7-2200-6025-1

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS

FOR THE MINNESOTA POLLUTION CONTROL AGENCY

In the Matter of Proposed
Rules Governing Requirements for
Aquaculture Facilities,
Minnesota Rules Part 7050.0216.

REPORT OF THE ADMINISTRATIVE LAW JUDGE

The above-entitled matter came on for hearing before Administrative Law Judge Richard C. Luis for afternoon and evening sessions on January 29, 1992 at the Grand Rapids City Hall and on January 31, February 13, February 14 and February 27, 1992, at the Pollution Control Agency Board Room, 520 Lafayette Road, St. Paul.

This Report is part of a rulemaking proceeding held pursuant to Minn. Stat. 14.131 to 14.20, to hear public comment, to determine whether the Minnesota Pollution Control Agency (MPCA, PCA or Agency) has fulfilled all relevant substantive and procedural requirements of law applicable to the adoption of the rules, whether the proposed rules are needed and reasonable and whether or not modifications to the rule proposed by the MPCA after initial publication are impermissible substantial changes.

Richard P. Cool, Special Assistant Attorney General, Suite 200, 520 Lafayette Road, St. Paul, MN 55155, appeared on behalf of the MPCA. The MPCA's hearing panel consisted of Douglas A. Hall, Supervisor of the Permits Unit, Industrial Section, Water Quality Division; Gene M. Soderbeck, Supervisor of the Technical Review Unit, Industrial Section, Water Quality Division; Jim Strudell, Senior Pollution Control Specialist, Industrial Section, Water Quality Division; C. Bruce Wilson, Research Scientist in the Nonpoint Source Section, Water Quality Division; Steven A. Heiskary, Research Scientist in the Nonpoint Source Section, Water Quality Division and Richard J. Wedlund, Research Scientist in the Standards Unit, Assessment and Planning Section, Water Quality Division.

Approximately three hundred persons attended the six hearing sessions, a number of whom attended on multiple occasions. 117 persons signed the hearing register. The hearings continued until all interested persons, groups or associations had an opportunity to be heard concerning the adoption of this rule.

The record remained open for the submission of written comments for twenty calendar days following the date of the last hearing, to March 18, 1992. Pursuant to Minn. Stat. 14.15, subd. 1 (1988), three business days were allowed for the filing of responsive comments. At the close of business on March 23, 1992, the rulemaking record closed for all purposes. The

Administrative Law Judge received written comments from interested persons during the comment period. The MPCA submitted written comments responding to matters discussed at the hearings and proposing changes in the proposed rule.

This Report must be made available for review to all affected individuals upon request for at least five working days before the Agency takes any further action on the rule. The Agency may then adopt a final rule or modify or withdraw its proposed rule. If the MPCA makes changes in the rule other that those recommended in this Report, it must submit the rule with the complete hearing record to the Chief Administrative Law Judge for a review of the changes prior to final adoption. Upon adoption of a final rule, the Agency must submit it to the Revisor of Statutes for a review of the form of the rule . The Agency must also give notice to all persons who requested to be informed when the rule is adopted and filed with the Secretary of State.

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

FINDINGS OF FACT

Nature of the Proposed Rules and General Statutory Authority

1. Minn. Stat. § 115.03, Subds. 1(c) and 1(e) provide the PCA with authority to set water pollution standards and adopt rules designed to prevent water pollution. With respect specifically to aquaculture (defined by statute as the culture of private aquatic life for consumption or sale), the Legislature enacted Minn. Laws 1991, Ch. 309, codified in part at Minn. Stat. §§ 17.494 and 17.498, which statutes compel the Commissioner of the Pollution Control Agency to present rules prescribing water quality permit requirements for aquaculture facilities to the PCA Board. It is found that Minn. Stat. §§ 17.494 and 17.498, taken together, grant the PCA Board the general statutory authority to adopt the proposed rules governing requirements for aquaculture facilities.

2. The rule as finally proposed includes definitions of terms used, a requirement that no facility covered by the rule can be operated without a permit from the Agency, a requirement for collection and treatment of wastes prior to discharge, effluent standards for water discharged, a variance provision including a requirement that receiving waters must be returned to pre-operational ("baseline") conditions, and various special conditions.

3. Any portions of the rule as finally proposed by the Agency in this proceeding not commented on in this Report are found to be needed and reasonable. Any proposals which are changes from the proposed rule published in the State Register on December 16, 1991 not commented on in this Report are found not to constitute substantial changes.

