NORTH DAKOT DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WASTE MANAGEMENT

Review and Response to Public Comments Received for the Proposed Administrative Rules Related to Solid Waste Management and Land Protection

March 12, 2020

The North Dakota Department of Environmental Quality (Department) is conducting a rulemaking proceeding to address proposed rules relating to Solid Waste Management and Land Protection. The proposed rules primarily introduce a general permits program, adopt the federal coal combustion residual (CCR) rule, and address needed updates for the sections on regulated infectious waste, financial assurance, waste transporters, certification of operators and solid waste management planning.

The Department regulates the management of solid waste under the authority of North Dakota Century Code (NDCC) Chapter 23.1-08, Solid Waste Management. The Division of Waste Management's Solid Waste Program implements the department's rules for the management of solid waste in North Dakota Administrative Code (NDAC) Article 33.1-20, Solid Waste Management and Land Protection.

The proposed rules were released to the public and published on the Department's website on December 4, 2019. A public comment hearing was scheduled and held in Bismarck on February 11, 2020. The public comment period ended on February 24, 2020. Public notices of the draft rules, comment period and hearing were published in all official county newspapers in North Dakota and through the Department's public notice webpage and public notice email subscription service in December 2019. During the public comment period, the Solid Waste Program received both verbal and written comments regarding the proposed rules.

Many comments received were similar in nature and topic. The Department has grouped them into general categories to aid in the response. In some cases several similar comments have been summarized so that one response applies to all of them. In other cases excerpts have been quoted and directly responded to. The transcript of the public comment hearing and copies of all written comments are included as appendices.

Please note that the Department is only responding to statements and comments that directly apply to the proposed draft rules. Lack of response to a comment does not indicate that the Department agrees that it is accurate. The public hearing was transcribed as accurately as possible, and comments are quoted as stated into the record, with no corrections for grammar or wording.

The public comments and the Department's review, analysis and responses are organized as follows:

1. Comments related to Chapter 33.1-20-01.1. General Provision
2. Comments related to Chapter 33.1-20-02.1. Permit Provisions and Procedures
3. Comments related to Chapter 33.1-20-04.1. General Performance Standards
4. Comments related to the new CCR permit program in Chapter 33.1-20-08.
5. Comments related to Chapter 33.1-20-14. Financial Assurance Requirements
6. Comments related to Chapter 33.1-20-15. Solid Waste Management Fees
7. Comments related to Chapter 33.1-20-16. Certification of Operators
8. Comments related to Chapter 33.1-20-17. Solid Waste Management Planning
9. Summary and Conclusions

1. Comments related to Chapter 33.1-20-01.1. General Provisions

1.1 Comment: *The following changes were suggested in an underline/strikethrough format document: "NDAC 33.1-20-01.1-03(85). "Treatment" means a method or process designed to change the physical, chemical, or biological character or composition of a solid waste or leachate so as to neutralize the waste or leachate or so as to render the waste or leachate safe for public health or environmental resources during transport, storage, **beneficial reuse,** or disposal. The term does not include resource recovery." (Targa)*

1.1 Response: The Department has no objection to the proposed addition of "beneficial reuse" in the definition of "treatment" and will make the change.

2. Comments related to Chapter 33.1-20-02.1. Permit Provisions and Procedures

2.1 Comment: "*33.1-20-02.1-01 (2): removal of paragraph d. effects the charitable collection of recycling of products and the storage areas of farmers, small business and individuals of small amounts of recyclable materials. Suggest setting a weight or volume limit (i.e. 2 tons)." (C. Kreger)*

2.1 Response: The Department understands that the commenter is expressing concern over removing the exemption for places that receive recyclable materials from the requirement to have a solid waste permit as not to restrict or limit recycling activities. The Department fully supports appropriate recycling in accordance with NDCC 23.1-08-03 and has addressed this through the addition of a general permit program in section 33.1-20-02.1-03. The Department's intent is that a general permit will be issued for collection of recyclable materials which will exempt small and temporary recycling operations and encourage recycling in a manner which will not cause a nuisance or hazard.

2.2 Comment: *The following changes were suggested in an underline/strikethrough format document: "33.1-20-02.1-03(1)(g). A person that beneficially uses, processes or treats solid waste under a general permit shall comply with the terms and conditions of the general permit and requirements of this article **~~to the same extent as if the activity were covered by an individual permit.~~***

Targa requests clarity of this provision. The provision stipulates the beneficial use, process or treatment shall be in compliance with conditions of a general permit and requirements of the article. Therefore, the reference of performing these activities in the same manner as if they were covered by an individual permit is confusion and Targa suggests removing the reference to an individual permit." (Targa)

2.2 Response: The abovementioned provision clarifies the need for a permit in order to conduct the permitted activity. The permitted activity can be covered by either a general permit or an individual permit. The Department will retain the provision.

2.3 Comment: *The following changes were suggested in an underline/strikethrough format document: "33.1-20-02.1-03(2)(a). A description of the type of solid waste to be covered by the general permit, including physical and chemical characteristics of the waste. The chemical description shall contain an analysis of a sufficient number of samples of solid waste in the **same** waste type to accurately represent the range of physical and chemical characteristics of the waste type;" (Targa)*

2.3 Response: The Department has no objection to the proposed addition of "same" in subdivision a of 33.1-20-02.1-03(2) and will make the change.

