

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE MINNESOTA ENVIRONMENTAL QUALITY BOARD

In the Matter of the Proposed
Amendments to Rules Governing the
Environmental Review Program Relating
to the Application of Provisions on
Connected Actions to Animal Feedlots,
Minn. Rules, Chapter 4410

REPORT OF THE
ADMINISTRATIVE LAW JUDGE

The above-entitled matter came on for hearing before Administrative Law Judge Allan W. Klein on January 21, 1999 in St. Paul; January 25 in North Mankato; January 26 in Morris; and February 4 with a video conference involving persons in St. Paul, Rochester, and Thief River Falls. At each of the locations, there was both an afternoon and an evening session, except for the first day in St. Paul, which was morning only. Each hearing session continued until all interested persons, groups and associations had an opportunity to be heard concerning the proposed rules.

This Report is part of a rulemaking proceeding held pursuant to Minn. Stat. §§ 14.31 to 14.20 (1998), to hear public comment, to determine whether the Minnesota Environmental Quality Board (hereinafter "the Board") has fulfilled all relevant substantive and procedural requirements of law applicable to the adoption of rules, whether the proposed rules are needed and reasonable, and whether or not modifications to the rules proposed by the Board after initial publication are impermissible, substantial changes.

Alan Mitchell, Assistant Attorney General, 445 Minnesota Street, 900 NCL Tower, St. Paul, Minnesota 55101, appeared on behalf of the Board. Greg Downing, Environmental Review Coordinator, Minnesota Environmental Quality Board, 658 Cedar Street, St. Paul, Minnesota 55155, presented the Board's position and answered questions at each of the hearings.

The record remained open for the submission of written comments until February 19, 1999. During the initial comment period, the ALJ received numerous written comments from interested persons and the Board. Pursuant to Minn. Stat. § 14.15, subd. 1, five working days were then allowed for the filing of responsive comments. During the responsive comment period, interested persons replied to the Board's comments, and the Board also replied to written comments. The record closed for all purposes on February 26, 1999.

NOTICE

The Board must wait at least five working days before taking any final action on the rules; during that period, this Report must be made available to all interested persons upon request.

Pursuant to the provisions of Minn. Stat. § 14.15, subd. 3 and 4, this Report has been submitted to the Chief Administrative Law Judge for his approval. If the Chief Administrative Law Judge approves the adverse findings of this Report, he will advise the Board of actions which will correct the defects and the Board may not adopt the rule until the Chief Administrative Law Judge determines that the defects have been corrected. However, in those instances where the Chief Administrative Law Judge identifies defects which relate to the issues of need or reasonableness, the Board may either adopt the Chief Administrative Law Judge's suggested actions to cure the defects or, in the alternative, if the Board does not elect to adopt the suggested actions, it must submit the proposed rule to the Legislative Coordinating Commission for the Commission's advice and comment.

If the Board elects to adopt the actions suggested by the Chief Administrative Law Judge and makes no other changes and the Chief Administrative Law Judge determines that the defects have been corrected, then the Board may proceed to adopt the rule and submit it to the Revisor of Statutes for a review of the form. If the Board makes changes in the rule other than those suggested by the Administrative Law Judge and the Chief Administrative Law Judge, then it shall submit the rule, with the complete record, to the Chief Administrative Law Judge for a review of the changes before adopting it and submitting it to the Revisor of Statutes.

When the Board files the rule with the Secretary of State, it shall give notice on the day of filing to all persons who requested that they be informed of the filing.

Based upon all the testimony, exhibits and written comments, the Administrative Law Judge makes the following:

FINDINGS OF FACT

Procedural Requirements

1. On July 13, 1998, the Board published a request for comments concerning these rules at 23 State Register 211. Ex. 1.

2. On July 16 and 17, 1998, the Board mailed a request for comments to its rulemaking list, its mailing list for notice of board meetings, its list for notice of activities relating to the Generic EIS on Animal Agriculture, and to the

Department of Agriculture's Feedlot and Manure Management Advisory Committee. Ex. 2.

3. On October 26, 1998, the Board authorized the issuance of a Notice of Intent to Adopt Rules after Holding a Public Hearing. This resolution was signed by Chair Rodney W. Sando and Board Member Gene Hugoson. Ex. 3.

4. On November 18, 1998, the Revisor of Statutes certified a copy of the proposed rule amendments. Ex. 4.

5. On November 23, 1998, Chair Sando executed the Board's Statement of Need and Reasonableness.

6. On November 25, 1998, the Board filed a copy of a Proposed Notice of Hearing, a copy of the proposed rules, and the Statement of Need and Reasonableness with the Office of Administrative Hearings. On that same date, the Board requested the scheduling of hearings in St. Paul, North Mankato, and Morris. Finally, on that date, the Board requested prior approval of the additional notice plan described on pages 9 and 10 of the Statement of Need and Reasonableness.

7. On December 4, 1998, the Board was given oral approval for its additional notice plan, and by letter dated December 8, 1998, the Board was given written approval.

8. On December 15, 1998, the Board filed a copy of the Statement of Need and Reasonableness with the Legislative Coordinating Commission. Ex. 6.

9. On December 21, 1998, the Board published the Notice of Hearing in the State Register at 23 State Register 1412. This notice announced the hearings in St. Paul, North Mankato, and Morris. It also indicated that additional days of hearing would be scheduled if necessary. Ex. 7.

10. On December 18, 1998, the Board mailed a copy of the Notice of Hearing and the proposed rules to all persons on its statutory rulemaking list, to all persons who submitted comments in response to the request for comments, and to all persons (roughly 1300) on its mailing list for the Generic Environmental Impact Statement on Animal Agriculture. In addition, on that date the Board also mailed to roughly 24 state legislators involved in legislation affecting the Board's rulemaking authority and special legislation requiring that this particular hearing be held. Ex. 9 and 11.

11. On December 28, 1998, the Board published a copy of the Notice for Hearing at 22 EQB Monitor 39. Ex. 10.

12. Prior to the start of the public hearings, the Board decided to add an additional hearing date to provide an easier opportunity for persons in the southeast and northwestern portions of the state to participate in the hearing process. On January 19 and 20, 1999, the Board mailed a Notice of Additional Hearing to its statutory rulemaking list, all persons who submitted comments in response to the request for comments, and to those persons on the Board's mailing list for the Generic EIS on Animal Agriculture who had mailing addresses in the south central, southeast, north central, and northwest portions of the state. This notice announced the February 4 video hearing sessions involving sites in St. Paul, Rochester, and Thief River Falls. Ex. 12.