Procedural Requirements

4. On November 22, 1991, the MPCA filed the following documents with the Administrative Law Judge:

(a) a copy of the proposed rule certified by the Revisor of Statutes;

(b) the Notice of Hearing proposed to be issued; and

(c) a Statement of Need and Reasonableness (SONAR).

5. On December 13, 1991, the PCA filed the following documents with the Administrative Law Judge:

a) a copy of MPCA's Order for Hearing

b) a copy of the Proposed Rule with a certification of approval as to form by the revisor of statutes;

c) a copy of the Certificate of the Agency's Authorizing Resolution;

d) a copy of the Notice of Hearing to be published in the State Register.

e) a copy of the Notice of Hearing for mailing to interested and affected Parties;

f) a copy of the Supplement to the Statement of Need and Reasonableness;

g) a Statement of the number of persons expected to attend the hearing and the estimated length of time necessary for the MPCA to present its evidence at the hearing;

h) a statement indicating the MPCA intended to provide discretionary additional public notice of the proposed rule.

6. On December 16, 1991, the Notice of Hearing was published at 16 State Register 1496.

7. On December 20, 1991, the MPCA filed:

a) the Notice of Hearing as Mailed;

b) photocopies of the pages in the State Register on which Notice of Hearing and the Proposed Rule was printed;

c) a certification that the MPCA's mailing list required by Minn. Stat. § 14.14, subd. 1a (1990), used for mailing of notice was accurate and complete;

d) an Affidavit of Mailing the Notice of Hearing to all persons on the MPCA mailing list;

e) the names of Agency Personnel who would represent the Agency at the hearing, together with the names of any other witnesses solicited by the Agency to appear on its behalf;

8. On December 23, 1991, the MPCA filed an Affidavit of Additional Discretionary Notice under Minn. Stat. § 14.14, subd. 1a (1990).

9. The Documents noted in the preceding Findings were available for inspection at the Office of Administrative Hearings from the date of filing until the close of the record.

10. Minn. Rule 1400.0600 F. requires an agency proposing rules for adoption to file with the Administrative Law Judge within 25 days of the hearing copies of all materials received following a notice made pursuant to Minn. Stat. § 14.10, together with a copy of the State Register containing the notice or pages of the State Register on which the notice was published. The notice referred to is that which an agency is required to publish soliciting outside opinion on the subject of concern in preparation of proposed rules. Such notice is required whenever an agency seeks information or opinions on topics proposed for rulemaking from persons outside the agency. In this case, the PCA formed an Aquaculture Advisory Group for consultation in connection with drafting of the rules, and was also required by the authorizing statute to consult with the Commissioners of Agriculture and Natural Resources, so it was required by § 14.10 to solicit outside opinion by way of notice in the State Register. This was not accomplished until January 27, 1992, when the notice required by § 14.10 was published at 16 SR 1803. The Notice gave all interested persons through February 7, 1992, to file any information or opinions. The filing of all such information received in response to a notice to solicit outside opinion in this case was due 25 days prior to the commencement of the hearing (or the first working day thereafter), Monday, January 6, 1992.

11. In order accommodate the possibility that outside information or opinions regarding proposed rules would be submitted, a new final date for the hearing was added by the Administrative Law Judge who set Thursday, February 27, 1992, as a date for reconvening of the hearing in order for the PCA Staff to present its comments and proposed rule amendments, if any, in response to any outside opinion received. The date set for reconvening was announced at the Grand Rapids hearing on January 29 and at the St. Paul hearing on January 31, as well as at subsequent hearings.

12. The number of persons wishing to comment at the January 29 and January 31 hearings was too great for all to be heard, so the Administrative Law Judge Ordered reconvenings of the hearing on February 13 and February 14, as well as on February 27, 1992. At the February 27, 1992 hearing, set originally so that Agency personnel could respond to additional public comments, the Agency Staff announced that no comments had been filed or statements received pursuant to the Notice published in the State Register on January 27, 1992. However, persons not yet heard before that date who had indicated a desire to testify at earlier hearings were accommodated, and the hearing continued on February 27 until all persons interested in the proposed rule had the opportunity to be heard.

