

# Minnesota Department of Natural Resources Memorandum in Support of Proposed Gas Production Rule

May, 2026

## Table of Contents

General Statement of Need.....	3
Regulatory Analysis .....	4
General Statement of Reasonableness.....	7
6124.0100 DEFINITIONS.....	7
6124.0200 PURPOSE AND POLICY .....	10
6124.0300 SCOPE .....	10
6124.1000 PERMIT APPLICATIONS .....	11
6124.1100 FINANCIAL ASSURANCE .....	12
6124.1200 ANNUAL REPORT .....	13
6124.1300 REQUEST FOR RELEASE FROM PERMIT .....	14
6124.1400 TEMPORARY SHUTDOWN.....	15
6124.1500 PERMANENT SHUTDOWN .....	15
6124.2000 SITING.....	15
6124.2200 SITE PREPARATION AND OPERATION .....	16
6124.2300 RECLAMATION .....	17
6124.2400 CORRECTIVE ACTION .....	17
6124.3000 PROCEDURES FOR OBTAINING A GAS RESOURCE DEVELOPMENT PERMIT.....	18
6124.3200 AMENDMENT OF GAS RESOURCE DEVELOPMENT PERMIT .....	20
6124.3300 MODIFICATION OF GAS RESOURCE DEVELOPMENT PERMIT .....	21
6124.3400 ORDER TO IMPLEMENT CONTINGENCY RECLAMATION PLAN DURING A TEMPORARY SHUTDOWN .....	21
6124.3500 CANCELLATION OF GAS RESOURCE DEVELOPMENT PERMIT .....	22
6124.3600 SUSPENSION OF GAS PRODUCTION .....	22
6124.3700 REVOCATION OF GAS RESOURCE DEVELOPMENT PERMIT .....	23
6124.3800 ASSIGNMENT.....	24
6124.3900 PUBLICATION .....	24
6124.4000 INSPECTION OF GAS RESOURCE DEVELOPMENT LOCATIONS .....	25
6124.5200 SPACING.....	25

## General Statement of Need

In February 2024, drilling confirmed an accidental discovery of helium gas that had taken place in the northeastern part of the state in 2011.<sup>1</sup> The helium exploration company that drilled that boring suggested that they might be able to start commercial production of not just helium, but also carbon dioxide, within twelve to eighteen months, of their February 2024 drill program.<sup>2</sup>

At the same time, exploration companies had identified drilling targets for geologic hydrogen in Kansas and Nebraska, along a geologic formation known as the Midcontinent Rift System that extends northwards into Minnesota, from the Iowa border up to Lake Superior.<sup>3</sup> The United States Geological Survey had also identified the Midcontinent Rift System as one of the top two prospective regions for geologic hydrogen production in the United States.<sup>4</sup>

Given the historical absence of gas production in the state, Minnesota lacked a framework that would regulate these emerging industries, properly protect natural resources and human health, ensure the conservation of the state's natural resources, and develop a fair royalty structure on state-managed lands. The Minnesota Legislature acted on the need for such a framework in 2024 when it placed a prohibition on oil and gas production in the state without a permit from the Department of Natural Resources (DNR) and granted the DNR and other state agencies expedited rulemaking authority to establish rules for that regulatory framework.<sup>5</sup> Under section 93.514, the DNR must use the expedited rulemaking procedure in section 14.389 to "... adopt or amend rules pertaining to the conversion of an exploratory boring to a production well, pooling, spacing, unitization, well abandonment, siting, financial assurance, and reclamation for the production of gas and oil."<sup>6</sup> The DNR must publish notice of intent to adopt those rules by May 22, 2026.<sup>7</sup>

---

<sup>1</sup> Jimmy Lovrien, *Helium confirmed at drill site near Babbitt*, DULUTH NEWS-TRIBUNE, (Feb. 29, 2024, 4:19 PM), <https://www.duluthnewstribune.com/news/local/helium-confirmed-at-drill-site-near-babbitt>; see also News Release, *Pulsar Confirms Helium Encountered in the Jetstream #1 Appraisal Well at the Topaz Project*, PULSAR HELIUM (Feb. 29, 2024), [https://s203.q4cdn.com/212931576/files/doc\\_news/2024/2465e05860be50d6fc7bbee515\\_PLSRNR2024-11\\_Jetstream-Final.pdf](https://s203.q4cdn.com/212931576/files/doc_news/2024/2465e05860be50d6fc7bbee515_PLSRNR2024-11_Jetstream-Final.pdf).

<sup>2</sup> Stephane Foucaud, *Impressive Flow Rate at Appraisal Well Implies \$22M in Revenue*, STREETWISE REPORTS (June 10, 2024), <https://www.streetwisereports.com/article/2024/06/10/impressive-flow-rate-at-appraisal-well-implies-22m-in-revenue.html>.

<sup>3</sup> S. Stein et al., *New Insights into North America's Midcontinent Rift*, EOS (August 4, 2016), <https://eos.org/features/new-insights-into-north-americas-midcontinent-rift>.

<sup>4</sup> UNITED STATES GEOLOGICAL SURVEY, *THE POTENTIAL FOR GEOLOGIC HYDROGEN FOR NEXT-GENERATION ENERGY* (April 13, 2023), <https://www.usgs.gov/news/featured-story/potential-geologic-hydrogen-next-generation-energy>.

<sup>5</sup> Laws of Minnesota 2024, Ch. 116, Art. 3, Secs 21-25; see also Minn. Stat. § 93.513, subd. 1 (2024); Minn. Stat. § 93.514 (2024).

<sup>6</sup> Minn. Stat. § 93.514(a)(4)

<sup>7</sup> Minn. Stat. § 93.514(b)

## Regulatory Analysis

### *Permitting and Reclamation*

Minnesota Statutes 93.513 prohibits the production of gas resources in Minnesota without a permit issued by the commissioner.<sup>8</sup> The purpose of a gas resource development (GRD) permit is to control possible adverse environmental effects of gas resource development, to preserve natural resources, and to encourage the planning of future land utilization, while at the same time promoting the orderly development of gas resources, the encouragement of good gas resource development practices, preventing waste, avoiding the drilling of unnecessary wells, protecting the correlative rights of landowners, and recognizing the beneficial aspects of gas resource development.<sup>9</sup> This permit ensures that a gas resource is developed in a manner that facilitates future land uses. A gas resource development permit also ensures that financial assurance will be available if needed to reclaim the gas resource development project.