2.4 Comment: *The following changes were suggested in an underline/strikethrough format document: "33.1-20-02.1-03(2)(c).* ***If appropriate, a~~A~~*** *detailed narrative and schematic diagram of the production or manufacturing process from which the waste to be covered by the general permit is generated;" (Targa)*

2.4 Response: A detailed narrative and schematic diagram is an important part of the application as it gives the Department a clear understanding of the process in which the waste is generated. It is up to the applicant to explain why it is not necessary to include a detailed narrative and schematic diagram as part of the application. The Department will retain the original proposed language.

2.5 Comment: *The following changes were suggested in an underline/strikethrough format document: "33.1-20-02.1-03(2)(d).* ***If appropriate, f~~F~~****or beneficial use general permits, proposed concentration limits for contaminants in the beneficially used waste, and a rationale for those limits.* ***If applicable, ~~A~~a****t a minimum, the use of the waste as an ingredient in an industrial process or as a substitute for a* ***~~commercial~~ raw material or*** *product may not present a greater harm or threat of harm than the use of the product or ingredient which the waste is replacing;" (Targa)*

2.5 Response: Proposed concentration limits for contaminants in the beneficially used waste and a rationale for those limits must be included as part of the application. Concentrations of contaminants may be too high in some cases for waste to be beneficially used and that needs to be understood in order to successfully beneficially use the waste. The Department will retain the original proposed language.

In order to waste to be beneficially reused, the waste must not present a greater harm or threat of harm than the use of the product or ingredient which the waste is replacing. The beneficial use of waste must not adversely affect human health or the environment. The Department will retain the original proposed language.

The Department has no objection to the proposed addition of "raw material" in subdivision d of 33.1-20-02.1-03(2) and will make the change.

2.6 Comment: *The following changes were suggested in an underline/strikethrough format document: "33.1-20-02.1-03(2)(e).* ***If appropriate f~~F~~****or general permits that involve beneficial use of solid waste, a detailed demonstration of the* ***suitability ~~efficacy~~*** *of the waste for the proposed beneficial use, which must include:*

(1) A ***description~~demonstration~~*** *that the physical characteristics and chemical composition of the solid waste contributes to the proposed beneficial use and does not interfere with the proposed beneficial use;*
(2) If the waste is to be used as a substitute for a commercial product, ***documentation~~a demonstration~~*** *that the waste can perform the desired functions of the commercial product, and that the waste meets or exceeds all applicable national, state, local or industry standards or specifications for the material for which the waste is being substituted;*
(3) If the waste is to be used as a raw material for a product with commercial value, ***documentation~~a demonstration~~*** *that the waste will contribute significant properties*

or materials to the end product, and that the waste meets or exceeds all applicable national, state, local or industry standards or specifications for the material for which the waste is being substituted;

(4) If the waste is to be used in general roadway application or highway construction, ***documentation~~a demonstration~~*** *that approval will be granted by the department of transportation, if applicable, for the use of the waste for the intended application;" (Targa)*

2.6 Response: General permits that involve beneficial use of solid waste must include a demonstration of the suitability of the waste for the proposed beneficial use. The demonstration will allow the Department to determine if the proposed activity is truly a beneficial use or "sham" recycling. The Department will retain the original proposed language.

The Department uses the term demonstration instead of description because a demonstration is a broad term that can include a description, data, studies, or other items. The term description is narrow and may not include adequate information in order for the Department to make a determination. The Department will retain the original proposed language.

The Department has no objection to replacing "efficacy" with "suitability" in subdivision e of 33.1-20-02.1-03(2) and will make the change.

2.7 Comment: *The following changes were suggested in an underline/strikethrough format document: "NDAC 33.1-20-2.1-03(5). Coverage under a general permit*

a. A person authorized to operate under a general permit if one of the following occurs:

2) Registration required for coverage. The applicable general permit requires persons to register with the department prior to operating under the general permit. ***Within 24 hours following receipt of the registration,*** *the department will notify the person that has registered that they may begin to operate in accordance with the terms of the general permit;*

Targa believes timing for receiving approval from the ND DEQ for this type of registration under a general permit is critical for the success of treatment of waste to beneficial reuse; therefore, a 24-hour period for receipt from the agency is necessary to ensure timely completion of the treatment process." (Targa)

2.7 Response: The proposed rule regarding general permits is intended to be broad in order to cover a variety of activities. The Department does not want to limit, within the rule, a timeframe as each activity is different and will have different requirements. The Department understands that treatment of waste through land treatment may require a faster turnaround time than other activities and each general permit will specify the Department's turnaround time. The Department will retain the original proposed language.

2.8 Comment: *"b. Except as provided in subdivision c, as a condition of each general permit, the department may require persons seeking coverage under the general permit to register or apply with the department within a specified time period. New operations not in existence before the issuance of a general permit must register prior to conducting the activity authorized by the general permit.*

Targa believes that this provision appears to be duplicative in substance to 5.a.(2) and overly burdensome on staff. Therefore, Targa suggests the registration be removed." (Targa)

2.8 Response: There is some overlap in content of NDAC Subdivisions 33.1-20-02.1-03(5)(b) and 33.1-20-02.1-03-5(a)(2), however subdivision 5.b. does clarify that new operations must register before conducting any activities authorized by a general permit. The Department will retain the subdivision.

2.9 Comment: *"c. For general permits where the solid waste is to be used as a construction material, antiskid material or otherwise placed directly onto the land, as a condition of the general permit, the department may require persons who intend to operate under the general permit to apply for and obtain authorization from the department prior to conducting the activity authorized by the general permit. The department may impose the requirement for prior authorization on other general permits for beneficial use, processing or treatment activities if the department determines that the condition is necessary to prevent harm or a threat of harm to the health and safety of people or the environment.*

Targa believes that this provision appears to be duplicative in substance to 5.a.(2) and overly burdensome on staff. Therefore, Targa suggests the registration be removed." (Targa)

2.9 Response: Similar to the previous comment and response for 2.8, there is some overlap in content of NDAC Subdivision 33.1-20-02.1-03(5)(c) and NDAC Paragraph 33.1-20-02.1-03(5)(a)(3), however subdivision 5.c. clarifies which types of activities must apply for approval to operate under a general permit and that an application must be approved by the Department before conducting any activities authorized by a general permit. The Department will retain the subdivision.