13. It is found that the Agency's failure to solicit outside opinion on time to comply with Minn. Rule 1400.0600 F. is a technical defect and not one that makes it necessary for the Agency to take further action in remediation. It is found not to be a defect that prevents adoption of the rule in this proceeding. The Agency's corrective action of publication of a Notice of Solicitation of Outside Information or Opinions regarding the proposed rules, accomplished in time for Agency Staff and other interested persons to respond to any such information or opinions elicited prior to the close of the record, complies sufficiently with the intent of Minn. Stat. § 14.10. The purpose of

the statute is to assure that whenever an agency decides to solicit participation from persons outside the agency, that as many potential participants as possible have the opportunity to contribute. There is no time deadline in the statute specifying when publication of Notice of Solicitation must be done and in this case, the statute has been satisfied because the Notice and any material received as a result have been made part of the record. Thus, it is found that the failure to comply with Minn. Rule 1400.0600 F. is a technical defect which was corrected by subsequent publication, entry into the record of all material received as a result of that publication and a reconvening of the hearing for the reaction of the Staff and any interested members of the public.

The Agency issued notice in this proceeding to all persons known to it to be engaged in aquaculture activities. Nothing in the record shows there were persons who would have participated in this process but for a lack of notice prior to January 27, 1992. To assert otherwise is pure speculation. In the absence of any evidence of prejudice to any persons potentially interested, it is found that the Agency's publication in the State Register on January 27, 1992, of a Notice of Solicitation of Outside Information or Opinions satisfies Minn. Stat. § 14.10, despite its being technically in violation of Minn. Rule 1400.0600 F. See City of Minneapolis v. Wurtele, 291 N.W.2d 386, 393 (1980).

14. It is noted that the Legislature, in Minn. Laws 1992, Ch. 494, § 4, added subdivision 5 to Minn. Stat. 14.15, which reads:

> "Subd. 5. Harmless errors. The administrative law judge shall disregard any error or defect in the proceeding due to the agency's failure to satisfy any procedural requirement imposed by law or rule if the administrative law judge finds:
>
> (1) that the failure did not deprive any person or entity of an opportunity to participate meaningfully in the rulemaking process; or
>
> (2) That the agency has taken corrective action to cure the error or defect so that the failure did not deprive any person or entity of any opportunity to participate meaningfully in the rulemaking process.

The above-quoted statute took effect on April 21, 1992. The failure to comply with Minn. Rule 1400.0600 F. discussed in the preceding four Findings is found to be a harmless error within the meaning of the above-quoted statute because the failure to comply did not deprive any person or entity of an opportunity to participate meaningfully in the rulemaking process and because the PCA took corrective action, by publishing adequate notice soliciting outside input in the January 27 State Register, to cure the procedural defect so that its failure to comply with Part 1400.0600 F. did not deprive anyone of an opportunity for meaningful participation.

Small Business Considerations and Economic Factors in Rulemaking

15. The MPCA stated in its first SONAR:

Minn. Stat. 14.115, subd 2, provides that state agencies proposing rules affecting small businesses must consider methods for reducing the impact of the rule on small businesses.

16. In the SONAR, the MPCA listed Minn. Stat. 14.115, subd. 2, subparts (a) - (e) and subd. 3 and finished with this paragraph:

> In drafting part 7050.0216, the Agency did give consideration to small businesses. Subpart 1 defines a concentrated aquatic animal production facility as a hatchery, fish farm or other facility which contains, grows or holds at least 20,000 pounds harvest weight of cold water aquatic animals or at least 100,000 pounds of warm or cool water aquatic animals. A facility which meets these criteria is considered a large production facility. (Emphasis added) Small fish farms or hatcheries are generally excluded from the requirement to obtain an Agency water quality permit and, thus, are excluded from the conditions and requirements of this rule. (SONAR at 79-81, Nov. 22, 1991)

17. The MPCA filed a five page Supplement to the SONAR on December 13, 1991 to address small business considerations. With respect to matters it is required to consider under Minn. Stat. § 14.115 (Small business considerations), the Agency stated:

> a) The proposed rule will affect small businesses which hold or require permits for aquaculture facilities;
>
> b) Compliance with the criteria and requirements in the proposed rule could mandate additional costs and changes to aquaculture facilities;
>
> c) The statutory definition of "Small Business" as found in Minn. Stat. 14.115, subd 1, including the provision that an agency may define small business to include more employees than the statute states (fewer than 50 full-time) to help small businesses.
>
> d) The Agency methods used to reduce the proposed rule's impact on small business. Basically, the Agency excludes small concentrated animal production facilities from the permit requirements of the proposed rule. If a small facility should violate discharge limits, the Agency will consider the size and capability of the company in determining compliance schedules. Small businesses would be considered for longer compliance schedules.
>
> e) The authorizing statute does not mandate the MPCA to formulate simpler compliance and reporting standards for small businesses. However, the MPCA staff does provide forms and take time to explain the forms and reporting

requirements to small businesses not having technical staff.

f) With respect to setting performance standards for small businesses to replace design or operational standards required in the rule, the PCA Staff considered such alternatives but determined it was not authorized to adopt them by the enabling legislation.

g) The proposed rule does not exempt small businesses, it exempts aquaculture operations under certain production levels. However, only three or four of the approximately eighty licensed aquaculture operations will be required to obtain a permit. The effect will be an exemption for most small businesses.

18. It is found that the MPCA's Supplement to the SONAR documents how it has considered the methods and the results of reducing the impact of its proposals on small business. Therefore, the MPCA has fulfilled the requirements of Minn. Stat. § 14.115, subd 2.

19. The MPCA Supplement to the SONAR, page 4, states that it satisfied Minn. Stat. § 14.115, subd 4, Small Business Participation in Rulemaking by:

a) allowing small businesses to participate in the Aquaculture Advisory group;

b) providing notification of the public hearing on the proposed rules through a mailing to DNR(Department of Natural Resources) license holders for private hatcheries and fish farms;

c) publishing rulemaking information in "Aquaculture News"; and

d) providing an opportunity to participate in public rulemaking hearings by oral or written comments in Grand Rapids and St. Paul.

20. At the hearing and during the period set for submission of written comments, a number of businesses involved in aquaculture, all of them "small businesses" as defined in Minn. Stat. § 14.115, participated and offered comments. Oral and written comments were also submitted by Chisholm area residents, soil and water conservation districts and concerned fish and environmental associations. Minnesota Aquafarms, Inc. (MAI), the only entity large enough to be subject to the rule because of production levels, was represented by counsel (Mark Hanson), a limnologist (Joel Schilling), its Chief Executive Officer (Daniel Locke) and other employees. Cal Courneya, Mike Mulford and Mack Cook were among other aquaculturists who appeared. The MPCA has allowed small businesses to participate in rulemaking by notification of public hearings and allowing comments (written or oral or both) before, during and after public hearings. The MCPA has proven that it satisfied the requirements of Minn. Stat. § 14.115, subd. 4 on Small Business Participation in Rulemaking.

21. Minn. Stat. § 14.115, subd. 3 requires the Agency to incorporate into the proposed rules any of the methods to relieve small businesses of the impacts of the rule if it finds doing so to be feasible, unless doing so would be contrary to the statutory objectives that are the basis of the proposed rulemaking. The bases of the MPCA's authority in this proceeding are from Minn. Stat. §§ 17.494 and 17.498.

22. Minn. Stat. § 17.494 provides, in relevant part:

> ". . .State agencies shall adopt rules or issue commissioner's orders that establish permit and license requirements, approval timelines and compliance standards. . . "
>
> Minn. Stat. § 17.498 (a) provides:
>
> a) The commissioner of the pollution control agency, after consultation and cooperation with the commissioners of agriculture and natural resources, shall present proposed rules to the pollution control agency board prescribing water quality permit requirements for aquaculture facilities by May 1, 1992. The rules must consider:
>
> > 1) best available proven technology, best management practices that prevent and minimize degradation of waters of the state considering economic factors, availability, technical feasibility, effectiveness, and environmental impacts;
> >
> > 2) classes, types, sizes and categories of aquaculture facilities;
> >
> > 3) temporary reversible impacts versus long-term impacts on water quality;
> >
> > 4) effects on drinking water supplies that cause adverse human health concerns; and
> >
> > 5) aquaculture therapeutics, which shall be regulated by the pollution control agency.

It is found that the rule as finally proposed in this proceeding is within the scope and intent of the above-quoted statutes, for reasons detailed in the balance of this Report.

23. As finally proposed, Rule 7050.0216, Subparts 3A and 3B state:

> A. Collection and Treatment. All concentrated aquatic animal production facilities shall collect, remove, treat, and properly dispose of unconsumed fish food and fish wastes.
>
> B. Discharge Requirements. All concentrated aquatic animal production facilities that discharge industrial or other wastes to

waters of the state shall comply with the requirements of 7050.0212, subparts 1, 3, 4, 5, and 6.