13. On January 21, at the start of the public hearings, the Board introduced the above-numerated documents into the record, as well as introducing copies of public comments received up to January 20 (Ex. 13); a copy of the special legislation requiring this rulemaking (Ex. 14); as well as a number of background exhibits describing animal feedlots, connected actions, and the environmental review process. The Board also filed a Certificate of Mailing List Completeness as of December 18, 1998. Ex. 18.

14. On February 1, 1999, the Rochester Office of the Minnesota Pollution Control Agency issued a press release, reminding persons of the February 4 video conference.

15. On February 19, 1999, the Board filed comments in response to the testimony and written materials which had been supplied by the public and by other agencies during the hearing process. In response to comments, the Board proposed a number of modifications to its original proposals.

16. On February 26, 1999, the Board filed an additional responsive comment, which contained two additional modifications, both in response to comments which had been filed by the MPCA staff. Finally, on February 26, the Board filed a final response to comments from the Turkey Store Company which had been filed the previous day.

All of the above documents have been available for inspection at the Office of Administrative Hearings from the date of filing.

Standards of Review

17. In a rulemaking proceeding, an administrative law judge must determine whether the agency has established the need for and reasonableness of the proposed rule by an affirmative presentation of facts.¹ An agency need not always support a rule with adjudicative or trial-type facts. It may rely on what are called "legislative facts" — that is, general facts concerning questions of common

¹ Minn. Stat. § 14.14, subd. 2, and Minn. Rule 1400.2100.

sense, policy, and discretion. The agency may also rely on interpretations of statutes and on stated policy preferences.² Here, the Board prepared a SONAR setting out a number of facts, statutory interpretations, and policy preferences to support the proposed rules. It also supplemented information in the SONAR with information presented both at the hearing and in written comments and responses placed in the record after the hearing.

18. Inquiry into whether a rule is reasonable focuses on whether the rulemaking record establishes that it has a rational basis, as opposed to being arbitrary. Minnesota law equates an unreasonable rule with an arbitrary rule.³ Agency action is arbitrary or unreasonable when it takes place without considering surrounding facts and circumstances or disregards them.⁴ On the other hand, a rule is generally considered reasonable if it is rationally related to the end that the governing statute seeks to achieve.⁵

19. The Minnesota Supreme Court has defined an agency's burden in adopting rules as having to "explain on what evidence it is relying and how the evidence connects rationally with the agency's choice of action to be taken."⁶ An agency is entitled to make choices between different approaches as long as its choice is rational. Generally, it is not proper for an administrative law judge to determine which policy alternative he thinks would be the "best" approach, since making a judgment like that invades the policy-making discretion of the agency. Rather, the question for an administrative law judge is whether the agency's choice is one that a rational person could have made.⁷

20. In addition to ascertaining whether proposed rules are necessary and reasonable, an administrative law judge must make other decisions — namely, whether the agency complied with the rule adoption procedure; whether the rule grants undue discretion to the agency; whether the agency has statutory authority to adopt the rule; whether the rule is unconstitutional or illegal; whether the rule constitutes an undue delegation of authority to another; and whether the proposed language is not a rule.⁸

² Manufactured Housing Institute v. Pettersen, 347 N.W.2d 238, 244 (Minn. 1984); Mammenga v. Department of Human Services, 442 N.W.2d 786 (Minn. 1989).

³ In re Hanson, 275 N.W.2d 790 (Minn. 1978); Hurley v. Chaffee, 231 Minn. 362, 367, 43 N.W.2d 281, 284 (1950).

⁴ Greenhill v. Bailey, 519 F.2d 5, 10 (8th Cir. 1975).

⁵ Mammenga v. Department of Human Services, 442 N.W.2d 786, 789-90 (Minn. 1989); Broen Memorial Home v. Minnesota Department of Human Services, 364 N.W.2d 436, 444 (Minn. Ct. App. 1985).

⁶ Manufactured Housing Institute, *supra*, 347 N.W.2d at 244.

⁷ Federal Security Administrator v. Quaker Oats Company, 318 U.S. 2, 233 (1943).

⁸ Minn. Rule 1400.2100.

21. When an agency makes changes to proposed rules after it publishes them in the *State Register*, an administrative law judge must determine if the new language is substantially different from what the agency originally proposed.⁹ The legislature has established standards for determining if the new language is substantially different.¹⁰

Nature of the Proposed Rules

Impact on Farming Operations

22. Minn. Stat. § 14.111 imposes an additional notice requirement when rules are proposed that affect farming operations. The statute requires that the agency provide a copy of the proposed rule changes to the Commissioner of Agriculture at least 30 days prior to publication of the proposed rule in the *State Register*. In this particular case, the Board failed to provide separate notice to the Commissioner of Agriculture prior to publication in the *State Register*. However, as noted above, the Commissioner of Agriculture is a member of the EQB Board (see Finding 3), and staff from the Department of Agriculture were involved in drafting the rule. Transcript of January 21 hearing, at pp. 21-28 and letter dated January 5 from Sharon Clark, Acting Commissioner. In this letter, Acting Commissioner Clark states that the Department of Agriculture did have adequate advance notice of the rule and urged the Administrative Law Judge to treat the matter as a harmless error. The Administrative Law Judge finds that, under the circumstances noted above, the Board's failure to formally notify the Department of Agriculture of the proposed rule prior to publication is a harmless error.

Statutory Authority

23. Minnesota Statutes § 116D.04, subd. 2a(a) (1998) provides:

The board shall by rule establish categories of actions for which . . . environmental assessment worksheets shall be prepared as well as categories of actions for which no environmental review is required under this section.

This grants the EQB the authority to define which actions will or will not trigger mandatory environmental review via an environmental assessment worksheet. The EQB properly invoked Minn. Stat. 116D.04 as a source of its rulemaking authority. See SONAR p. 2.

⁹ Minn. Stat. § 14.15, subd. 3.