3. Comments related to Chapter 33.1-20-04.1. General Performance Standards

3.1 Comment: "*The Department should explicitly exclude surface impoundments from proposed subsection f of Section 33.1-20-04.1-09 "General disposal standards."" (Basin Electric, Lignite Energy Council, Montana-Dakota Utilities, Otter Tail Power)*

3.1 Response: This provision was not intended to apply to surface impoundments. The Department will clarify NDAC 33.1-20-04.1-09(3)(f) by inserting "excluding composite liners in surface impoundments" at the end of the first sentence as shown below:

> f. No composite liner may be exposed to freezing more than one winter season**, excluding composite liners in surface impoundments**. At least three feet of solid waste or other material approved by the department must be placed above the upper drainage layer on all lined areas by December first. No disposal may take place after December first in areas which have not met this requirement without first testing the composite liner's integrity and receiving approval from the department.

3.2 Comment: *"The new language prohibiting exterior slopes of any swales or drainage structures from exceeding a twenty-five percent slope is inconsistent with the existing twenty-five percent slope allowance for solid waste management unit." (Basin Electric, Montana-Dakota Utilities, Otter Tail Power)*

3.2 Response: NDAC Paragraph 33.1-20-04.1-09(4)(b)(3), regarding final closure criteria, has always stated "In no instance may slopes exceed twenty-five percent,". The criteria does not

say that the final average slope cannot exceed twenty-five percent, which is what it would have to be if the outside slopes of swales or drainage structures exceed twenty-five percent. The meaning of "in no instance" means just what it says, including any portion of the final slope. The phrase "including exterior slope of any swales or drainage structures" was added to clarify this. The Department has not explicitly approved swales or drainage structures to exceed twenty-five percent, though we do know that some facilities have been constructed in this manner. In some cases, the slope detail of the swales was not clearly identified in the design plans. During the Department's review of the as-built drawings in the construction documentation report, the Department noted swales with slopes greater than twenty-five percent. Facilities that have been closed in this manner were not required to reconstruct, however the Department wants to clarify this issue for the future. The phrase "including exterior slope of any swales or drainage structures" will be retained.

4. **Comments related to the new CCR permit program in Chapter 33.1-20-08.**

4.1 Comment: *"Does the past, current and future use of CCR for solidification of oil and gas waste qualify as "beneficial use" under the new regulations? Otherwise I would interpret, that a permit application, meeting the requirements of 33.1-20-08, will be required for any facility that received CCR in E&P waste after October 15, 2015. Will any testing and demonstration be required for future use?" (C. Kreger)*

4.1 Response: Yes, the use of CCR for solidification of oil and gas waste does qualify as beneficial use. A permit is typically not required for any facility that has received or will receive CCR for beneficial use purposes. CCR from a specific source should be tested to demonstrate that it is effective for use as a solidification material before being used for that purpose.

4.2a Comment: "*Consideration should be made to incorporating the CCR Rule by reference." (Basin Electric, Lignite Energy Council, Montana-Dakota Utilities, Otter Tail Power)*

4.2b Comment: *"We support the flexibilities provided in the proposal…….If the proposed flexibilities are retained, we support the state proceeding with incorporating CCR provisions in the state administrative code rather than incorporating the federal requirements by reference…….If the flexibilities are not retained in the final code, we support incorporating the federal requirements by reference." (Great River Energy)*

4.2a and 4.2b Response: The Department's Solid Waste Program has not historically adopted federal rules by reference because that does not allow for state specific flexibilities. In previous discussions with North Dakota CCR facilities, the Department heard concerns that incorporation by reference of the federal CCR rules would not allow the Department to incorporate state specific flexibilities.

4.3 Comment: *"Flexibilities that have been proposed but not finalized in the federal regulations- need data and a record in order to incorporate these into the State regulations." (EPA)*

4.3 Response: The proposed areas of flexibility which differ from the federal CCR rule came primarily from the proposed Phase One amendments to the federal CCR rule which were published in the federal register on March 15, 2018, but were not finalized in the July 30, 2018 Phase One, Part One rule. The Department plans to provide as much data, justification, and validation as is available to Environmental Protection Agency (EPA) to support the proposed flexibilities. The Department understands that if the proposed flexibilities are not approved by

EPA that North Dakota will only receive partial approval for the CCR Permitting Program. However, EPA is currently in the process of proposing a number of additional revisions and flexibilities to the CCR regulations, the last in a set of four planned actions to implement the Water Infrastructure Improvements for the Nation (WIIN) Act, respond to petitions, address litigation and apply lessons learned to ensure smoother implementation of the regulations. The Department expects to have at least one more round of changes to the state CCR Permitting Program rules to address any 2020 changes to the federal program, so if any of the currently proposed flexibilities are not approved, they can be modified if necessary at that time. The currently proposed flexibilities are summarized below, with the Department's response for each one:

- Slope protection.
- 12-inch vegetation height on dikes and surrounding areas.
    - The 6-inch maximum height of vegetation on dikes was vacated and the finalized federal rule did not specify a maximum height, therefore the Department will change the proposed 12-inch maximum vegetation height requirement to a height that will maintain the native grass cover.