24. In a previously adopted rule, Minn. Rule 7050.0212, Subpart 1A, the MPCA adopted the Federal standards for minimum discharge limits which include Best Available Technology (BAT). If no BAT exists for an industry, the effluent limits of Minn. Rule 7050.0211, Subpart 1 then apply.

25. Minnesota Aquafarms Inc. questions the feasibility of Treatment Technology Discharge Requirements in proposed rule 7050.0216, Subpart 3. Minnesota Aquafarms argues that no BAT exists for net pen facilities (like theirs) to treat their wastes without insurmountable costs. The Agency Staff, while not conceding that point, argues that an appropriate analysis of this issue cannot end there.

The MPCA used 100% enclosure and treatment for the purposes of cost estimates in the SONAR, but the SONAR shows also that unit funnel collection systems are even less costly. The MPCA further maintains that land-based aquatic animal production facilities which collect and treat their wastes to meet 7050 are a "prudent and feasible" alternative to net pen facilities. (Final Comments of Agency Staff, page 29, Mar 23, 1992). The MPCA feels the cost for on-land collection and treatment systems may be significant, but will be offset by the lower capital construction costs associated with on-land facilities. (SONAR 21, Ex. 53, page 37).

26. The MPCA also maintains that if none of their suggested collection and treatment systems are commercially available, the technical knowledge and hardware exists to fabricate and implement a system suited for net pen facilities. Therefore, net pen facilities should be able to collect and treat their wastes and meet acceptable water quality standards, without insurmountable costs.

27. Minn. Stat. 116D.04, subd 6, states:

> "No state action significantly affecting the quality of the environment shall be allowed, nor shall any permit for natural resources management and development be granted, where such action or permit has caused or is likely to cause pollution,impairment, or destruction of the . . . . water. . . located within the state so long as there is a feasible and prudent alternative consistent with the reasonable requirements of the public health, safety and welfare and the state's paramount concern for the protection of its . . . water . . . and other natural resources from pollution . . . . Economic considerations alone shall not justify such conduct."

28. The MPCA has fulfilled Minn. Stats. §§ 14.115, subd 3 and 116D.04, subd. 6, by providing feasible cost estimates for land-based, closed-bag and unit funnel collection and treatment systems.

Arguably, there is a range of costs depending on the system selected. However, the statutory objective of the proposed rule is to establish permit and license requirements for aquatic animal production facilities that meet water quality standards set by the USEPA and the MPCA.

Not meeting water quality standards, because of improper or no collection or treatment of fish food and fish wastes, or because of economic considerations alone, would be contrary to the objectives of Minn. Stat. §§ 17.494, 17.498, 116D.04, subd 6 and Minn. Rules 7050.0211 and 7050.0212.

It is found specifically that the Agency has demonstrated that failure to collect and treat fish food and fish wastes generated by concentrated aquatic animal production facilities can result in a violation of existing water quality rules. Such a violation constitutes "pollution, impairment or destruction" of natural resources, triggering the application of Minn. Stat. § 116D.04, subd. 6, as well as other applicable provisions of Minn. Stat. Chapters 116B and 116D.

29. The Agency is required by Minn. Stat. § 116.07, subd. 6 to give due consideration to economic factors. The statute provides, in relevant part:

> "In exercising all its powers the pollution control agency shall give due consideration to the establishment maintenance, operation and expansion of business, commerce, trade, industry, traffic, and other material matters affecting the feasibility and practicability of any proposed action . . . and shall take or provide for such action as may be reasonable, feasible, and practical under the circumstances."

The record establishes that the Agency has considered a number of possible economic impacts on aquaculture facilities in the state arising from adoption of its proposed rule. The largest economic impact comes from imposition of requirements for wastewater collection and treatment. At pages 72-79 of the SONAR, the Agency lays out its estimates of additional costs that would result from passage of Minn. Rule 7050.0216 as proposed, emphasizing that the Agency must also consider a number of other rules and requirements during the process of setting any facility's effluent limitations, including the specific existing conditions of receiving water. The statewide water quality standards are an additional set of rules which can impact a facility's effluent limitations, and costs could change if more stringent effluent limitations were placed in a permit.