Rules are needed to ensure that a GRD permit application includes the information necessary for DNR to determine whether an issued permit supports the purposes identified above. A permit applicant must demonstrate their technical and financial ability to complete the project. The environmental and physical setting of the project must be described to screen for applicable siting and setback restrictions, to identify potential sensitive receptors, and to set baseline conditions that guide reclamation efforts. The application must include: (1) detailed construction, operations, and contingency reclamation plans that the DNR needs to ensure that there is orderly construction and development of GRD facilities; (2) sound operational practices that allow gas resources to be extracted, enriched, and transported to market in ways that control potential adverse effects; and (3) plans that allow the DNR to determine, on an ongoing basis, the full scope of required remediation. Rules on annual reporting requirements are also needed to ensure that the DNR has all of the information needed to determine permit compliance.

Once a permit application is deemed completed, there is need for rules that identify how applications are processed and how and when the public is informed of the proposed project and given the opportunity to provide meaningful input before the commissioner makes a final decision. Once a permit is issued, rules are needed to identify how a GRD permit is amended, modified, suspended, or revoked, as well as how production can temporarily or permanently shut down.

Reclamation rules are needed to promote reclamation of the land, minimize surface disturbances, guide the decommissioning of GRD facilities, and to restore and reclaim GRD

---

<sup>8</sup> Minn. Stat. § 93.513, subd. 1

<sup>9</sup> See *infra* 6124.0200.

locations once they are no longer in use by the permittee. Dust, noise, and light impacts during GRD operations need to be controlled through rulemaking. Rules are needed to provide DNR access to GRD locations to evaluate permit compliance and to empower DNR to order corrective actions to address identified permit violations.

#### *Financial Assurance*

The purpose of financial assurance is to ensure that there is a source of funds to be used by DNR if the permittee is unwilling or unable to either decommission and reclaim their GRD locations, or to undertake and complete corrective actions as required by the commissioner. Financial assurance rules are needed to reduce the risk that any public funds must be expended to correct accidents, reclaim lands, decommission facilities, or seal orphaned gas wells.

Rules are needed to require GRD permit applicants to document an estimate of the costs necessary to implement a contingency reclamation plan, seal gas wells and decommission GRD facilities, and to update that estimate annually. Similar rules are needed to compel the applicant or permittee to estimate the costs of completing corrective actions to address noncompliance with design and operation criteria or to protect human health and the environment.

Once these cost estimates are submitted, rules are needed for their effective evaluation by DNR and to compel an applicant or permittee to provide financial assurance in the amount equal to those cost estimates. Rules that constrain the types of financial instruments used and the qualifications of companies providing those instruments are necessary to ensure that the funds will be available if needed.

#### *Siting and Setbacks*

Decisions on whether natural resource development in a given area should be excluded or restricted—either because development activities would conflict with protected land uses or pose a threat to human health or the environment—are made when a specific development project is proposed, and when the project details can be evaluated during permitting and environmental review. The State of Minnesota has determined that, in specific cases, land use conflict is so significant that the state has a compelling interest to exclude resource development in certain areas even before the impacts of any proposed project can be assessed.<sup>10</sup>

A setback is the minimum horizontal distance between an operation and either a receptor or boundary (rather than restrictions on activity within the boundaries of a defined area).<sup>11</sup>

---

<sup>10</sup> For example, the Boundary Waters Canoe Area Wilderness is protected from mineral development by federal and state law. Boundary Waters Canoe Area Wilderness Act, Public Law 95-495 (Oct. 21, 1978); Minn. Stat. § 84.523.

<sup>11</sup> See, e.g., Minn. R. 6120.2500, subp. 14 (defining setback).

Setbacks usually focus on isolating receptors (*e.g.*, occupied dwellings, day care facilities) or protected lands from nuisance impacts associated with resource development.

Gas projects need specific siting and setbacks that reflect a major difference between metallic mineral resources and gas resources: gases flow, while bedrock mineral resources remain in place. As a result, it is possible to use distant gas wells to extract gas resources from protected areas without those areas experiencing either surface or subsurface impacts. Rules are therefore needed to distinguish between locations where even the passive extraction of gas resources is prohibited by law, and locations where gas resources can be developed so long as there are no surface disturbances but subsurface disturbances by directional or horizontal drilling methods are permitted.

### *Pooling, Spacing, and Unitization*

Nearly every U.S. state that regulates gas production has pooling and spacing regulations that prevent waste and protect the correlative interests of every landowner that sits over a common pool or supply source of gas resources.<sup>12</sup> These laws are needed because gas flows beneath the surface unlike solid mineral resources that do not stray from where they sit. Without pooling and spacing rules the “Rule of Capture” may apply, which basically provides that if you capture gas on your land you can keep it, regardless of whether that gas had been sitting under your property or flowed from your neighbor’s land.<sup>13</sup> In areas where there is a large gas field, unitization laws guide the development of the field by pooling separate production projects.<sup>14</sup>

Pooling regulations in other states guide resource development in situations where an operator is unable to gain complete control of the mineral interests in a spacing unit.<sup>15</sup> In Minnesota, under Minnesota Statutes section 93.513 an operator must control 100% of the extraction area before issuance of a permit.<sup>16</sup> This statutory language currently limits the need for rules on pooling. There is, however, a need for rules that provide DNR with the information needed to identify the size of a proposed project’s extraction area or spacing unit. Once a spacing unit is established, rules are needed to determine whether a permit applicant has secured the right to develop gas resources across 100% of the spacing unit’s area.

---

<sup>12</sup> 1 Summers Oil and Gas, § 5.1 (3<sup>rd</sup> ed. 2025).

<sup>13</sup> Bruce M. Kramer & Owen L. Anderson, *The Rule of Capture – An Oil and Gas Perspective*, in 35 *Env’tl. L.* 899, 900 (2005).

<sup>14</sup> See generally Jacqueline Lang Weaver & David F. Asmus, *Unitizing Oil and Gas Fields Around the World: A Comparative Analysis of National Laws and Private Contracts*, in 28 *Hous. J. Int’l. L.* 3 (2006).

<sup>15</sup> For example, Michigan authorizes the pooling of mineral interests within a drilling unit when not all of the mineral interests owners agree to voluntary pooling under Mich. Admin. Code R. 324.304.

<sup>16</sup> Minn. Stat. § 93.513, subd. 1 (requiring control of the extraction area to receive a permit).

## General Statement of Reasonableness

### 6124.0100 DEFINITIONS

Subpart 1. This subpart explains that definitions in this part apply throughout the chapter.

Subpart 2. This subpart defines “commissioner” as the commissioner of natural resources.

Subpart 3. This subpart defines a “contingency reclamation plan” as a plan identifying reclamation activities that would be needed for a permanent shutdown. It is reasonable to require the permittee to develop a plan for the steps needed to shut down a gas resource development operation. Should a permittee abandon a site, DNR would have to implement the plan.

Subpart 4 defines “corrective action” as an immediate action that must be taken to correct a gas resource development permit violation. It is reasonable to require a permittee to take immediate action to correct a violation to prevent environmental or other impacts from worsening over time.