      NDAC Item 33.1-20-08-04-3(a)(4)(b)[5] will be changed to the following:

      [5] The vegetative height of grassy and woody vegetation must be maintained at a height that will not be detrimental to the native grass cover.

      And NDAC Subparagraph 33.1-20-08-04(3)(d)(1)(d) will be changed to the following:

      (d) Vegetated slopes of dikes and surrounding areas must be maintained at a height above the slope of the dike that will not be detrimental to the native grass cover, except for slopes which have an alternate form or forms of slope protection;

- Corrective action for deficiency or release at CCR surface impoundments or CCR landfills.
- Department determination that a remediation of a release of a constituent listed in Appendix II may not be necessary.
- Department determination to specify an alternative length of time to demonstrate that concentrations of constituents listed in Appendix II have not exceeded the groundwater protection standards.
- Corrective action procedures to remedy eligible non-groundwater releases.
- Use of CCR in design and construction of final cover system.
- No alternative capacity for non-CCR waste streams.
- Alternate postclosure period.
- Recordkeeping and Reporting:
    - Notification of discovery of a non-groundwater release
    - Report documenting the completion of the corrective action
    - Demonstration including long-term performance data supporting the reduced postclosure care period

There are several additional flexibilities included that were not in the proposed Phase One amendments. These include:

- Allowance for risk-based corrective action levels. Risk-based corrective action is widely implemented in many of the RCRA programs and is currently allowed and in use in the North Dakota Hazardous Waste Program and North Dakota Leaking Underground Storage Tank Program.
- Allowance for an alternative liner for existing impoundments that is demonstrated and certified, using recognized and generally accepted good engineering practices, to have a total flux rate through the liner equal to or less than the flux rate through a liner that meets the requirements of the prescriptive impoundment liner.
- Allowance for alternative final covers with an average long-term percolation rate less than 0.2 inches per year (currently in NDAC Subsection 33.1-20-07.1-02(2)). Alternative final landfill covers, primarily evapotranspiration (ET) covers are increasingly being used at waste disposal sites. These include municipal solid waste landfills, hazardous waste landfills, and special waste landfills when equivalent performance to conventional final cover systems can be demonstrated. A demonstration project was completed in North Dakota, showing that alternative final covers can be successfully implemented in our semi-arid to moderate rainfall climate. To add further protection, a maximum percolation rate of 0.2 inches/year (5 mm/year) was included in the criteria for alternative final covers. To put that in perspective, average percolation rates for prescriptive MSW covers range from 1.5 mm/year in arid desert areas to more than 50 mm/year in humid areas (Albright, et al, 2004.) A copy of the demonstration project final report is included with the State CCR Rule approval package.
- Allowance for inspection schedules to be at least once every calendar week or at least once every calendar month, instead of "not to exceed seven days" or "not to exceed thirty days."

4.4 Comment: *"The dates that required reports or activities are due are very different from the federal regulations, especially for actions/dates that have already passed (in 2017 or 2018, for example). These should be justified or revised." (EPA)*

4.4 Response: It is not possible to promulgate state rules that have requirements that must have been completed before the state rule becomes effective. The proposed rule requires that CCR facilities must apply for a state permit under the new rules within twenty-four months of the effective date of the rule. All of the reports, certifications, demonstrations, and activities must be included in the state permit application. CCR facilities must still comply with the self-implementing aspects of the federal CCR program prior to obtaining a state permit.

4.5 Comment: *"Several regulations appear to be missing recordkeeping and public notification requirements. This should be justified and clarified or revised." (EPA)*

4.5 Response: Recordkeeping, notification and public information websites requirements are scattered throughout the federal CCR rule. To be as concise and clear as possible, the Department consolidated all of these requirements that are in the federal rule into Section 33.1-20-08-08, Recordkeeping, Notification, and Posting of Information to the Internet.

4.6a Comment: *"Several regulations appear to be missing approval by a professional engineer or the State director. This should be justified or revised." (EPA)*

4.6b Comment: *"33.1-20-08-05. Operating criteria Missing certification by a professional engineer or by the State for fugitive dust control plan and run-on run-off control plan. That certification is missing in many areas throughout the regulations and should be added in." (EPA)*

4.6a and 4.6b Response: Demonstrations and plans that must be submitted within 24 months of the effective date of the rule as part of the permit application, but not required to be certified by a professional engineer or other qualified environmental professional, are considered to be approved by the Department (state director) when the permit is finalized and approved after the public comment period. By being included as part of the permit application package, these demonstrations and plans are open for public review and comment during the permit public comment period.

4.7 Comment: *Inspection timeframes are written differently. Is that to align with other state regulations? "at least once each calendar week" instead of "not exceeding seven days" could be the same. Inspection effective date should be the effective date of the regulations, not 30 days after the effective date to be as protective as the federal regulations. This is especially true because facilities should be conducting inspections already. Also, the timeframe for conducting the initial inspection is not later than one year after the effective date of the chapter, but that is inconsistent with the federal regulations." (EPA)*

4.7 Response: It is not the intent of the Department to allow facilities to not do "weekly" or "monthly" inspections. The intent is to allow facilities some flexibility to conduct inspections on an alternate day in case of inclement weather or holidays without being out of compliance, with the expectation that they then return to their routine weekly or monthly inspection schedule.