¹⁰ Minn. Stat. § 14.05, subd. 2.

24. During the 1998 session, the Minnesota legislature enacted the following directive:

The environmental quality board, in consultation with the pollution control agency, shall study and adopt rules pursuant to Minnesota Statutes, chapter 14, to revise and clarify Minnesota Rules, part 4410.1000, subpart 4, as it applies to connected actions on animal feedlots and the need for environmental review.

Laws of Minn. 1998, ch. 401, § 54.

25. Opponents of the proposed amendments challenged the authority of the EQB to eliminate the connected actions provision. Opponents view the language of the Act (directing the EQB to "revise and clarify") as proof of the legislature's intent that the concept of connected actions to environmental review of feedlots *not* be eliminated. They reason that elimination of connected actions is beyond the authority of the EQB because to do so is beyond legislative intent. See Transcript vol. 3A, p. 40. The Administrative Law Judge finds their reading of the Act to be too strained. The Act does not preclude elimination of the concept of connected action. Moreover, the authority of the Board granted by Minn. Stat. §116D.04 is broader than that provided by the 1998 Act. The EQB has the authority to specify which categories of actions require an EAW. The proposed rule revises the categories of actions that require an EAW. It is concluded that the EQB is acting within its authority to propose the elimination of connected actions and to create new categories of actions that require EAWs.

Cost and Alternative Assessments in SONAR

26. Minn. Stat. § 14.131 provides that state agencies proposing rules must identify classes of persons affected by the rule, including those incurring costs and those reaping benefits; the probable effect upon state agencies and state revenues; whether less costly or intrusive means exist for achieving the rule's goals; what alternatives were considered and the reasons why any such alternatives were not chosen; the cost that will be incurred complying with the rule; and differences between the proposed rules and existing federal regulations.

27. In the SONAR, the Board addressed each of these requirements.¹¹ The Administrative Law Judge finds that the Board has complied with the requirements of the statute.

¹¹ Ex. 7, pp. 4-6.

Performance-Based Regulation

28. Minn. Stat. § 14.002 directs all agencies, whenever feasible, to develop rules that emphasize superior achievement in meeting the agencies' regulatory objectives and a maximum flexibility for the regulated public in meeting those goals. It also requires agencies to describe in the SONAR how they considered this policy. The Board stated in its SONAR that it did not believe the statute applied to these rules because they did not relate to a "regulatory program".

29. The Administrative Law Judge disagrees. The setting of precise thresholds, distances and other specifics, which is done in these rules, is the type of rulemaking which the legislature intended to address by the statute. However, in this case the record does contain numerous suggestions from the public for changes to the rule, including changes that offer increased flexibility in meeting the underlying program goals. The public has had a full opportunity to address these issues. The Administrative Law Judge finds the Board's error to be a harmless error.

History of the Proposed Rule

30. The use of multisite animal feedlots as a method of producing farm animals is becoming more common, especially for raising hogs. See SONAR, p. 3. In the multisite production method for hogs, the animals are born at one site, and then transported one or more times to other sites to be raised to an appropriate body weight before slaughter. See Exhibit 16. The individual sites may vary substantially in distance from one another. Regardless of distance or size, under current rule, the individual sites of a multisite project are often treated as a "connected action" under Minn. R. 4410.0200, subp. 9b. See Transcript vol. 1A, p. 21 and Exhibit No. 20, *Pope County Mothers and Others Concerned for Health v. Minn. Pollution Control Agency*, Pope County District Court File No. C1-98-76 dated September 15, 1998. The issue of whether it is appropriate to apply the concept of "connected actions" to determine if multisite animal feedlots should be subject to environmental review is in dispute. See SONAR, p. 3. The Minnesota legislature considered this issue in 1998, but did not change existing law. Instead, it directed the EQB to "revise and clarify" the application of the concept of connected actions to environmental review of animal feedlots.

31. In response, the EQB solicited proposals for alternative ways to apply the concept of connected actions to feedlots. See SONAR, pp. 1-2; Transcript vol. 1A, p. 23. Some commenters suggested only repealing or retaining the connected actions concept. See Transcript vol. 1A, p. 24. Others suggested the repeal of connected actions and use of animal density per unit of land area as an alternative. The EQB considered these views and formulated five options; none was "strongly supported." The EQB convened a stakeholders

group to solicit additional ideas. The proposed rules resulted from proposals made at the stakeholders' meetings. However, there was no vote or consensus position which was supported by all of the participating stakeholders. See Transcript vol. 1A, p. 25; SONAR, p. 2. Some of the stakeholders and other people that commented on the proposal were opposed to removing the connected actions without having some kind of compensating lowering of thresholds for mandatory EAWs. That "compromise" was the genesis of these proposals.

Related Proceedings: The GEIS and the MPCA Ch. 7020 Rules

32. The timing of this EQB rulemaking proceeding was dictated by the legislative directive noted in Finding 24 above. In order to comply with the legislative schedule, this rulemaking had to be conducted at this time. However, there are two other proceedings which relate to feedlots and animal agriculture that may affect the content of these rules. First, the MPCA is about to propose a wide-sweeping update of its feedlot rules, Minn. Rules Ch. 7020. Public hearings for the MPCA project were tentatively scheduled for the spring of 1999, but have now been postponed until June. While the precise details of the MPCA's proposed amendments are not yet public, MPCA (and others) did submit comments suggesting the likely content of some of the rules particularly pertinent to these EQB rules. (See letter dated February 19 from Lisa Thorvig, Acting Commissioner, and draft rules submitted by MCEA). Secondly, the EQB is in the process of preparing a generic EIS on animal agriculture, including feedlots. (SONAR, p. 9). This document is expected to provide new data on a number of the issues raised by these rules. The generic EIS has been scoped, but it is not expected to be finalized until 2001. A number of commentors suggested that this EQB rulemaking effort was poorly timed, because (1) the GEIS was expected to generate data that would assist with the decisions here and because (2) the MPCA rules were far more comprehensive than these rules, and it made no sense to proceed with this partial set now until the status of the MPCA rules was finalized, so that there would be a minimum of conflict and confusion.

