

11b. If not, list and explain the corrections that need to be made to the Iowa Code citations.

- 567 IAC 115.26(1)“j” states, “Evidence that the proposed plan has been reviewed by the local soil conservation district commissioner and that the technical assistance of the soil conservation district will be utilized to facilitate compliance with wind and water soil loss limit regulations provided for in Iowa Code sections 467A.42 to 467A.51.” However, Iowa Code chapter 467A is listed as “Reserved” in the 2014 Iowa Code.

- 567 IAC 115.26(1)“m”(3) states, “Outside a flood plain or shoreland, unless proper engineering and sealing of the site will render it acceptable and prior approval of the department under Title V of these rules and, when necessary, the U.S. Corps of Engineers is obtained.” It is unknown which specific provisions in this administrative chapter that “Title V” is referencing.

- 567 IAC 115.30(1) states, “The purpose of this rule is to implement Iowa Code section 455B.306(6)“d” by providing the criteria for developing a detailed emergency response and remedial action plan (ERRAP) for permitted sanitary disposal projects.” However, the correct Iowa Code citation is 455B.306(7)“d”.

- 567 IAC 115.30(3)“e” states in part, “Facilities that submitted an ERRAP meeting the requirements defined under Iowa Code section 455B.306(6)“d” by May 1, 2001, including…”. However, the correct Iowa Code citation is 455B.306(7)“d”.

- 567 IAC 115.30(4)“b”(1) states, “Iowa Code section 455B.306(6)“d” criteria citation.” However, the correct Iowa Code citation is 455B.306(7)“d”.

- 567 IAC 115.5 states, “All plans and specifications submitted in the application for a sanitary disposal project permit or a developmental permit shall be prepared in conformance with Iowa Code chapter 542B and shall be submitted in triplicate.” Iowa Code chapter 542B pertains to professional engineering and land surveying law and not to the development and submittal of documentation.

11c. If this chapter contains federal statutory citations, are those citations proper and current?

Yes ☐ No ☐ Not Applicable ☒ **(check or circle one option)**

If the answer is “no,” then answer question 11d. If not, then proceed to question 11e.

11d. If not, list and explain the corrections that need to be made to the federal statutory citations.

Not Applicable

11e. If this chapter contains federal regulatory citations, are those citations proper and current?

Yes ☐ No ☒ Not Applicable ☐ **(check or circle one option)**

If the answer is “no,” then answer question 11f. If not, then proceed to question 11g.

11f. If not, list and explain the corrections that need to be made to the federal regulatory citations.

- 567 IAC 115.31(6)"e"(5) references 40 CFR, Part 258.74; however, this section pertains to allowable financial assurance mechanisms for MSWLFs. The correct reference for required cost estimates would be to just cite the entire chapter as 40 CFR 258 (as are

the other federal regulatory citations), rather than trying to specify the individual sections (e.g., 40 CFR, Parts 258.71 through 73 or Iowa Code sections 455B.304(8), 455B.306(7)“c” and 455B.306(9)).

- 567 IAC 115.26(1)“e”(1) states in part, “…the proposed alternative liner system will ensure that the contaminant concentration values listed in federal regulations under 40 CFR 258, Subpart D, Table 1, will not be exceeded…”. Given 40 CFR, Part 258 pertains to MSWLFs, its relevance to industrial landfills and this administrative chapter is not apparent.

- 567 IAC 115.31(6)“f”(4)“2” references 40 CFR, Part 144.62, however, this is the only reference to 40 CFR, Part 144 that specifies section 62. The CFR reference is pulled verbatim from 40 CFR, Part 258.74(f)(4)(ii). All mechanisms that reference 40 CFR, Part 144 should be phrased the same for consistency.

11g. If this chapter contains internal cross-reference citations, are those citations correct and current?

Yes ☐ No ☒ Not Applicable ☐ **(check or circle one option)**

If the answer is “no,” then answer question 11h. If not, then proceed to question 11i.

11h. If not, list and explain the corrections that need to be made to the internal cross-references.

- 567 IAC 115.25 states in part, “…a variance from the specific requirements of rules 115.14(455B) to 115.25(455B) may be issued, modified, or denied by the director.” This is a self-referencing citation, the correct range is 567 IAC 115.14 through 115.24.