In regard to the comment that the inspection effective date should be the effective date of the regulations, the Department will clarify that the first weekly inspection must be conducted within one week of the effective date of the rule and that the first monthly inspection must be conducted within one month of the effective date of the rule. NDAC Subparagraph 33.1-20-08-05(4)(a)(2)(a) will be changed to read as follows:

> (a) Existing CCR surface impoundments. The owner or operator of the CCR unit must initiate the inspections by a qualified person no later than one week after [effective date of this chapter] for weekly inspections and one month after [effective date of this chapter] for monthly inspections.

4.8 Comment: *"There are some references to RCRA and other federal statutes- is this allowed under the State regulations? Some States don't allow references to federal statutes for applicability." (EPA)*

4.8 Response: North Dakota administrative code does allow references to federal statutes.

4.9 Comment: *"33.1-20-08- for all permit application dates. Requires demonstration within 24 months of the effective date of the rule – seems like a really long time. What is the rationale for this timeframe?" (EPA)*

4.9 Response: The proposed rule requires that CCR facilities must apply for a state permit under the new rules within twenty-four months of the effective date of the rule. All of the reports, certifications, demonstrations, and activities must be included in the state permit application. CCR facilities must still comply with the self-implementing aspects of the federal CCR program prior to obtaining a state permit. The allowed twenty-four-month timeframe will give facilities ample time to compile their application package for a state permit. The Department anticipates that applications from the facilities will be submitted at various times during the twenty-four-

month period, which will give the Solid Waste Program staff more flexibility in reviewing the applications.

4.10 Comment: "*A phased approach to facility permit renewal applications and clarification on fee assessment should be considered." (Basin Electric, Lignite Energy Council, Montana-Dakota Utilities, Otter Tail Power)*

4.10 Response: The Department proposed that all CCR facilities must apply for a state permit under the new rules within twenty-four months of the effective date of the rule because it allows facilities ample time to compile their application package for a state permit. It also allows the Solid Waste Program staff more flexibility in reviewing the applications as the Department anticipates that application from the facilities will be submitted at various times during the twenty-four-month period. As seen in Comment 4.9, EPA had concerns regarding how long the Department was giving existing CCR facilities to apply for a state permit under the new rules.

All CCR facilities will be required to submit permit applications and for existing CCR facilities, they will be considered new permits due to the new CCR permits program. The permit applications will include all of the reports, certifications, demonstrations, and activities and will be more comprehensive than compared to permit modifications or permit renewals. Any permit application for CCR facilities, whether it is for a new permit, major modification or renewal of a permit, requires a permit application fee as stated in NDAC Subsection 33.1-20-3.1-02(3) and NDAC Chapter 33.1-20-15.

4.11 Comment: *"33.1-20-01.1-14. Variances. Are any types of variances allowed for CCR units?" (EPA)*

4.11 Response: The Department understands that EPA is required to determine whether state CCR program provisions are as protective as the federal CCR program provisions. Therefore the Department will clarify this for CCR facilities by adding the following sentence to the end of NDAC Section 33.1-20-01.1-14:

> The department will not approve variances for CCR facilities without concurrence from the United States environmental protection agency.

4.12 Comment: *"33.1-20-02.1-06. Permit modification, suspension, or revocation. Where are major and minor modifications defined? What public participation is required for major or minor modifications? When the CCR units come in for CCR permit, will they be modified permits or considered new permits? What is the life of the permit? What is the public participation required when permits are renewed?" (EPA)*

4.12 Response: NDAC Subsection 33.1-20-02.1-07(3) contains the lists of minor permit modifications and no public participation is required due to the changes being minor in nature. NDAC Subsection 33.1-20-02.1-07(4) contains the list of major permit modifications and public participation is required. Public participation includes a 30-day public comment period and an option to hold a public hearing as stated in NDAC Subsection 33.1-20-03.1-03(3).

A permit application for CCR units at existing facilities will be considered new permits because the adoption of the federal CCR rules is a new program. The existing permit numbers will be retained for ease of preserving historical information regarding the facility. Permits for solid waste management facilities may be issued for a maximum of ten years from the date of issuance as stated in NDCC Section 23.1-08-09.

New permits and permit renewals for solid waste management facilities require a 30-day public comment period and the option to hold a public hearing as stated in NDAC Subsection 33.1-20-03.1-03(3).

4.13 Comment: *33.1-20-08-03 Location Restrictions:*

- *Requires both general standards and the CCR specific:*
  - *General - 33.1-20-01.4-01(2): Covers ESA, floodplain and surface waters*
  - *CCR - 33.1-20-08 Seems to cover all CCR requirements plus some.*
- *Why is the date to submit location restrictions 48 months after the effective date of the rule? The facilities should have posted location restrictions by October 17, 2018, so this date doesn't make sense." (EPA)*

4.13 Response: CCR facilities must comply with the general location requirements for all solid waste facilities (citation in comment should be 33.1-20-04.1-01(2))and with the location requirements specific to CCR facilities, as found in Section 33.1-20-08-03. The date required to submit a demonstration showing compliance with location restrictions to obtain a state permit is within twenty-four months of the effective date of the rule, not 48 months.

4.14 Comment: "*33.1-20-08-04 Design Criteria*

- *(2)a.(1)(a) The surface impoundment liner still includes the clay liner, but that provision was vacated by the USWAG decision How is the State handling the USWAG decision in the regulations?*
- *(3) Structural integrity looks the same- will this be certified by a professional engineer or approved by the State?*
- *(4) Vegetative cover standards. Included a performance standard and height restrictions similar to other state requirements for vegetative cover. This could be as protective as the federal regulations, but the State may need to provide more information to defend its position as this has not been finalized federally." (EPA)*

4.14 Response: The Department will remove the allowance for a clay-only liner in NDAC Subparagraph 33.1-20-08-04(2)(a)(1)(a) and renumber the following two subparagraphs accordingly. In addition, NDAC Subdivision 33.1-20-08-07(2)(a) will be changed to read as follows:

a. The owner or operator of an existing unlined CCR surface impoundment, as determined under subdivision a of subsection 2 of section 33.1-20-08-04, is subject to the requirements of paragraph 1.