The Staff argue that there should be no additional costs for existing on-land facilities to comply with the rule, based on calculations made for in situ (water-based) facilities and assuming a complete mixing of the pollutants which do not settle out.

30. For in situ facilities, the Agency estimates an additional cost for qualifying collection and treatment systems of 81¢ per pound produced (50¢ for collection and 31¢ for treatment) for facilities with annual productions of 500,000 pounds. In its March 18 filing, MAI estimates an 84¢ per pound increase.[1] The Staff recognize costs could change significantly depending on

[1] It is noted that MAI has submitted a proposal for a grant, which has been funded in part, to evaluate the potential for capturing and utilizing waste products from its net pen operations. See Ex. 129.

site specific conditions, noting that a number of factors should be considered when choosing a collection and treatment alternative such as waste type, wastewater volume, waste loading and waste characteristics. In addition, a variety of alternatives producing acceptable effluent should also be considered. While these costs are greater that those for on-land facilities, the Staff notes that initial capital construction costs for in situ facilities are less than those for on-land facilities, such that with collection and treatment systems included in facility costs, the total capital costs for in situ and on-land facilities will be similar and equitable.

31. The Administrative Law Judge finds that the Pollution Control Agency has fairly and adequately assessed the economic impact of the proposed amendments on the regulated public.

32. Minn. Stat. §§ 14.11 and 17.83 requires an agency to notice and describe in its Statement of Need and Reasonableness any direct or substantial adverse effect the proposed rule might have on agricultural land. In its SONAR, at pages 81-82, the Agency states that it does not believe the proposed rule will have adverse impacts on agricultural land. In fact, some of the proposals will aid agricultural land by providing nutrient-rich fertilizer for croplands. It is found that the Agency has established that there will be no adverse impact on agricultural land.

33. Under Minn. Stat. § 14.11, subd. 1 an agency must provide an estimate of the public monies associated with implementing the proposed rule if it is estimated that the total cost to all local public bodies exceeds $100,000 in either of the first two years following adoption of the rule. In its SONAR, the Agency points out that concentrated aquatic animal production facilities are generally owned privately, with the exception of DNR-operated fish hatcheries. The Staff do not expect that the proposed rule will require the expenditure of any public monies by local units of government within the first two years after adoption of the rule. It is found that the MPCA has established that proposed rule 7050.0216 will not require the expenditure of public monies by local units of government within the meaning of Minn. Stat. § 14.11, subd. 1 within the first two years after its adoption.

34. The MPCA made efforts to consult with and solicit input from numerous parties, including the regulated community and other interested persons. It organized an Advisory Group of 26 individuals from the aquaculture industry, environmental groups and concerned citizens of Chisholm and Virginia. This group's meetings included oral presentations and discussions and exchange of written materials relevant to aquacultural issues and regulatory concerns. In addition, the MPCA presented and discussed the proposed rule with the Minnesota Aquaculture Commission on November 20, 1991 and January 8, 1992. The Commission includes representatives of the private aquaculture industry.

35. Minn. Stat. § 17.498 requires consultation by the Commissioner of the Pollution Control Agency with the Commissioners of Agriculture and Natural Resources before presenting proposed rules to the PCA Board. Prior to the

close of the record, the Staff submitted an affidavit from the Commissioner of the Pollution Control Agency with attached letters from the Commissioners of Natural Resources and Agriculture indicating that consultation and cooperation occurred in accordance with the governing statute. It is noted that representatives from Agriculture and DNR also served on the MPCA's Aquaculture Advisory Group. The Staff maintains that it has been consulting with members of the DNR and Agriculture staffs throughout the process on various aspects of the proposed rule and its impacts. It is found that the Agency has complied with the directive in Minn. Stat. § 17.498 (a) requiring consultation and cooperation with the Commissioners of Agriculture and Natural Resources.

36. Minn. Stat. § 17.498 (c) requires the MPCA commissioner to submit a draft of the proposed rules to the Legislative Water Commission by September 1, 1991, and to submit a report to the Commission about aquaculture facilities permitted by the PCA by January 15, 1992. Prior to the close of the record, the Staff submitted its January 15, 1992 report to the Legislative Water Commission in compliance with the statutory directive. A draft of the proposed rules was not forwarded to the Commission until September 17, 1991, but the record includes a letter from the Executive Director of the Legislative Water Commission acknowledging that the last previous meeting of the Commission was held June 21, 1991, prior to completion of the draft rules, so that the Commission did not have an opportunity for review of draft rules until its next meeting on September 26, 1991. The Executive Director's letter indicates also that no member of the Legislative Water Commission made a request for a copy of the draft before that September 26, 1991 meeting.