33. In addition to those two specific actions, this is a time of increasing scrutiny and discovery of the environmental impacts of large-scale feedlots. For example, it was in May of 1998 that Greg Pratt of the MPCA released his study of cumulative impacts from feedlot air emissions. Ex. 23. The *Hancock Pro-Pork* decision was released in September of 1988. Ex. 20. The MPCA issued its Guidance Document on Cumulative Effects of Feedlot Air Emissions in January of 1999. Ex. 36. As we learn more, we can write "better" rules, in the sense that we can more precisely target the problems to be avoided and the best solutions for them. Any efforts at this time must be viewed as only temporary solutions, which ought to be re-examined within a few years.

Rule by Rule Analysis

Connected Actions

34. Multiple projects that are "connected actions" must be considered in total when determining the need for an EAW, preparing the EAW, and determining the need for an EIS. They must be considered in total when determining whether various thresholds have been met, thus triggering various types of environmental review.

35. Connected actions with respect to environmental review are defined in Minn. Rule 4410.0200, subp. 9(b):

Two projects are "connected actions" if a responsible governmental unit determines they are related in any of the following ways:

- A. one project would directly induce the other;
- B. one project is a prerequisite for the other; or
- C. neither project is justified by itself.

36. The proposed rule eliminates the application of connected actions provision to determine whether proposed multisite animal feedlots must prepare an EAW.

37. Proponents and opponents of the proposed rules attacked the reasonableness of either retaining or eliminating the connected actions provision.

38. Opponents of removing the "connected actions" provision expressed concern about potential or actual environmental effects of multisite feedlots on water and air quality. In their view, pollutants discharged from several individual feedlots *within some proximity* have cumulative effects on air and water. Many believed in the general need to assess potential cumulative effects on water and air. Commentors felt that there should be some mechanism to trigger mandatory environmental review of related projects to assess cumulative effects. They desired to retain the connected action provision in order to assess these cumulative efforts.

39. The cumulative effects of feedlot runoff on groundwater pollution may be significant. See Letter from Minnesota Project, p. 2 (Feb. 11, 1999). The cumulative effects of excess nitrate and phosphorus on soil and water is a major concern. *Id.*

40. Cumulative effects on air quality from volatile chemicals released from several individual animal feedlots may be significant. Hog facilities, for example, release hydrogen sulfide (H_2S) and ammonia (NH_3) gas into the

surrounding air. The recent MPCA modeling study finds that heightened concentrations of these gases may result from the cumulative effect of several individual hog facilities in close proximity to one another. Ex. 23. The cumulative effects on air H₂S concentrations may be apparent for up to 4.9 miles downwind from sources with high emissions. See *id.* The effect of NH₃ is evident up to 1.6 miles downwind from such sources. Thus cumulative effects on air quality may arise from closely situated, yet geographically distinct feedlots. Of course, cumulative air effects have nothing to do with any economic relationship between feedlots.

41. The Minnesota Pollution Control Agency is now requiring air emissions analysis for all EAWs for an area 5.5 miles around a proposed project. If the average AU density within that area exceeds 0.25 AU per acre, then cumulative air emission modeling using a sophisticated model is now required. Ex. 36. However, it is unknown at this time whether the MPCA, in the absence of an EAW, intends to require any sort of air quality modeling as part of its permit process under its new rules. See MCEA letter of February 19.

42. Several commentors believed that application of connected actions also served a useful purpose in simply identifying for the public projects which have multiple sites and share common owners. Disclosure to the public of a proposed project before it is constructed is another important function of the EAW. See, e.g., SONAR at p. 3. The EAW process allows public inquiry into the project while still in the proposal stage. This is important to correcting errors in information and discovering problems of environmental importance that may lead to changes in the project or in the conditions of the feedlot permit. (See, e.g., Transcript vol. 3A, pp. 32-33, 42, 46, 48, 76).

43. Opponents of eliminating connected actions for feedlots were concerned that feedlots currently subject to review as connected actions would no longer be reviewed under the proposed rule. Many individual hog facilities are built just below the 1000 AU threshold to avoid other permits. "There is no rational basis for eliminating the [connected action] rule and then not providing an approach which would capture the same facilities that are currently covered by an environmental review." Transcript vol. 3A, p. 50.

44. Proponents of the rule change contend that the connected actions rule is itself irrational and thus its elimination is rational. See Transcript vol. 3A, p. 93, 3B, p. 18. The connected actions definition connects feedlots having economic relationships. These *economic* relationships may or may not reflect a relevant *environmental* relationship having potential for cumulative harm. See Letter from The Turkey Store, p. 1 (February 25, 1999); Exhibit No. 32, Comments of the Turkey Store, pp. 6-7. A connected action may reflect an economic relationship between geographically distant sites. At some distance, direct environmental relationships between the sites ceases to exist; at this point

the connected actions relationship becomes meaningless for purposes of environmental review. In addition, the connected actions provision does not address environmental effects of neighboring feedlots that are not economically connected actions, yet are in close enough proximity to have potential cumulative environmental effects. Replacing connected actions with criteria that are more directly related to the potential for environmental harm from a project makes more sense. See Letter of Patricia Bloomgren, Director of Minn. Dept. of Health, p. 1 (February 26, 1999). The EQB agrees generally with the foregoing analysis. See Letter of Gregg Downing, Environmental Quality Board (February 26, 1999).

45. So long as an EAW is required to be prepared, the cumulative effects of nearby feedlots will be addressed in the preparation of an EAW regardless of any economic relationship (See MPCA Guidance, Ex. 36). Connected actions is not a prerequisite for addressing cumulative effects.

46. Many livestock producers favored eliminating connected actions. Preparation of EAWs are bound to add unwanted costs to a feedlot proposal. Connected actions may penalize cooperative efforts of small farmers, by "connecting" their coordinated efforts to the point that an EAW is required. See Transcript vol. 4B at p. 26.

47. The proposed rules retain the phased action provision.¹² Individual feedlots that expand in stages are still covered. See, e.g., Letter of John McIntosh regarding Metro Dairy, a phased and connected action.

48. Sometimes, the current connected actions provision identifies multiple sites that should be reviewed together because they pose cumulative environmental effects. However, at other times connected actions identifies sites that pose no cumulative environmental effects. Thus, the current connected actions provision is found to be a seriously imprecise method of determining whether the potential for cumulative environmental harms exist. The Administrative Law Judge finds that the Board has justified the need for, and reasonableness of, elimination of connected actions and its replacement by other criteria that more directly address the potential for environmental harm.