(1) Except as provided by paragraph 3, an owner or operator of an existing unlined CCR surface impoundment must cease placing CCR and non-CCR wastestreams into the unlined CCR surface impoundment and either retrofit or close the CCR unit in accordance with the requirements of subsection 3.

The hazard potential classification assessments and the initial and periodic structural stability assessments are required to be certified by a professional engineer. The emergency action plan must be approved by the Department. For the comment about height restrictions for vegetative cover, see the previous response, 4.3 , regarding vegetative height in the section that discusses requested flexibilities.

4.15 Comment: *"Consider removal of language subject to vacatur." (Basin Electric, Lignite Energy Council, Montana-Dakota Utilities, Otter Tail Power)*

4.15 Response: See the previous comment and response 4.14, regarding vacatur of clay-lined impoundments.

4.16 Comment: *"33.1-20-08-06. Groundwater monitoring and corrective action.*

- *Why is the Annual groundwater monitoring and corrective action report date due in April of each year rather than January 31?*
- *USWAG decision implementation issue about unlined CCR surface impoundments must close regardless if the unit is leaking.*
- *Date of groundwater monitoring samples to be collected doesn't make sense to be no later than 6 months after the effective date, since the facilities should have already collected the samples under the federal rule*
- *Selection of remedy section mentions risk-based alternative…will need to discuss; no other information presented" (EPA)*

4.16 Response:

- The Department will change the groundwater monitoring and corrective action report preparation date in NDAC Subdivision 33.1-20-08-06(1)(e) from April first to January thirty-first and the submittal date to March first.
- The Department will remove NDAC Paragraph 33.1-20-08-06(2)(d)(2) that allows unlined surface impoundments in a multiunit groundwater monitoring system to remain open until detection of a statistically significant increase above a groundwater standard.
- The Department believes that all facilities have already completed the collection of background groundwater samples as part of their self-implementation of the federal CCR requirements. However, the requirement to collect background samples within six months of the effective date of the rule was included in the event that any CCR facility was not previously in compliance with that requirement.
- A risk-based corrective action concentration in NDAC Paragraph 33.1-20-08-06(7)(b)(2) was included by the Department in the selection of remedy for groundwater exceedances as a flexibility that is as protective of human health as the prescriptive groundwater standards. EPA has developed guidance for the use of risk-based corrective action at Leaking Underground Storage Tank sites and at Superfund sites. The Department believes that if risk-based corrective action is appropriate for LUST and Superfund sites, then it should also be appropriate for CCR corrective action, which has not been found to be a hazardous waste. If EPA determines that risk-based corrective action is not appropriate for CCR corrective action, then it will subsequently be removed as an alternative in NDAC Paragraph 33.1-20-08-06(7)(b)(2).

4.17 Comment: "*33.1-20-08-08. Recordkeeping, Notification, and Posting of Information to the Internet*

- *33.1-20-04.1-04(4): Annual GWM report- Not sure where everything else is though?*
- *There are some notifications to the state or submission to the operating record but there are many areas where recordkeeping requirements are missing.*
- *Publicly accessible website requirements? Will that be everything that is required by 257.107 and that is put in the facility operating record?" (EPA)*

4.18 Response: Recordkeeping, notification and public information website requirements are scattered throughout the federal CCR rule. To be as concise and clear as possible, the Department consolidated all of these requirements that are in the federal rule into Section 33.1-

20-08-08, Recordkeeping, Notification, and Posting of Information to the Internet. All of the federal requirements for posting of records to a publicly accessible website are located in subsection 33.1-20-08-08(3).

4.19 Comment: *"Guideline 20- CLOSURE AND POSTCLOSURE CARE COST ESTIMATES FOR PUBLICLY AND PRIVATELY OWNED LANDFILLS. Cost cannot be considered for the closure of CCR units, per the RCRA statutory standard" (EPA)*

4.19 Response: The cost estimates listed in the Department's Guideline 20 are required in order to determine the amount of financial assurance a facility must have for closure and post-closure. The cost estimates are not used as a consideration to determine whether a facility should close and will not be used as a consideration to determine if a CCR unit should close. The federal CCR rule does not include financial assurance provisions. North Dakota's requirement for certain solid waste management facilities, such as CCR facilities, to have financial assurance is more stringent than the federal CCR rule.

The guidelines included in the package to EPA are used to demonstrate the department's comprehensive solid waste management plan.

4.20 Comment: "*The Department should clarify the applicability provisions in 33.1-20-08-06 through 33.1-20-08-08 to avoid expanding the proposed requirements to unit which closed prior to October 19, 2015." (Basin Electric, Lignite Energy Council, Montana-Dakota Utilities, Otter Tail Power)*

4.20 Response: Subsection 2 of NDAC Section 33.1-20-08-02, Applicability, specifically states that "This chapter does not apply to CCR landfills that have ceased receiving CCR prior to October 19, 2015." However, for the purpose of clarity, the Department will change the word "All" in Section 33.1-20-08-06(1)(a) to "Existing". Units which ceased receiving CCR and commenced or completed closure before October 19, 2015 had to have ceased receiving CCR, are not subject to the requirements of Sections 33.1-20-08-07 and 33.1-20-08-08 as stated in NDAC Subsection 33.1-20-08-02(2).