Subpart 5 defines “correlative rights” as the right of each owner in a common pool to that owner’s equitable share of gas resources. This definition is reasonable because it is consistent with common law definitions and with statutes in other states, such as Colo. Rev. Stat. 34-60-102(1)(a)(III) (2025).

Subpart 6 defines “Department” as the Department of Natural Resources.

Subpart 7 defines “financial assurance” as activities that accomplish the requirements of part 6124.1100. This definition is reasonable because it incorporates all of the purposes and requirements set forth in the financial assurance rule.

Subpart 8 defines gas to include both hydrocarbon and nonhydrocarbon gases. This definition is reasonable because the agency intends to regulate gases including helium and hydrogen, which are nonhydrocarbon gases.

Subpart 9 defines “gas resource” as an occurrence of gas that might be developed in commercial quantities. This definition is reasonable because this chapter is intended to regulate the commercial production of gas resources.

Subpart 10 defines “gas resource development” as extracting, producing, treating, or processing gas at a gas resource development location from a gas resource. This definition is reasonable because it addresses the commercial production of gas that the rule is intended to regulate.

Subpart 11 defines “gas resource development facility” as improvements used for gas resource development. This definition is reasonable because it addresses both above-ground and below-ground improvements used in gas production.

Subpart 12 defines “gas resource development location” as an area where gas resource development operations have disturbed or may disturb the surface. This definition is reasonable because it addresses areas where surface facilities, such as drill pads, are located.

Subpart 13 defines “gas resource development operations” as siting, drilling, maintaining, and abandoning a gas well; gas production; disposing of wastes; separating and enriching extracted gases; and reclamation. This definition specifically excludes exploratory borings. Exploratory borings are regulated by the Department of Health under Minnesota Statutes chapter 103I and Minnesota Rules chapter 4725 and are not considered “gas wells” under this chapter. This definition also excludes liquefaction facilities that are not co-located with production and separation activities. The intent of the rules is to regulate initial gas separation and enrichment activities that occur on-site, which may include on-site liquefaction, but to exclude industrial gas processing facilities to which gas is transported after extraction and initial separation. These operations are also defined to exclude transportation of materials outside of gas resource development locations through pipelines, common carriers and public transportation systems. This chapter is intended to regulate gas wells, flow lines and on-site processing of gas on property controlled by the operator. It is not intended to regulate transportation of material by truck, train, or by pipelines regulated by the Public Utilities Commission once that material leaves the operator’s property. This definition is reasonable because it defines the agency’s jurisdiction so as to exclude activities under the jurisdiction of the Department of Health, Public Utilities Commission, or Pollution Control Agency.

Subpart 14 defines “gas resource development permit” as the commissioner’s approval to engage in gas resource development operations as required by Minnesota Statutes section 93.513. This definition is reasonable because gas resource development operations fall within the commissioner’s statutory permitting authority.

Subpart 15 defines “gas resource development plan” as a plan to conduct gas resource development operations that is approved by the commissioner. It is reasonable to require a plan for the development of a gas resource to ensure that the gas resource development permit addresses the potential environmental and other impacts of a proposed project.

Subpart 16 defines “gas well” as an excavation that is construction, maintained, and abandoned according to Department of Health regulations and a gas resource development plan. “Gas well” is defined to exclude exploratory borings regulated by the Department of Health pursuant to Minnesota Statutes chapter 103I and Minnesota Rules chapter 4725. This definition is

reasonable because it is consistent with both the Department of Health's regulatory authority over gas wells and the agency's regulatory authority over gas resource development operations. The definition also reasonably excludes exploratory borings which are regulated under Minnesota Statutes chapter 103I.

Subpart 17 defines "interested party" as a person with an ownership or leasehold interest in real property or several minerals associated with a gas resource development plan. This definition is reasonable because persons who own fee title or severed minerals or lease minerals in a spacing unit have property rights that may be impacted by a gas resource development operation.

Subpart 18 defines "natural resources" as set forth in Minnesota Statutes section 116B.02, subdivision 4. This definition is reasonable because it is a broad definition that encompasses, and is protective of, many types of resources.

Subpart 19 defines "operator" as a person engaged in or preparing to engage in gas resource development operations under an approved gas resource development plan. This definition is reasonable because it identifies the types of permittees, applicants, and other persons that may apply for a gas resource development permit to engage in gas resource development operations.

Subpart 20 defines "permittee" as a person who holds a gas resource development permit. This definition incorporates the definition of "person" as including one or more individuals or corporations. This definition is reasonable because it is common for more than one individual or corporate entity to be engaged in gas resource development operations.

Subpart 21 defines "person" to include individuals, corporations, and other groups. This definition is reasonable because part 6124.0300 requires joint applications where two or more persons are engaged in gas resource development operations. It is common for a gas operator to have a parent company or joint venture company that is also actively engaged in financial and operational decision-making, and including both entities as a permittee helps to ensure that reclamation is completed.

Subpart 22 defines "reclamation" as the activities necessary to accomplish the requirements of parts 6124.2200 and 6124.2300. This definition is reasonable because it ensures that gas resource development locations are returned to a condition that is environmentally stable and maintenance-free.

Subpart 23 defines "spacing order" as the commissioner's order that allocates land to a spacing unit. It is reasonable for the commissioner to issue a spacing order – separate from a gas resource development permit – because the spacing order implicates the rights of mineral owners and lessees throughout the spacing unit.

Subpart 24 defines “spacing unit” as lands allocated by the commissioner through a spacing order to a single gas well or multiple gas wells for developing gas resources. This definition is reasonable because the establishment of a spacing unit is needed as part of the permitting process to protect the correlative rights of mineral owners.

#### 6124.0200 PURPOSE AND POLICY

This part describes the policies that this chapter implements including controlling possible adverse environmental effects of gas resource development and encouraging good gas development practices. The agency has adopted a policy statement based on legislative policy set forth in Minnesota Statutes chapter 93 and other policies that are significant considerations in the development of gas operations. This statement is reasonable because it is based on legislative policy statements regarding mineland reclamation in Minnesota Statutes section 93.44 and pooling and spacing in Minnesota Statutes section 93.515.

#### 6124.0300 SCOPE

Subpart 1. This subpart describes when a person is required to obtain a gas resource development permit. A permit is required before a person extracts commercial quantities of gas. It is reasonable to set “commercial quantities” as the threshold where a permit is required because a well driller may unintentionally encounter gas when drilling a water well or exploratory boring.

Subpart 2. This subpart requires that gas resource development permittees also comply with requirements established by the Department of Health for construction, maintenance and abandonment of gas wells. This subpart is reasonable because the Department of Health has regulatory authority over well construction, maintenance, and abandonment, and these regulations are important for protecting public health and safety and the environment.