Lowering size threshold of a facility for triggering mandatory EAW from 2000 to 1000 animal units where the facility is not in a "sensitive area."

49. The current rule requires an EAW for a construction or expansion of a proposed feedlot greater than 2000 AU¹³ in size.

¹² Phased actions are two or more projects undertaken by the same proposer, reasonably close in time that will impact the same geographic area.

50. The proposed rule requires an EAW prior to construction or expansion of a feedlot greater than 1000 AU in size. The threshold applies to facility whether it is a confinement or nonconfinement type.

51. Farmers, agribusiness representatives and local public officials expressed concerns that lowering the threshold will make preparation of EAWs mandatory for more farmers. Their concerns were: 1) perceived high cost of EAW preparation; 2) lengthy time of preparation of EAWs, leading to costly delays in construction; and 3) administrative "logjams" at MPCA, leading to delays in completion of EAW and permitting decisions.

52. Some commentors suggested that a threshold of 500 to 750 AU is more appropriate than a threshold of 1000 AU. This view was based the observation of high concentrations in air pollutants by a few feedlots of that size. MCEA's February 19 letter cited Ex. 22 for the proposition that of 24 facilities found to have violated the hydrogen sulfide standard during 1998 monitoring, eight were below 1000 AU. The single highest exceedance was from a facility with only 360 AUs.

53. Decreasing the threshold was also criticized on the ground that the threshold for permits for NPDES is 1000 AU. Since NPDES permits require "greater site specific environmental controls," requiring an EAW was seen as unnecessary. See Letter of Gene Hugoson, Department of Agriculture (February 19, 1999). However, supporters of the 1000 AU threshold noted that it comports with the current requirements for various feedlot permits, such as the federal NPDES permit. See SONAR, p. 4; Letter of Patricia Bloomgren, Director of Minn. Dept. of Health, p. 1 (February 11, 1999); Letter from The Minnesota Project, p. 2 (February 11, 1999), and thus the cost of EAW preparation will not

¹³ "Animal unit" is a unit of measure used to compare differences in the production of animal manures that employs as a standard the amount of manure produced on a regular basis by a slaughter steer or heifer. Currently, the equivalents are:

- A. one mature dairy cow, 1.4 animal unit;
- B. one slaughter steer or heifer, 1.0 animal unit;
- C. one horse, 1.0 animal unit;
- D. one swine over 55 pounds, 0.4 animal unit;
- E. one duck, 0.2 animal unit;
- F. one sheep, 0.1 animal unit;
- G. one swine under 55 pounds, 0.05 animal unit;
- H. one turkey, 0.018 animal unit;
- I. one chicken, 0.01 animal unit.

For animals not listed in items A to I, the number of animal units is the average weight of the animal divided by 1,000 pounds. Minn Rule pt. 7020.0300, subp. 5, applied to EAWs through Minn. Rule pt. 4410.0200, subp. 3. The MPCA may be considering changes to these numbers in its upcoming rulemaking proceeding.

be as great because much of the material needed for the EAW will also be needed for the permit. Use of an animal population threshold is a rational test of the need for environmental review. Letter of Lisa Thorvig, MPCA (February 19, 1999).

54. Lowering the threshold will capture a few of the projects "lost" by the elimination of the connected actions provision. However, it will capture more projects which are not connected actions. It was part of the trade-off for eliminating the connected actions provision. In general, it is fair to say that the more animal units, the greater the risk, *all other things (such as location) being equal*. There are other ways to assess risk, such as using the data from the Pratt study to set a distance guideline for EAW purposes. But AU numbers is also a reasonable measure for a threshold.

55. The Administrative Law Judge agrees with the MPCA that, ultimately, the amount of environmental review should depend upon a complex weighing of density of pollution sources of all kinds in an area, the proximity of residents and other sensitive receptors in the area, and other similar factors. But for now, the Administrative Law Judge finds that the Board has demonstrated a rational basis for its proposed 1000 AU threshold.

Increasing the threshold for exemption of feedlots constructed outside of sensitive areas from 100 to 300 AU.

56. The proposed amendments to Minn. Rule 4410.4600, subp. 19 raise the exemption threshold for construction of new animal feedlots from 100 to 300 AU. The threshold for expansion of existing feedlots remains at 100 AU. These exemptions apply only to feedlots located outside of enumerated sensitive areas. In addition, the modification of an existing feedlot where expansion is less than 300 AU is exempted if the modification is necessary to obtain a feedlot permit. If a project is exempt pursuant to this subpart, it is totally exempt from the entire program. The exemption applies to petitions as well; they are of no effect for exempt projects. Finally, the Board proposes to add a *de minimis* provision which would exempt the construction or expansion of a feedlot with a resulting capacity of less than 50 AU, regardless of location.

57. The proposed changes were generally favored. Matching environmental review thresholds with permitting thresholds makes sense. The 300 AU threshold is currently a proposed permitting threshold in the MPCA's feedlot rule revision. See Letter of Lisa Thorvig, MPCA (February 19, 1999). Smaller feedlots are not considered have as much potential for significant environmental harm if sited outside of sensitive areas. See Letter of Patricia Bloomberg, Director of Minn. Dept. of Health, p. 3 (February 11, 1999). This change focuses limited staff time on environmental review for the larger feedlots

that have the greatest potential for affecting air and water quality. Sufficient facts exist in the record to make the 300 AU threshold for exemptions reasonable.

58. A question was raised regarding the exemption of modification projects needed to obtain a feedlot permit. The question was whether that exemption was available for both sensitive and non-sensitive areas. The EQB staff indicated an intent that it apply to both. The Administrative Law Judge agrees that the wording of the subparagraph does not indicate any locational limitation, and thus the exemption is available anywhere.

Sensitive Areas

59. For construction or expansion in sensitive areas, the proposed rules have two main parts. Subpart 29 of 4410.4300 added additional facilities to the mandatory EAW list. Subpart 19 of 4410.4600 expands the number of facilities that were exempted from EAW requirements. Both changes are designed to better focus EAWs toward projects that have greater environmental risks.