4.21 Comment: *"The rule should provide the flexibility to use 30 mil geomembrane liner." (Lignite Energy Council)*

4.21 Response: The Department is not aware of any CCR facilities currently using 30 mil geomembrane liner and none of the CCR facilities have asked to use 30-mil geomembrane liner. If a CCR facility wants to use a 30-mil geomembrane liner, they would have the option to obtain approval for an alternative liner by demonstrating that they meet the requirements for alternative liners.

4.22 Comment: *"The Department should clarify proposed subsection of 33.1-20-08-06 (4)(b) "Detection monitoring program" to prevent unnecessary and redundant sampling efforts." (Basin Electric, Lignite Energy Council, Montana-Dakota Utilities, Otter Tail Power)*

4.22 Response: The Department believes that all existing facilities are already in compliance with the background sampling requirements in this section but has not verified it for all facilities. The Department will clarify NDAC Subdivision 33.1-20-08-06(4)(b) by inserting "if not already completed" at the end of the subdivision.

4.23 Comment: *"Clarification is needed regarding the term qualified person." (Lignite Energy Council, Montana-Dakota Utilities, Otter Tail Power)*

4.23 Response: The term "qualified person" is used in the federal CCR regulations as a person who is qualified to conduct periodic inspections of CCR units, but is not necessarily qualified to certify various demonstrations, reports, and notifications in the manner required of a qualified environmental professional or a qualified professional engineer. It was inadvertently not included in the state rule. This definition is only applicable to CCR units and will be inserted in Section 33.1-20-08-01 as follows, with the remaining definitions renumbered accordingly:

23. "Qualified person" means a person or persons trained to recognize specific appearances of structural weakness and other conditions which are disrupting or have the potential to disrupt the operation or safety of the CCR unit by visual observation and, if applicable, to monitor instrumentation.

4.24 Comment: *"33.1-20-08-04.3.d(1)e.[2].c indicates that the capacity of the spillways from low hazard impoundments must be designed to accommodate the discharge from a 1000 year flood. The federal regulation requires the spillways for low hazard impoundments to be designed for 100-year floods. We request that this provision be made consistent with the Federal requirements" (Great River Energy)*

4.24 Response: This was a clerical error and spillway discharge design for low hazard impoundments will be changed to accommodate "100-year" floods.

4.25 Comment: *"33.1-20-08-06.5.H(2)(a) indicates that the abbreviation for micrograms per liter is (mg/L). We believe this is a typographical error and the abbreviation should instead be µg/L." (Great River Energy)*

4.25 Response: This was a clerical error and the abbreviation for micrograms per liter will be changed to "ug/L".

4.26 Comment: *EPA noted that North Dakota's proposed CCR rules needed to be doublechecked to ensure that all of the definitions in the federal CCR rules were incorporated.*

4.26 Response: The Department reviewed the definitions in the federal CCR rules and found that four definitions were inadvertently not included in North Dakota's proposed CCR rules. The definitions were for the terms "Height", "Maximum horizontal acceleration in lithified earth material", "Seismic factor of safety", and "Seismic impact zone". The four definitions will be added to NDAC Section 33.1-20-08-01 as follows, with the remaining definitions renumbered accordingly:

13. "Height" means the vertical measurement from the downstream toe of the CCR surface impoundment at its lowest point to the lowest elevation of the crest of the CCR surface impoundment.

16. "Maximum horizontal acceleration in lithified earth material" means the maximum expected horizontal acceleration at the ground surface as depicted on a seismic hazard map, with a 98% or greater probability that the acceleration will not be exceeded in 50 years, or the maximum expected horizontal acceleration based on a site-specific seismic risk assessment.

25. "Seismic factor of safety" means the factor of safety (safety factor) determined using analysis under earthquake conditions using the peak ground acceleration for a seismic event with a 2% probability of exceedance in 50 years, equivalent to a return period of approximately 2,500 years, based on the U.S. Geological Survey (USGS) seismic hazard maps for seismic events with this return period for the region where the CCR surface impoundment is located.

26. "Seismic impact zone" means an area having a 2% or greater probability that the maximum expected horizontal acceleration, expressed as a percentage of the earth's gravitational pull (g), will exceed 0.10 g in 50 years.

5. Comments related to Chapter 33.1-20-14. Financial Assurance Requirements

5.1 Comment: "*On page 170, under 33.1-20-14-03, there appears to be inconsistencies between items 2 and 3. Both paragraphs allow the use of more than 1 mechanism to fulfill the financial assurance requirement. Item 2 indicates satisfy the FA requirements, "…by using a trust fund, surety bond, letter of credit, insurance, financial test, or corporate guarantee." Item 3 states, "requirement of this section," but then limits the mechanisms to, "trust funds, surety bonds, letters of credit and insurance." It excludes the use of financial test or corporate guarantees. Perhaps they inadvertently omitted the mechanisms, "financial test" and "corporate guarantee"?" (J. Ketchum)*

5.1 Response: Financial test and corporate guarantee were left out of section 3 because by demonstrating financial strength a facility would not be required to provide other assurances. If the facility does not have the financial capability to meet a financial test for its environmental obligations as a whole, the portion of the cost estimate covered by the financial test places the Department at a higher level of risk of having to use public funds for performing closure, postclosure, or corrective action activities in comparison to the other available financial mechanisms.