Subpart 3. This subpart provides that a permittee may not construct a gas well under a gas resource development permit until regulations are in place for construction, maintenance and abandonment of gas wells, pursuant to either statutory enactment or adoption of rules by the Department of Health. It is reasonable to require that regulatory standards governing well construction are in place prior to well drilling to protect public safety and the environment.

Subpart 4. This subpart requires that if two or more persons are engaged in gas resource development operations, each such person must be included as a permittee. Pursuant to subpart 1, persons include entities that possess capital and engage in financial and operational decision making related to the gas resource development operations. It is reasonable to require that where multiple persons are engaged in operations, such as where a parent company or operator engages in financial and operational decision making, each of these persons is included as a permittee. Requiring that parent companies and other entities with financial and

operational decision-making authority over the operation are included as permittees helps to ensure that gas resource development locations will be reclaimed.

Subpart 5. This subpart requires operators to comply with applicable federal, state, and local law. It is reasonable to require an operator to comply with all applicable environmental laws.

Subpart 6. This subpart clarifies that the commissioner has regulatory authority over exploratory borings completed prior to July 1, 2025 that are later converted to gas wells. This provision is intended to ensure that converted exploratory borings are subject to gas resource development permitting requirements. This provision also prohibits exploratory borings completed after July 1, 2025 from being converted into gas wells regulated under this chapter. This provision is reasonable because certain exploratory borings were completed and constructed to an industry standard for producing gas prior to rule adoption.

#### 6124.1000 PERMIT APPLICATIONS

Subpart 1. This subpart requires that an applicant meet with the commissioner prior to submitting a gas resource development permit application. This requirement is reasonable because it is intended to avoid the submission of incomplete or inadequate applications.

Subpart 2. This subpart addresses the submission of a gas resource development permit application to the commissioner. This provision is reasonable because requiring both electronic and paper copies of applications is necessary for efficient record-keeping.

Subpart 3. This subpart lists information that an applicant must include in a gas resource development permit application. It is reasonable to require the information listed in the rule, including documents relating to the applicant's insurance coverage, proposed spacing unit, and right to drill. It is also reasonable because, for the purposes of efficiency, the gas resource development permit application and spacing unit application are combined into one application.

Subpart 4. This subpart requires information about the applicant's organizational structure, which is reasonably needed to determine which persons and entities should be permittees, and to determine responsibility for decision-making and financial assurance.

Subpart 5. This subpart requires information about the environmental setting of a proposed project, which is reasonably necessary for the agency to evaluate the potential impacts of the project and to set a baseline for reclamation. Understanding potential impacts is reasonable because it helps the agency to include appropriate special conditions in the gas resource development permit.

Subpart 6. This subpart requires an operations plan covering construction, operations and reclamation of the gas resource development site(s). Detailed information about planned

operations is reasonable because this information is needed to understand the proposed project's potential impacts and to draft appropriate special conditions in the gas resource development permit.

Subpart 7. This subpart requires a contingency reclamation plan describing reclamation activities that would be necessary if a permanent shutdown occurred in the upcoming calendar year. This plan is updated annually pursuant to Minnesota Rules 6124.1200, subpart 4 and is used to annually adjust financial assurance levels pursuant to Minnesota Rules 6124.1100, subpart 2. It is reasonable to require such a plan in advance of the start of reclamation because the commissioner may need to complete reclamation activities if the permittee is unable to due to default or bankruptcy.

Subpart 8. This subpart requires a temporary shutdown plan that would be implemented if production is stopped for more than 30 days. It is reasonable to require a temporary shutdown plan because the commissioner needs to ensure that the operator safely maintains shut-in wells and restarts operations.

#### 6124.1100 FINANCIAL ASSURANCE

Subpart 1. This subpart notes that the purpose of the rule is to provide financial assurance for reclamation activities and for corrective action. It is reasonable for the commissioner to require financial assurance for gas resource development operations to protect taxpayer dollars and ensure necessary funds are available for environmental reclamation activities even if an operator defaults or declares bankruptcy.

Subpart 2. Applicants must submit a contingency reclamation cost estimate, and permittees must annually adjust such estimates. Annual cost adjustments are reasonable to account for inflation or other impacts to estimates. Cost estimates must include the costs for a third party to undertake reclamation, which is reasonable because the agency would not be able to complete the work using agency staff. Cost estimates may only consider salvage value if they are supported by a bid demonstrating such value. This is reasonable because operators should not be given credit for salvage value that is speculative.

Subpart 3. If the commissioner requires corrective action, the permittee must submit an estimate of the costs necessary to complete the required actions. It is reasonable for the commissioner to know the costs associated with required corrective actions in order to determine whether such costs are accurately reflected in a permittee's financial assurance.

Subpart 4. This subpart contains several requirements for financial assurance, including that the permittee must provide financial assurance equal to the contingency reclamation cost estimate and must adjust the amount of financial assurance annually. This provision also requires financial assurance for corrective actions, and it contains several conditions addressing the

cancellation of financial assurance and the creditworthiness of a financial assurance provider. These provisions are reasonable in order to protect taxpayers in the event an operator fails to complete reclamation of a gas resource development location. These provisions are also reasonable because they allow for a gradual reduction in financial assurance, as a permittee completes progressive reclamation.

Subpart 5. This subpart contains additional criteria for financial assurance instruments. It is reasonable to impose these requirements to ensure that financial assurance is available when needed. Corporate guarantees are only permitted if another financial assurance mechanism such as a bond or letter of credit is also provided that meets the financial assurance needs as identified by the commissioner. This is reasonable because corporate guarantees do not provide adequate assurance if the corporation declares bankruptcy.

Subpart 6. This subpart allows the commissioner to access financial assurance if the operator fails to perform the contingency reclamation plan or corrective action plan. This is reasonable because the commissioner may need to compensate a third party to perform reclamation or corrective action if the operator fails to undertake this work.

Subpart 7. This subpart allows the commissioner to take action to enforce a gas resource development permit if the permittee fails to provide the required financial assurance. This is reasonable because financial assurance is a key obligation of the gas resource development permit in that it ensures funds will be available for reclamation purposes even in the event that an operator is financially unable to complete reclamation due to default or bankruptcy.

## 6124.1200 ANNUAL REPORT

Subpart 1. This subpart requires an annual report describing gas production and reclamation completed during the past year and planned for the upcoming year. This is reasonable because a mechanism is needed to allow the commissioner to monitor activities at gas resource development locations to determine permit compliance.

Subpart 2. This subpart details the information that the annual report must include about operations during the preceding calendar year. This information is reasonably required for the commissioner to monitor gas resource development locations to determine permit compliance.

Subpart 3. This subpart details the information that the annual report must include about planned operations during the upcoming calendar year (*i.e.*, the calendar year in which the report is filed). This information is reasonably required for the commissioner to determine whether planned operations would be in compliance with the permit.