60. In subpart 19, lines 14 though 18 added a new requirement for an EAW for any construction or expansion of a feedlot in certain sensitive locations. These are sensitive locations with respect to surface water or groundwater quality. Those sensitive locations are specifically listed and include:

- Shoreland
- Delineated floodplain
- State or federally designated wild and scenic river districts
- Minnesota River Project Riverbend area management district
- Mississippi Headwaters area management district
- Drinking Water Supply Management Area designated under Chapter 4720 of the State Health Department or
- Within 1000 feet of a known sinkhole

61. In the SONAR, EQB explained:

an EAW is required for any new construction or any expansion of a feedlot if it is situated in certain sensitive areas based on water quality concerns. All stakeholders consulted agreed that this revision was reasonable because feedlots in these areas clearly pose a potential threat to

ground or surface waters. Although this threshold is low, it is unlikely to result in many EAWs because few producers will even attempt to build or expand feedlots in these recognized sensitive areas.

After the hearings, the Board proposed to modify this rule to allow smaller (300 and under) construction and expansion projects without requiring an EAW in every case. See Finding 78, below.

62. Some additional information on the regions included in the definitions of sensitive areas include:

- Shoreland -- means land located within the following distances from the ordinary high water elevation of public waters: (1) land within 1,000 feet from the normal high watermark of a lake, pond, or flowage; and (2) land within 300 feet of a river or stream or the landward side of a floodplain delineated by ordinance on the river or stream, whichever is greater. This is designated and regulated by the DNR.
- Delineated floodplain -- the land adjoining lakes and rivers which is covered by the "100 year" or "regional" flood. This flood is considered to be flood that has a one- percent chance of occurring in any given year. Typically governed by floodplain zoning ordinances.
- State or federally designated wild and scenic river districts – lands designated and subject to a plan for preservation developed by the DNR. It is an entire river or a segment of a river and adjacent lands that possess "outstanding scenic, recreational, natural, historical, scientific, or similar values". The districts can include up to 320 acres of land per river mile on both sides of the river. The list of such rivers includes:
 - Kettle River in Pine County
 - Lower St. Croix from Taylor's Falls to the Mississippi River
 - Mississippi River from St. Cloud to Anoka
 - North Fork Crow River in Meeker County
 - Minnesota River from Lac Qui Parle dam to Franklin
 - Rum River in Mille Lacs, Sherburne, Isanti, and Anoka Counties
 - Cannon River from Faribault to the Mississippi River

- Minnesota River Project Riverbend area management district -- includes part of the counties of Renville, Redwood, Brown, Nicollet, Blue Earth, and Le Sueur. A board representing the counties is to develop and implement a comprehensive management plan for the preservation of the district.
- Mississippi Headwaters area management district -- area managed by a board consisting of member from the counties of Clearwater, Hubbard, Beltrami, Cass, Itasca, Aitkin, Crow Wing, and Morrison.
- Drinking Water Supply Management Area designated under Chapter 4720 of the State Health Department relating to a recent program of the Department of Health designed to protect municipal and similar drinking water wells from contamination.
- Within 1,000 feet of a known sinkhole.

* * *

These sensitive areas cover a significant portion of the state. The biggest sensitive areas are those located in 100-year flood plains¹⁴ and those that contain sinkholes. From the comments, it is clear that these areas do contain a significant number of feedlots already that may seek to expand and are in farming communities that may attract new feedlot construction.

Karst Topography Areas

63. Commentors on the subject of sensitive areas were mostly concerned with requirements to mandate EAWs for feedlots within 1,000 feet of a sinkhole. As several commentors pointed out, sinkholes can develop suddenly and unexpectedly. In Minnesota, there are at least three known cases where sinkholes have developed directly under existing sewage lagoons (see Finding 63, below). Other commentors pointed out that other karst features, such as near-surface caves, resurgent springs, disappearing streams, and karsted bedrock are as likely as sinkholes to lead to groundwater contamination. Other commentors pointed out that a problem with the existing proposal is that it requires feedlot operators to locate and self report sinkholes, which they may be reluctant to do.

64. Some southern Minnesota counties are dominated by karst geography. One commentator pointed out that in a survey of just two townships in Houston County there were 60 known sinkholes effecting 40 farms. Fillmore County has over 6,000 documented sinkholes, and the estimate is that the

¹⁴ The draft MPCA rules would appear to prohibit the construction or expansion of any feedlot within a 100-year floodplain. However, the MPCA is also considering an exception that would allow new feedlots to be constructed within the Red River Valley floodplain if they are at least 1,000 feet from the ordinary high water mark. The EQB may want to consider a similar exception for EAWs.

number should be closer to 10,000. There are 990 feedlots in Fillmore County and approximately 20 percent of them are within 1,000 feet of a known sinkhole. Rock County was estimated to have 535 sinkholes in 1984 and currently has approximately 732 feedlots.

65. As Dr. George Huppert, Professor of Geography and Earth Science at the University of Wisconsin-LaCrosse and chair of the department there testified:

Down here in southeast Minnesota, since 1974 there have been a collapse of three sewage lagoons: two at Altura, in 1974 and 1991, that's in Winona County; one in Lewiston in Winona County. I couldn't find a date on that, but it's fairly recent. And one in Bellechester, which is on the Goodhue-Wabasha County line, in 1992. These sinkhole – these lagoon collapses dumped literally millions of gallons of sewage, minimally-treated sewage into the groundwater system. Under the proposed rule of 1,000 feet setback to a sinkhole, all of these lagoons would have been approved, because on the maps around these sewage lagoons you will not find a sinkhole within a 1,000 feet. On the other hand, the reason for the collapse of these lagoons was the breaching and opening of a sinkhole beneath the lagoon (Tr. 4B, pp. 14-15).

66. Commentors such as the Minnesota Department of Health, Minnesota Department of Natural Resources, and Dr. Calvin Alexander, a Professor of Geology at the University of Minnesota and the state's expert on karst topography, all stated that other karst features are just as likely to lead to groundwater contamination as a sinkhole. The commentors recommended two alternatives: first, to require EAWs for any feedlot within a 1,000 feet of *any* karst feature including sinkholes, caves, resurgent springs, disappearing streams, karst windows, blind valleys, dry valleys, exposed bedrock and other karst features; or second, to use the county atlas maps and require EAWs for feedlots built in areas that have been mapped as being "high" or "moderate-high" probability of sinkhole development.