5.2 Comment: *"On page 177, - Release of financial assurance for completion of post-closure care – will this be certified annually? Will we be able to decrease total outstanding financial assurance for post-closure as we successfully complete the annual care? In other words, if we successfully post-closed, for example, 10 of the 30 years, then the FA mechanism should be based on cost estimates to post-close for the remaining 20 years, not 30 years." (J. Ketchum)*

5.2 Response: The post closure care period for the solid waste management unit begins following the Department's approval of the closure certification report regarding the final closure of the unit and continues for 30 years after that date and financial assurance is required for 30 years under NDAC Subdivision 33.1-20-04.1-09(5)(b). The postclosure care period may be extended or shortened at the discretion of the Department, based on whether an extended period is necessary or a reduced period is sufficient, to protect human health and the environment. This would require a permit modification.

During the post-closure period, if the owner or operator can demonstrate that a cost estimate for postclosure care exceeds the maximum costs of postclosure during the remaining postclosure period, the Department may approve a decrease in the amount assured by the mechanism under NDAC Subdivision 33.1-20-14-02(1)(c). Potential effects of inflation as well as requirements specified in the postclosure plan will be major considerations in evaluating requests for decreases in the amounts of funds assured.

6. Comments related to Chapter 33.1-20-15. Solid Waste Management Fees

6.1a Comment: *"…I submitted a set of written comments that you can take into play. I won't repeat those, but I do want to add that I think it would be advantageous to eliminate the requirement for an annual fee for the waste haulers under the regulation cited for waste hauler licenses. Since you are obtaining a significantly higher fee for the two year price than you're currently charging for waste haulers…" (Public Hearing – C. Kreger)*

6.1b Comment: "*Clarification is needed regarding the conflicting language concerning annual permit fees for a waste transporter." (Lignite Energy Council)*

6.1a and 6.1b Response: The application fee for waste transporters was changed in Section 33.1-20-15-01 from $75 to $200. The Department had intended to eliminate the annual fee of $25 for waste transporters in Section 33.1-20-15-02 to offset the increase in the application fee, however that was not included in the published draft rules due to a clerical error. The Department will eliminate the annual waste transporter fee as originally intended. It should be noted that the waste transporter application fee will cover a five-year permit, not a two-year permit, as stated in the comment.

7. Comments related to Chapter 33.1-20-16. Certification of Operators

7.1 Comment: *"The addition of language to require "municipal solid waste ash landfills, and special waste landfills which accept primarily oilfield special waste or TENORM waste in North Dakota are required to have at least one certified operator onsite at all times during operation of the facility" found in Chapter 33.1-20-16 is not authorized by North Dakota Solid Waste Law 23.1-08-15. In Chapter 23, the aggregate of solid waste facilities is described as "solid waste disposal facilities". In 23.1-08-15 The language is modified to specifically state "municipal waste landfill and a municipal waste incinerator". This indicates to me that the legislature intended only to require the presence of a "Certified Operator" at these specific facilities. Suggest removal of this language and a modification of Chapter 23 if the Department wishes to pursue this regulation." (C. Kreger)*

7.1 Response: NDCC Section 23.1-08-15 requires municipal waste landfills and municipal waste incinerators to have a certified operator on duty during operation; however, it does not preclude the department from requiring certified operators at other types of solid waste facilities. At the time Chapter 23.1-08 was written and enacted by the legislature, there were no landfills that received significant quantities of oilfield special waste, so that was not a concern at that time.

Paragraphs 8 and 9 of NDCC Section 23.1-08-03, Powers and Duties of the Department, states the following:

> 8. Adopt and enforce rules governing solid waste management to conserve the air, water, and land resources of the state; protect the public health; prevent environmental pollution and public nuisances; and enable the department to administer this chapter, the adopted solid waste management plan, and delegated federal programs.
>
> 9. Establish procedures for permits governing the design, construction, operation, and closure of solid waste management facilities and systems.

The legislature clearly intended that the Department has the authority to adopt rules with specific requirements for the operation of solid waste facilities. The public has commented at hearings for new oilfield special waste landfills that they are concerned that the facilities' staff do not have adequate training or experience to operate the landfill in a manner that is protective of human health and the environment. This requirement addresses that concern. In addition, all of the oilfield special waste landfills have voluntarily sent operators to the Department's landfill operator certification training course because they feel that it is good training for their staff and good to show the public that their staff is trained on proper landfill operation.

7.2 Comment: *"33.1-20-16-03 implies that different certifications will be required based on the facility. Does that mean individuals may need multiple certifications? Suggest a hierarchy of certification that allows one certification to apply to all facilities if the authority argument above fails." (C. Kreger)*

7.2 Response: There are some similarities and there are some significant differences in the operation of a special waste landfill and a municipal waste landfill. The Department currently plans to have two different landfill operator training courses.

8. Comments related to Chapter 33.1-20-17. Solid Waste Management Planning

8.1 Comment: *"33.1-20-17 changes current regulation to require that a "person" or presumably any private entity develop a "Solid Waste Management Plan". I do not see any authority in Chapter 23 of solid waste law in North Dakota that supports this requirement. Is there a different section of the Century Code that addresses this?" (C. Kreger)*

8.1 Response: Paragraph 7 of NDCC Section 23.1-08-03, Powers and Duties of the Department, states the following:

> 7. Require any person within the state to submit for review and approval a solid waste management plan to show that solid wastes will be disposed of in accordance with the provisions of this chapter.

Chapter 33.1-20-17, District Solid Waste Management Plans, has been updated because there are no longer any solid waste management districts in the state. The establishment of solid waste management districts was repealed by the state legislature in 1995. This chapter is being updated for general solid waste management planning purposes.

9. Summary and Conclusions

The Department did not receive any substantive documentation to not adopt the proposed rules and will change the proposed rules based on comments received as indicated in the above responses.