Subpart 4. This subpart requires that if corrective action has been ordered by the commissioner, the annual report must include information about corrective action conducted in

the preceding year and planned for the upcoming year, along with a corrective action cost estimate. This requirement is reasonable because the commissioner needs this information to determine whether the corrective action is effective and the financial assurance is adequate.

Subpart 5. This subpart requires maps depicting the status of operations, construction, and reclamation. It is reasonable to require a permittee to provide visual depictions to support the commissioner's evaluation of the annual report.

Subpart 6. This subpart provides that the commissioner may require the permittee to address deficiencies in the annual report or to take corrective action to remedy violations set forth in the annual report. This is reasonable because the annual report is an important tool for monitoring construction, operations, and reclamation at the gas resource development facility. This is also reasonable because proposals to achieve compliance with the permit provide critical information to the commissioner on how to monitor and assist non-compliant operators in achieving compliance.

#### 6124.1300 REQUEST FOR RELEASE FROM PERMIT

Subpart 1. This subpart provides that the commissioner may approve release from the gas resource development permit for any gas resource development location that is satisfactorily reclaimed. It is reasonable to provide a mechanism to release a permittee from the obligations of a gas resource development permit if that permittee has fully complied with the permit terms and this chapter.

Subpart 2. This subpart describes the information required to be included in a request for release from the gas resource development permit. The requested information includes the gas resource development locations for which a release is requested and the status of reclamation at those locations, such as removal of equipment and re-vegetation. This information is reasonably needed for the commissioner to make a decision as to whether reclamation is complete and therefore the requested release is appropriate.

Subpart 3. This subpart requires the commissioner to review the request for release and inspect the affected gas resource development locations. The commissioner will then decide whether the locations have been satisfactorily reclaimed and whether the permittee may be released from all or a portion of the gas resource development permit. Because the commissioner is charged with ensuring that permittees comply with these rules, it is reasonable for the commissioner to have discretion to determine whether the permittee has satisfactorily completed reclamation and should be released from all or part of a gas resource development permit.

## 6124.1400 TEMPORARY SHUTDOWN

Subpart 1. This subpart requires a permittee to notify the commissioner 5 days prior to the start of a temporary shutdown. It is reasonable for the commissioner to obtain notice of a temporary shutdown to ensure that DNR staff are on-hand to inspect shutdown procedures and determine the permittee's compliance with the temporary shutdown plan.

Subpart 2. This subpart requires the permittee to implement its temporary shutdown plan as described in Minnesota Rules 6124.1000, subpart 8. It is reasonable to require compliance with the temporary shutdown plan to ensure that gas wells are safely placed into shut-in status.

## 6124.1500 PERMANENT SHUTDOWN

Subpart 1. This subpart requires the permittee to notify the commissioner at least 5 days before a permanent shutdown. It is reasonable for the commissioner to obtain notice of a permanent shutdown to ensure that DNR staff can be on-hand to inspect shutdown procedures and determine the permittee's compliance with the contingency reclamation plan.

Subpart 2. This subpart requires the permittee to implement the contingency reclamation plan, seal gas wells, and comply with reclamation requirements in this chapter. It is reasonable to require the permittee to follow the approved decommissioning and reclamation procedures in the contingency reclamation plan, initiate the procedure to seal gas wells, and start reclamation because the commissioner must ensure that gas resource development locations are fully reclaimed and left in a stable condition.

## 6124.2000 SITING

Subpart 1. This subpart prohibits gas resource operations within the Boundary Waters Canoe Area Wilderness, Voyageurs National Park, state wilderness areas, the Agassiz and Tamarac National Wilderness areas, and Pipestone and Grand Portage National monuments. This provision prohibits gas operations that disturb the surface, subsurface directional or horizontal drilling, and passive gas extraction. It is reasonable to prohibit gas operations in areas where gas production is contrary to State or federal law or inconsistent with established management objectives.

Subpart 2. This subpart prohibits gas resource development operations that disturb the surface and subsurface directional and horizontal drilling in state-owned lands designated as scientific and natural areas, peatland scientific and natural areas in certain circumstances, state parks, and in calcareous fens. Passive extraction of gas from beneath the surface of these lands is permitted. It is reasonable to prohibit gas resource development operations on and beneath lands that are protected under state law based on their exceptional natural features, as described in Minnesota Statutes Chapter 86A and Section 103G.223.

Subpart 3. This subpart prohibits gas resource development operations that disturb the surface within the BWCAW Mineral Management Corridor; a one-quarter mile setback of lands described in subparts 1 and 2; certain historic sites; public waters; federal and state wild, scenic or recreational river districts; the area described in the North Shore Management Plan; and certain setbacks from sensitive locations such as occupied dwellings, schools, churches, parks and roads. It is reasonable to allow horizontal and directional drilling but to prohibit above ground development in areas sensitive to surface disturbance. It is also reasonable to have tiered levels of siting and setback restrictions to limit nuisance impacts of gas resource development operations on protected lands.

Subpart 4. This subpart only permits gas resource development that disturbs the surface in the following areas if the operations cannot be achieved elsewhere in the spacing unit: national wildlife refuges, national waterfowl protection areas, and national trails; state-owned lands designated as a wildlife management area, state trail, or state recreation area; and peatlands identified as peatland watershed protection areas. Based on the management goals for these properties, it is reasonable to restrict gas resource development facilities in these areas if there are comparable areas within the spacing unit for these operations outside of the protected areas.

Subpart 5. This subpart requires that gas resource development locations are sited to avoid or minimize certain impacts to the public and to natural resources. These general siting criteria are reasonable because they ensure that gas development projects are designed to reduce impacts where possible and comply with general air, water, and noise pollution standards, as well as local land use regulations or other requirements across the entire state, rather than just within or near protected areas.

## 6124.2200 SITE PREPARATION AND OPERATION

Subpart 1. This subpart contains requirements to ensure that gas resource development locations are designed, constructed, and operated to promote reclamation, protect topsoil disturbed by operations, and minimize surface disturbance. These requirements are reasonable because they will reduce the environmental impacts of gas resource development operations and support reclamation of all or part of a gas resource development location as soon as the land is no longer needed to support operations.

Subpart 2. This subpart contains restrictions on dust, noise, and light. Dust must be controlled through approved techniques; operators must comply with Minnesota Pollution Control Agency noise standards; and light must be shielded and directed downward. These restrictions are reasonable because gas resource development operations produce dust, noise, and light impacts that need to be controlled to prevent nuisance impacts and comply with existing law.

Subpart 3. This subpart describes key aspects as to how the permittee must reclaim lands no longer supporting production. This subpart is reasonable because it ensures reclamation will be progressive. Areas that were disturbed in construction but are no longer in use will be reclaimed, including through re-vegetation, which reduces the impacts of the gas resource development operations.