67. Commentors opposed to the requirement for EAWs in sensitive areas cited the costs and delays in obtaining an EAW as an unreasonable burden on small feedlot operators. They felt that the fact that counties such as Houston, Rock, and Fillmore have so many sinkholes, and so many feedlots, makes this an unfair and unreasonable burden for the feedlot operators in their region.

68. In this karst region, the question of whether or not any given new or expanded facility has a significant potential to adversely affect the environment is truly a case-by-case question. The very first witness to testify at the first hearing session was the Houston County zoning administrator. He pointed out that the topography of portions of Houston County is such that it is entirely possible that a proposed feedlot within a thousand feet of a known sinkhole can be located, topographically, in such a way that it has no flowage to the sinkhole at all. Tr. 1A, pp. 40-41. Although he did not say so, the Administrative Law Judge believes that it is also possible to have a feedlot site located more than a thousand feet from a known sinkhole that does, in fact, have a direct hydrologic connection to groundwater near the sinkhole. In other words, the distance to a known sinkhole is no guarantee of groundwater protection (unless the distance chosen is very large, probably measured in miles, which is not reasonable). What is needed is a site-by-site evaluation. And that is what an EAW provides. But to avoid having to do an EAW on every site, the rule should separate out those with the potential for environmental harm from those without the potential. The persons and agencies who have done the greatest amount of study in this area universally suggest that the Board's proposal is inadequate. This includes Dr. Alexander (noted above), Dr. George Huppert, Chair of the Geography and Earth Science Department at the University of Wisconsin at LaCrosse (Tr. 4B, pp. 13-20 and letter dated January 24), the Minnesota Department of Health (letters of February 11 and February 26), and the Minnesota Department of Natural Resources (comments dated January 19). Each of them argues that in order to protect groundwater from contamination, what is needed is adequate depth of soil and slow percolation rates. They argue that while sinkholes are a visible and easily understood path for surface contamination to reach groundwater, they are not the only means. Instead, they are merely one indicia of karst geology.

69. In response to the comments, the EQB recommended against making any changes to the sinkhole language. They acknowledged that there were other factors to consider, such as the depth to groundwater or the existence of bedrock, but felt that the rule would be too difficult to draft and too uncertain to implement if all these factors were addressed in the rule.

70. The Administrative Law Judge finds that EQB's reason for including the requirement of EAWs within 1,000 feet of a sinkhole was to protect the groundwater of these regions. But, as was made clear by the comments, the current language fails in that goal. Requiring EAWs only for feedlots within 1,000 feet of a known sinkhole ignores the many other karst features that may directly lead to groundwater contamination. The EQB's reasoning that changing the language would be too difficult is not convincing. The use of the maps, although the best answer in the long run, is not feasible for all areas at this time. The maps are not available for all counties and their accuracy and timeliness may lead to other problems. The best alternative is to require an EAW for a feedlot

within 1,000 feet of a known karst feature or locations with exposed bedrock. As recommended, the definition of a karst feature would include sinkholes, caves, resurgent springs, disappearing streams, karst windows, blind valleys, and dry valleys.

71. The proposed rule has not been shown to be reasonable. While it is simple, it is not a rational response to the problem. To cure this defect, the Board should adopt some combination of the map test and the list of karst features.

Wellhead Protection Areas

72. Commentors were also concerned with the requirement that EAWs be prepared for projects in a "wellhead protection area designated under chapter 4720". The problem is that many of these areas have not yet been designated and so there is no certainty where or how extensive these areas might be.

73. EQB responded to this concern by adopting a portion of the Minnesota Department of Health's proposed solution, which was a change in the language to "drinking water supply management area delineated under chapter 4720". But similar problems arise with this language. As the Department of Health stated in their February 26 response, MDH has a ten-year goal of delineated all drinking water supply management areas. The process is not even half done yet. By only requiring EAWs for projects within those delineated protection areas, the rule would ignore all of the ones that MDH has not delineated yet. MDH asked that the language include "for wells not yet delineated, a two mile radius for a community or nontransient noncommunity water supply well that the Minnesota Department of Health has determined is potentially vulnerable to contamination." EQB responded by stating this language was "too unwieldy and will lead to disagreements and delays". MDH replied that it has already faced this problem in connection with feedlots, underground storage tanks, and other contexts, and has worked out a procedure with MPCA to use the temporary two-mile radius for those wells which have not yet had their designated DWSMAs finalized. MDH staff are able to make reasoned judgments about the vulnerability of wells in undelineated areas because they have established criteria (Minn. Rule pt. 4720.5550, subp. 2) to guide them. MDH argues that since MPCA will likely be the RGU for feedlots in sensitive areas, there should be no problem with using the same process here.

74. The Administrative Law Judge finds that the EQB's proposal, which would leave the undesignated wells without any protection, is unreasonable. This defect can be cured by adopting all of the language proposed by MDH in its letter of February 11, at page 2. If the Board feels uncomfortable with the discretion allowed by that language, it could add some limiting language referencing "the criteria contained in Minn. Rule pt. 4720.5550."

Definition of Expansion

75. Several commentors pointed out the necessity to clarify the definition of "expansion". EQB explained that expansion in case of all categories means an increase in whatever the parameter is used. In this case, expansion is measured with respect to the number of animal units. The Board intends to measure by expansion of permitted capacity, not just the addition of one animal unit. If the feedlot operator seeks to add AUs above the current permitted level, that is an expansion. The addition of AUs that does not exceed the facility permit capacity would not be considered an expansion.

76. Item B under subpart 19 allows modification without expansion of capacity of any feedlot of no more than 300 AUs if the modification is necessary to secure a Minnesota feedlot permit. This exemption was created to allow feedlot operators to make upgrades to their system, such as manure handling methods, that will allow them to come into compliance with the feedlot permit program. This exemption would apply whether the facility was located in a sensitive or non-sensitive area. Based on the revised language proposed by the EQB in their February 26 letter, this exemption would continue to apply even if there was an expansion that resulted in a facility with a capacity of less than 50 AUs. The Administrative Law Judge finds that the Board has justified both of these interpretations.