- 567 115.26(1)“g”(1) states, “The design and construction of the system must be in accordance with subrule 115.26(3) and be coordinated with the planned phase development of the site and the timing of leachate generation.” 567 IAC 115.26(3) outlines the requirements to operate and maintain a hydrologic monitoring system, which is incorrect. The proper citation should be 567 IAC 115.26(11).

- 567 IAC 115.31(6)“i"(4) and (5) reference the "pay-in period" as defined in 567 IAC 115.31(6)“i”, when a more accurate reference would be 567 IAC 115.31(6)"i"(3). This would mirror how it is expressed in 567 IAC 115.31(6)"a"(3) and (4) for trust funds.

11i. If the chapter contains cross-reference citations to other chapters, are those citations correct and current?

Yes ☐ No ☒ Not Applicable ☐ **(check or circle one option)**

If the answer is “no,” then answer question 11j. If not, then proceed to question 11k.

11j. If not, list and explain the corrections that need to be made to the cross-references to other chapters or outside sources.

- 567 IAC 115.3(1) references eighteen other solid waste administrative chapters (i.e., 567—Chapters 102 to 106, 109 to 116, and 118 to 122), most of which have no relationship to industrial waste disposal. This list should be reduced to only those chapters that directly pertain to industrial waste management or eliminate this statement altogether.
- 567 115.26(1)"e"(1) states in part, "…All operational issues related to monitoring systems, compliance determinations, groundwater assessments, and remedial measures are governed by the appropriate relevant rules in this chapter and 567—Chapter 111." 567 IAC 111 currently pertains to environmental management systems and the correct reference should have been 567 IAC 110. This administrative chapter is no longer applicable and should be struck from this provision.

11k. If this chapter contains website references, are those website references necessary, correct and current?

Yes ☐ No ☐ Not Applicable ☒ **(check or circle one option)**

If the answer is "no," then answer question 11l. If not, then proceed to question 11m.

11l. List and explain any necessary corrections to the website references.

Not Applicable

11m. If the chapter contains addresses and phone numbers, are the addresses and phone numbers necessary, correct and current?

Yes ☐ No ☐ Not Applicable ☒ **(check or circle one option)**

If the answer is "no," then answer question 11n. If not, then proceed to question 11o.

11n. List and explain any corrections that need to be made to the addresses and phone numbers contained in the chapter.

Not Applicable

11o. If the chapter contains adoptions by reference, are those adoptions by reference correct and current?

Yes ☐ No ☒ Not Applicable ☐ **(check or circle one option)**

If the answer is "no," then answer question 11p. If not, then proceed to question 11q.

11p. List and explain any corrections that need to be made to update adoptions by reference.

567 IAC 115.31(6)"f"(2) and 567 IAC 115.31(6)"f"(3)"1" refer to Government Accounting Standards Board (GASB) Statement 18. GASB 18 pertains only to accounting standards for MSWLF closure and postclosure care costs, not industrial waste landfills for which this administrative chapter was adopted. References to GASB Statement 18 should be struck from this administrative chapter.

11q. If the chapter contains DNR-created documents adopted by references, are those

document references necessary, correct and current?

Yes ☒ No ☐ Not Applicable ☐ **(check or circle one option)**

If the answer is "no," then answer question 11r. If not, then proceed to question 12.

11r. List and explain any corrections that need to be made to update the DNR-created document references.

Not Applicable

12. WHAT PUBLIC GROUPS ARE AFFECTED BY THE CHAPTER?

12a. List any stakeholder groups, workgroups, public groups or other public participants impacted by the issues in the chapter.

Potential interested parties: Public and private agencies operating or planning to operate an industrial landfill in Iowa, Iowa Society of Solid Waste Operations (ISOSWO), Association of Business and Industry (ABI), Iowa Solid Waste Comprehensive Planning Areas, Iowa Environmental Council (IEC), Iowa League of Cities, Iowa State Association of Counties (ISAC), Iowa Groundwater Association, Iowa Recycling Association (IRA), County Environmental Health Sanitarians, Sierra Club - Iowa Chapter, and Iowa Citizens for Community Improvement.

12b. If any stakeholders have already been included in a review process for this chapter during the past five years, state the names of those stakeholder groups, workgroups, public groups, or other public participants, and explain the nature of their involvement.

External stakeholder feedback has not been sought in the past five years regarding revisions to this administrative chapter.