#### 6124.2300 RECLAMATION

Subpart 1. This subpart lists requirements for decommissioning a gas resource development location, including removing equipment, sealing wells, and re-vegetating disturbed areas. These requirements are reasonable to avoid environmental impacts and ensure that gas resource development locations are returned to productive use. It is also reasonable to set these requirements into rule to guide a permit applicant's development of its contingency reclamation plan. The 18-month deadline for reclamation is intended to balance the permittee's need for adequate time to complete reclamation with the commissioner's need to ensure that reclamation is timely completed to reduce environmental impacts.

Subpart 2. This subpart provides that reclamation must consider current land use and future land use potential, and the commissioner may permit re-vegetation using non-native species if appropriate based on future land use. This provision is reasonable because planting native species in some urban, suburban or agricultural areas may not be consistent with the future land use potential of the site.

Subpart 3. This subpart requires monitoring of re-vegetated areas and achievement of 70 percent ground cover free of non-native invasive species within three growing seasons and within a 90 percent statistic confidence interval. This provision is reasonable because re-vegetation is important for preventing environmental impacts such as erosion and ensuring productive future land use and is consistent with other state regulation. The Minnesota Pollution Control Agency's Construction Stormwater General Permit also requires the achievement of 70 percent vegetative coverage. (NPDES/SDS Construction Stormwater General Permit issued August 1, 2023, at 10-11, 19). Minn. R. 6132.2700, subp. 2(C), which governs nonferrous metallic mineral mining, requires the establishment of vegetation within three growing seasons and within a 90 percent statistical confidence interval.

#### 6124.2400 CORRECTIVE ACTION

Subpart 1. This subpart imposes an obligation on the permittee to take immediate action—without an order from the commissioner—to implement its emergency response plan to address an immediate threat to human safety or natural resources relating to gas resource development operations. The permittee must also immediately notify the commissioner if it is aware of any violation of this chapter or the gas resource development permit. It is reasonable

to require the permittee to take immediate action in an emergency situation without any precipitating action from the commissioner to ensure that emergencies are responded to in an appropriate and timely manner to protect human safety and the natural environment. In addition, the requirement to notify the commissioner is reasonable because it provides an opportunity for state emergency responders or permit compliance staff to quickly mobilize to the site and oversee implementation of the permittee's emergency response plan.

Subpart 2. This subpart authorizes the commissioner to order the permittee to take corrective action to address any violation of this chapter or the gas resource development permit. The commissioner may order the permittee to take immediate action or to submit a corrective action plan within 10 business days for commissioner approval. If the permittee fails to comply, the commissioner may suspend, modify or revoke the gas resource development permit (*see* discussion below with respect to Rules 6124.3300, .3600, and .3700). This provision is reasonable because the commissioner must have tools to ensure compliance with this chapter and to correct violations in a timely matter. Immediate corrective action is reasonable for violations that do not require substantial planning to correct. For other violations, engineering review and planning may be required, and therefore it is reasonable to require that a corrective action plan be available for review.

## 6124.3000 PROCEDURES FOR OBTAINING A GAS RESOURCE DEVELOPMENT PERMIT

Subpart 1. This subpart identifies permit application procedures. It is reasonable to provide in-rule information that is needed by a permit applicant to initiate a permit application.

Subpart 2. This subpart describes the commissioner's initial review of a gas resource development permit application to determine completeness of the application and identifies criteria that must be used by the commissioner to reject a permit application without prejudice. It is reasonable to describe for the benefit of an applicant and the public how the commissioner will conduct an initial review. Rejection of an incomplete application without prejudice is reasonable because it allows the applicant the opportunity to submit a complete application for consideration.

Subpart 3. This subpart requires the commissioner to publish notice in the State Register that the agency has received an application for a gas resource development permit. It is reasonable to identify in rule the steps that must be taken by the commissioner to declare a permit application to be complete and to notify the public of the permit application.

Subpart 4. This subpart allows the commissioner to hold an informational meeting regarding a gas resource development permit application. Notice of any meeting must be published in the State Register 30 days prior to the meeting. It is reasonable to provide an informational

meeting on proposed operations when the commissioner determines one is needed, based on the size, location, and other features of the potential project. It is also reasonable to provide public notice for the informational meeting to ensure the public has a fair chance to participate.

Subpart 5. This subpart requires the applicant to mail notice to surface and mineral owners within the proposed spacing unit within 30 days of the commissioner publishing notice of the complete permit application in the State Register. This provision is reasonable because the surface and mineral owners may be affected by the commissioner's decision as to the spacing unit and the gas resource development permit. This provision reasonably acknowledges that, because the applicant must demonstrate control of the spacing unit prior to production, they therefore must have made offers to purchase or lease land from owners within the spacing unit and should reasonably be prepared to provide the commissioner with information on those owners.

Subpart 6. This subpart requires that the commissioner review the proposed spacing unit and the financial assurance, operations, reclamation, temporary shutdown, and other plans as part of its review of the gas resource development permit application. If the commissioner modifies the proposed spacing unit the applicant must demonstrate control of areas added to the spacing unit. This provision is reasonable because Minnesota Statutes section 93.513 requires an applicant to demonstrate control of the entire extraction area.

Subpart 7. This subpart requires that the commissioner issue a draft gas resource development permit along with any special conditions, a draft spacing order, and publish notice of the draft permit and order in the State Register. This provision is reasonable because the draft documents will assist the public in submitting comments for the commissioner's consideration in reaching a decision on the application.

Subpart 8. This subpart requires that the commissioner provide early notice to Tribal governments 30 days prior to publication of the draft permit and spacing order in the State Register. It is reasonable to provide early notice to Tribal governments as a courtesy.

Subpart 9. This provision requires that the commissioner accept public comments for 30 days. The commissioner is not required to respond to individual comments, and the commissioner may hold a public meeting during the comment period. The optional meeting is reasonable because some projects may be the subject of less public interest than others. It is reasonable not to require responses to individual comments because where the commissioner receives many comments, it is more efficient to group comments by theme for response.. Responding directly to individual comments could be unduly burdensome if the agency receives large numbers of public comments.

Subpart 10. This subpart requires the commissioner to issue separate orders on the gas resource development permit application and the spacing unit proposal. Both of these decisions are subject to appeal as final agency decisions. It is reasonable to issue a separate permitting decision and spacing order because these decisions are based on different technical considerations, and because the spacing order may affect other property owners in addition to the permit applicant.

Subpart 11. This subpart requires a numeric permit term for the time necessary for completion of the gas resource development plan including reclamation. This provision is reasonable because the permittee's obligations should continue until the property is reclaimed. It is also reasonable to give the commissioner discretion to determine the amount of time required by a permit applicant to complete their proposed gas resource development plan, because the size of the developed gas resource and the amount of time required to complete reclamation will vary between permits.