Changes to the Proposed Rule

77. Much of the concern over the EQB's original proposals was in response to concerns about their impact on small farms. Many commentors noted the financial and time difficulties that the EAW could cause for construction and expansion of these facilities in areas such as the karst areas of southeastern Minnesota. And most commentors felt that the large, mostly commercial feedlot operations could absorb the burden of the EAW with less impact. EQB was receptive to these concerns and proposed several changes to the proposed language in their letters dated February 19 and 26.

78. One change to respond the comments of those that want to protect small farms was to limit the *mandatory* EAW requirement in sensitive areas to construction of feedlot facilities of more than 300 AUs or expansion of an existing facility by no more than 100 AUs. As the EQB notes in their letter, this does not mean that small feedlots in sensitive areas are exempt from EAW review, only that it is not mandatory. An EAW could still be required by the county, PCA, or in response to a citizen petition.

79. EQB went a step further in their February 26 response by modifying Part 4410.4600, Exemption categories, Subpart19 (A) to exempt, even in sensitive areas, construction or expansion of a feedlot with a resulting capacity of

less than 50 AUs. This language was supported by the many of the comments from both individuals and agencies.

80. This change in language leads to the following breakdown for EAWs:

EQB FINAL PROPOSAL¹⁵

CONSTRUCTION

AUs	Not Sensitive Areas	Sensitive Areas
OVER 1001	Mandatory	Mandatory
301-1000	May Be Requested	Mandatory
UNDER 300	Exempt	May Be Requested
UNDER 50	Exempt	Exempt

EXPANSION

AUs	Not Sensitive Areas	Sensitive Areas
OVER 1001	Mandatory	Mandatory
301-1000	May Be Requested	Mandatory
100-300	May Be Requested	May Be Requested
50-99	Exempt	May Be Requested
UNDER 50	Exempt	Exempt

Who Will Be the Responsible Governmental Unit?

81. The EQB initially proposed that the PCA be the preparer of mandatory EAWs unless the county would issue the feedlot permit, in which case the county would be the RGU. This drew a few comments, particularly one from

¹⁵ To minimize complexity, this chart does not include special provisions for modifications necessary to obtain a feedlot permit.

the MPCA. In its letter of February 19, the MPCA questioned whether it was a good idea for counties to be the RGUs, particularly in light of recent developments requiring air dispersion modeling of both the proposed facility and surrounding facilities when cumulative air impacts are at issue. This is the matter discussed at Finding 41. The MPCA noted:

[T]he MPCA is currently working to develop tools and guidance to better assess the potential environmental impacts of feedlot operations, regardless of their size. As these tools and strategies are developed, the MPCA is planning to share that information with the counties that have delegated permitting authority, in order to provide them with the ability to conduct environmental review, as envisioned by this rule change. This effort, however, will take some time. As a result, the MPCA asks that the EQB consider "phasing in" the requirement for counties to take on the RGU designation for environmental review of feedlots for which they would issue a permit. (MPCA letter of February 19).

82. In response, the EQB noted that those county officials, including zoning and feedlot officers, who did comment during the hearing supported the idea of requiring fewer EAWs, but did not generally object to the concept of the county being the RGU responsible for preparation of the EAWs. The EQB agreed with the MPCA that some delay in transferring the RGU responsibility would be appropriate. The EQB recommended that an eighteen-month delay, to January 1, 2001, would be an appropriate time for the MPCA to develop and disseminate the necessary knowledge to assist counties in this task. Therefore, the EQB recommended that the language proposed for part 4410.4300, subp. 29, be amended to delay its application until January 1, 2001.

83. The Administrative Law Judge finds that this is a reasonable change. As noted earlier, recent developments will cause some EAWs to be more complicated to prepare than they have been in the past. It is appropriate that the agency with the greatest amount of staff expertise in air quality modeling, the MPCA, prepare guidance for others to follow. Delaying the transfer for 18 months is a reasonable way to accomplish that goal. This change does not result in a substantially different rule, and may be adopted.

Based upon the foregoing Findings of Fact, the Administrative Law Judge makes the following:

CONCLUSIONS

1. That the Environmental Quality Board gave proper notice of the hearing in this matter.

2. That the Board has fulfilled the procedural requirements of Minn. Stat. §§ 14.14, subds. 1, 1a, 1b and 14.14, subds. 2 and 2a, and all other procedural requirements of law or rule, except as noted at Findings 22 and 29, which are both harmless errors.

3. That the Board has demonstrated its statutory authority to adopt the proposed rules and has fulfilled all other substantive requirements of law or rule within the meaning of Minn. Stat. §§ 14.05, subd. 1, 14.15, subd. 3 and 14.50 (i) and (ii).

4. That the Board has documented the need for and reasonableness of its proposed rules with an affirmative presentation of facts in the record within the meaning of Minn. Stat. §§ 14.14, subd. 2 and 14.50 (iii), except as noted at Findings 71 and 74.

5. That the amendments and additions to the proposed rules which were suggested by the Board after publication of the proposed rules in the State Register do not result in rules which are substantially different from the proposed rules as published in the State Register within the meaning of Minn. Stat. §§ 14.05, subd. 2 and 14.15, subd. 3.

6. That the Administrative Law Judge has suggested action to correct the defects cited in Conclusion 4 as noted at Findings 71 and 74.

7. That due to Conclusions 2 and 4, this Report has been submitted to the Chief Administrative Law Judge for his approval pursuant to Minn. Stat. § 14.15, subd. 3 or 4.

8. That any Findings which might properly be termed Conclusions and any Conclusions which might properly be termed Findings are hereby adopted as such.

9. That a finding or conclusion of need and reasonableness in regard to any particular rule subsection does not preclude and should not discourage the Board from further modification of the proposed rules based upon an examination of the public comments, provided that the rule finally adopted is based upon facts appearing in this rule hearing record.

Based upon the foregoing Conclusions, the Administrative Law Judge makes the following:

RECOMMENDATION

IT IS HEREBY RECOMMENDED: that the proposed rules be adopted except where specifically otherwise noted above.

Dated this 30th day of March 1999.

Allan W. Klein

ALLAN W. KLEIN
Administrative Law Judge

Reported: Transcript Prepared: Shaddix and Associates, Bloomington, Minnesota