Subpart 12. This provision provides that a gas resource development permit is irrevocable during its term unless it is modified, cancelled, suspended, or revoked. This provision is reasonable because it provides the permittee with some assurance that it can complete the gas resource development plan so long as it complies with its issued permit. It is also reasonable for the commissioner to have the authority to revoke, modify, or suspend an issued permit if the permittee fails to comply with permit requirements.

#### 6124.3200 AMENDMENT OF GAS RESOURCE DEVELOPMENT PERMIT

Subpart 1. This subpart provides that a permittee must submit an application for a gas resource development permit amendment. It is reasonable to provide the commissioner with discretion in requesting information to support the application because the information needed would vary based upon the requested permit amendment.

Subpart 2. This subpart requires that the commissioner review an amendment application to determine if it meets the requirements of this chapter and is complete. This is reasonable because amendments must still comply with applicable permit requirements.

Subpart 3. This subpart requires the commissioner to determine if the proposed amendment constitutes a substantial change from the existing permit. If the amendment would be a substantial change, the commissioner must issue a draft amendment, publish notice of the issuance in the State Register, and accept public comments on the amendment for 30 days. This provision is reasonable because substantial amendments should receive the same public input as decisions on initial applications, but minor amendments do not merit the same level of public review. A substantial amendment is an amendment that involves: (1) a major departure from operations under the existing permit; (2) a significant change in the timing or location of

operations; or (3) a proposed change in operations for which public input would be helpful for the commissioner to reach a decision.

#### **6124.3300 MODIFICATION OF GAS RESOURCE DEVELOPMENT PERMIT**

Subpart 1. This subpart provides that the commissioner may modify a gas resource development permit when it is necessary to protect public health or safety, public lands or waters or the environment, or persons or property; to remedy a violation of the gas resource development permit or this chapter; or to address new information. This provision is reasonable because the commissioner needs to be able to modify the permit to protect public health and safety and to respond to changing conditions. Modification may be necessary to resolve an unforeseen problem. Modification may also be required to address an unresolved problem where the commissioner's efforts to work cooperatively with the permittee have not been successful.

Subpart 2. This subpart provides that the permittee may appeal a permit modification. This provision is reasonable because a permit modification may affect the permittee's ability to operate its project.

#### **6124.3400 ORDER TO IMPLEMENT CONTINGENCY RECLAMATION PLAN DURING A TEMPORARY SHUTDOWN**

Subpart 1. This subpart allows the commissioner to order a permittee to implement the contingency reclamation plan if a temporary shutdown exceeds 18 months. This deadline is reasonable because it prevents unreasonable delay in the permanent shutdown decision and the initiation of decommissioning and reclamation activities under the contingency reclamation plan, which reduces an operation's environmental impacts.

Subpart 2. This subpart requires that the commissioner provide a permittee with a temporary shutdown that has exceeded 18 months a notice of intent to declare a permanent shutdown and require implementation of a contingency reclamation plan. The permittee is given 30 days to either implement the plan, end the temporary shutdown, or request an extension of time to decide whether to initiate reclamation or end the shutdown. This provision is reasonable because it provides a process to ensure that reclamation is timely initiated and gas wells are not at risk of being abandoned, while giving permittees flexibility to adapt to changing conditions prior to permit cancellation.

Subpart 3. This subpart requires the commissioner to order that the permittee initiate reclamation if: (1) the permittee fails to respond to the above notice within 30 days; (2) the permittee states it will end the temporary shutdown but fails to do so within 60 days; or (3) the permittee's request for an extension is denied. This provision is reasonable because the

permittee has been provided with an opportunity to respond prior to issuance of the order. Ordering reclamation is reasonable because a shutdown has continued for more than 18 months, and the permittee has failed to respond or justify to the commissioner why additional time is needed. Eighteen months provides the operator with a sufficient period of time to react to changing prices and make decisions as to production.

#### **6124.3500 CANCELLATION OF GAS RESOURCE DEVELOPMENT PERMIT**

This part allows the commissioner to cancel a gas resource development permit if the permittee has not begun substantial construction or gas extraction within three years and no reclamation is necessary. This part also allows the commissioner to cancel a gas resource development permit at the permittee's request or with the permittee's consent, and with any conditions necessary to protect the public interest.

This part is reasonable because environmental conditions could change if the permittee were to wait more than three years to initiate development activities. A three-year time period is reasonable because it provides the operator with sufficient time to react to market conditions and to prepare for resume development activities. It is also reasonable to allow the permittee to be released from a permit without completing reclamation requirements identified in 6124.2000 through 6124.2300 if there have not been any development activities that require reclamation.

#### **6124.3600 SUSPENSION OF GAS PRODUCTION**

Subpart 1. This subpart authorizes the commissioner to suspend a gas resource development permit if there is an emergency situation involving imminent threat to public health and safety or the permittee has not corrected identified violations of the gas resource development permit or this chapter. This subpart is reasonable because it allows the commissioner to respond to emergency situations and ensure compliance with permitting requirements which protect human health and the state's environmental resources. This subpart is also reasonable because it allows the commissioner to ensure that operations cannot continue if an operator does not comply with financial assurance, annual reporting, or corrective action requirements.

Subpart 2. This subpart provides that reclamation obligations continue even if production-related operations have been suspended. This subpart is reasonable because it clarifies that reclamation is separate from production operations and reclamation activities are not suspended during permit suspension.

Subpart 3. This subpart requires that an order suspending production describe the conditions necessary to lift the suspension. It is reasonable to require the commissioner to identify within the written order of suspension the specific conditions that must be met before the suspension

may be lifted and provide permittees with certainty that their operations may continue upon compliance with the commissioner's requirements.

Subpart 4. This subpart provides that the permittee's failure to comply with the suspension order may lead to further enforcement action by the commissioner. It is reasonable for the commissioner to have the discretion to impose additional penalties if the permittee fails to take action required by the commissioner.

Subpart 5. This subpart authorizes the appeal of a suspension order to the Court of Appeals. It is reasonable to identify in rule the legal avenue available for a permittee to challenge a suspension order.

### 6124.3700 REVOCATION OF GAS RESOURCE DEVELOPMENT PERMIT

Subpart 1. This subpart authorizes the commissioner to revoke a gas resource development permit if it is necessary to protect public health and safety, the permittee has violated the terms of the gas resource development permit or this chapter, or information submitted in the gas resource development permit application is materially incorrect. It is reasonable to allow the commissioner the discretion to revoke a permit to protect public health and safety and ensure that gas resource development facilities are operating in a manner that is consistent with State law. It is also reasonable to allow the commissioner to revoke a permit based on materially incorrect information in the permit application and to provide a remedy if the materially incorrect information had an impact on the commissioner's final decision on a permit application. It is also reasonable for the commissioner to have the discretion to revoke a permit to protect persons and property from damage that may occur due to the permittee's unwillingness to correct a problem.

Subpart 2. This subpart states that the permittee must immediately cease operations as ordered by the commissioner. It is reasonable to cease operations once a permit is revoked as the permittee no longer has the required authorization to continue gas development.

Subpart 3. This subpart provides that the commissioner may access the permittee's financial assurance after revoking the permit. This is reasonable because if the gas resource development permit is revoked, the permittee is barred from performing all gas resource development operations, including decommissioning and reclamation work. As a result, the commissioner may have to use financial assurance funds to complete reclamation of the facility.

Subpart 4. This subpart authorizes the appeal of a revocation order to the Court of Appeals. It is reasonable to ensure due process by identifying the legal avenue available for a permittee to challenge a revocation order.

## 6124.3800 ASSIGNMENT

This part provides that the commissioner may authorize the assignment of a gas resource development permit if the assignee will perform the obligations of applicable law, including this chapter, and the gas resource development permit. The assignee must have the financial and technical capability to perform these obligations. It is reasonable to expect that an assignee be capable of complying with this chapter, and that the assignee has the technical and financial capability to perform the required operations, obtain financial assurance, and complete required reclamation activities.

## 6124.3900 PUBLICATION

Subpart 1. This subpart describes the information that must be included in a published notice in the State Register regarding a gas resource development permit application. The published notice must include a general description of the proposed operations. This provision is reasonable because it is not practical to print extensive technical information in the State Register, but interested parties will have the ability to obtain additional information.

Subpart 2. This subpart describes the information that must be included in a published notice in the State Register regarding the issuance of a draft gas resource development permit or spacing order. The notice must include a map of the gas resource development locations and spacing unit, and the means of obtaining more information about surface and mineral ownership along with a copy of the draft permit or spacing order. This provision is reasonable because it is not practical to print extensive technical information or real estate legal descriptions in the State Register, but interested parties will have the ability to obtain additional information.

Subpart 3. This subpart describes the information that must be included in a published notice in the State Register regarding an amended gas resource development permit or spacing unit. The published notice must include a description of the nature of the proposed amendment and the means of obtaining a copy of the draft permit amendment or draft spacing order amendment. This provision is reasonable because it is not practical to print extensive technical information in the State Register, but interested parties will have the ability to obtain additional information.

Subpart 4. This subpart requires that the commissioner publish notice in the State Register at least 30 days prior to a public informational meeting regarding a gas resource development permit application, as described in part 6124.3000, subpart 4. This provision is reasonable because it ensures adequate notice of a public meeting.

## 6124.4000 INSPECTION OF GAS RESOURCE DEVELOPMENT LOCATIONS

This part establishes a right of access for the commissioner to inspect gas resource development locations and associated records and monitor compliance with gas resource development permits. It is reasonable to provide the commissioner the ability to determine permit compliance by physically inspecting permitted locations and facilities and reviewing associated data sets.

## 6124.5200 SPACING

Subpart 1. This subpart requires that a gas resource development permit application include a proposal for a spacing unit. The spacing unit must consist of at least one quarter-quarter section of land and must include the maximum area that can be effectively drained by the applicant's proposed gas well(s). The subpart clarifies that for purposes of demonstrating control pursuant to Minnesota Statutes section 93.513, a spacing unit is equivalent to an extraction area. This subpart and the requirement for a permittee to obtain a spacing order is reasonable to avoid trespass, protect the correlative rights of mineral owners, and identify potential impacts of gas extraction. The spacing order also reasonably ensures that gas resource development operations meet the purpose and policy of parts 6124.0100 to 6124.5200.<sup>17</sup> It is reasonable to include a minimum acreage of 40 acres for a spacing unit because it is unlikely that a spacing unit would be smaller than 40 acres. Further, a 40-acre parcel (a quarter-quarter section) represents the smallest unit in the federal Government Land Office surveys of the State of Minnesota, and it is convenient to describe spacing units based on land ownership.

Subpart 2. This subpart lists required information for a spacing unit. A permit applicant must propose a spacing unit because they hold the data necessary to determine where a proposed area of extraction may be, given the permit applicant's plan of operations. However, it is the commissioner who actually issues an order to legally define a spacing unit for a given gas resource development permit based on the sufficiency of the technical data provided by the applicant. An accurate determination of a spacing unit's boundaries is critical because it establishes the location of mineral interests that the permit applicant must fully control under Minnesota Statutes Section 93.513 before a DNR gas resource development permit can be issued. It is therefore reasonable to ensure that the commissioner has the information necessary to evaluate an applicant's proposed spacing unit and to require the applicant to undertake an initial technical analysis of the spacing unit boundaries.

Subpart 3. This subpart describes the information that is needed to demonstrate control of mineral interests within a spacing unit as required in Minnesota Statutes. Evidence of control can include mineral deeds, mineral leases, and voluntary pooling agreements. This subpart is

---

<sup>17</sup> *Supra* item 6124.0200.

reasonable because the commissioner must establish that the applicant has the legal ability to operate on lands within the spacing unit and it is reasonable to identify acceptable forms of documentation in rule.

Subpart 4. This subpart provides that where there are separately owned tracts in a spacing unit, owners may enter into a voluntary pooling agreement. This subpart is reasonable because allowing multiple owners to pool their interests supports development of gas resources by resolving potential private land ownership and land use issues.

Subpart 5. This subpart requires that in deciding whether to approve a proposed spacing unit, the commissioner must consider whether the proposed spacing unit prevents waste, avoids drilling unnecessary wells, and protects correlative rights. This subpart is reasonable because these policy goals are the underpinning of the concept of spacing and are reflected in Minnesota Statutes Section 93.515.

Subpart 6. This subpart allows the commissioner to modify a spacing order if new geological or engineering information becomes available that supports a modification of the size or shape of an established spacing unit. A permittee may also request an amended spacing order by filing an application for an amended gas resource development permit. This subpart is reasonable because it is critical for the size and shape of a spacing unit to accurately reflect the extraction area and thereby protect the correlative interests of mineral interest owners. Allowing an established spacing unit to be modified based on newly available information also supports compliance with the statutory requirement in Minnesota Statutes section 93.513 for a permittee to control the mineral interests within a spacing unit.

Subpart 7. This subpart allows the commissioner to issue a provisional spacing order if there is not sufficient geological or engineering information available to determine the appropriate size and shape of a proposed spacing unit. A provisional spacing order would allow the permittee to drill wells and obtain the additional information needed to accurately determine the size and shape of an established spacing unit. The permittee would not be able to engage in commercial production until the commissioner either modified or upheld the provisional spacing order. The permittee would also need to demonstrate control of mineral interests in any areas added to the provisional spacing unit. This part is reasonable because it allows the commissioner to obtain needed information for establishing an accurate spacing unit that protects the correlative interests of mineral interest owners in the provisional and final spacing units.