37. It is found that the failure to comply with the provision of Minn. Stat. § 17.498 (c) requiring submission of a draft of the proposed rule to the Legislative Water Commission by September 1, 1991 is a technical procedural defect on the part of the Agency that did not deprive any person or entity of an opportunity to participate meaningfully in the rulemaking process within the meaning of Minn. Laws 1992, Ch. 494 § 4, to be codified as Minn. Stat. § 14.15, subd. 5. See City of Minneapolis v. Wurtele, supra.

38. Minn. Stat. § 14.14, subd 2, states:

> "Establishment of need and reasonableness of rule. At the public hearing the agency shall make an affirmative presentation of facts establishing the need for and reasonableness of the proposed rule and fulfilling any relevant substantive or procedural requirements imposed on the agency by law or rule. The agency may, in addition to its affirmative presentation, rely upon facts presented by others on the record during the rule proceeding to support the rule adopted."

39. The MPCA had a Statement of Need and Reasonableness on file with the Administrative Law Judge from November 22, 1991 to March 18, 1992. A Supplement was also on file with the Administrative Law Judge from December 13, 1991 to March 18, 1992.

40. It is found that the MPCA has satisfied the "need" requirement of Minn. Stat. 14.14, subd 2 because of the directives issued in Minn. Stat. §§ 115.03, subds. 1(c) and 1(e), 17.494 and 17.498.

41. It is found that MPCA has satisfied the "reasonableness" requirement of Minn. Stat. § 14.14, subd 2, by:

a) A detailed SONAR explaining the reasonableness of each section of the proposed rule (Nov. 22 and Dec. 13, 1991);

b) Presentation of the SONAR and exhibits 1 - 56 at the first public hearing in Grand Rapids (TR, VOL I, pages 23 - 26);

c) Oral presentation of Douglas A. Hall addressing each Subpart in proposed rule 7050.0216 (TR, VOL I, pages 31-35).

42. The objective sought by the MPCA in proposing the rule is to establish permit and license requirements for aquatic animal production facilities which meet water quality standards set by the EPA and MPCA. Proposed rule 7050.0216 is rationally related to achieving that objective.

43. Minn. Stat. § 14.15, subd. 3, states, in relevant part:

> "Finding of substantial change. If the report contains a finding that a rule has been modified in a way which makes it substantially different from that which was originally proposed, or that the agency has not met the requirement of sections 14.131 to 14.18, it shall be submitted to the chief administrative law judge for approval. . . . The agency shall not adopt the rule until the chief administrative law judge determines that the defects have been corrected."

In its filings of March 18 and March 23, 1992, the Staff proposed a number of changes from the proposed rule published in the State Register. The changes and amendments to initially proposed rule 7050.0216 were a direct result of comments made during public hearings or during the comment period. Collectively, the changes made in Subparts 1 - 6 are voluminous. Nonetheless, but it is found that none of these changes substantially change the proposed rule from its original intent. The changes and amendments basically clarify the intention of the rule, eliminate repetition of existing rules or statutes, or make references to corresponding rules that apply to regulation of aquaculture facilities. The changes are detailed in a subsequent section of this report.

44. It is found that the MPCA has not "substantially changed" proposed rule 7050.0216, within the meaning of Minn. Stat. § 14.15, subd 3, by proposing changes and amendments subsequent to original publication of the proposed rule on December 16, 1991.

Substantive and Procedural Issues Raised by Minnesota Aquafarms, Inc. (MAI)

45. As noted above, the Staff filed a Supplement to the Statement of Need and Reasonableness on December 13, 1991, to explain further what the Agency had done to comply with the "small business considerations" statute (Minn. Stat. § 14.115. On March 11, 1992, MAI filed with the Administrative Law Judge a letter expressing its concerns regarding the Supplemental SONAR. They include the fact that the Supplement was not signed or approved by the

MPCA Commissioner, that it was not reviewed or adopted by the Agency's Board, and that it was not available for public review prior to the Agency Board's meeting.

46. Neither the Minnesota Administrative Procedure Act nor the Rules of the Office of Administrative Hearings governing rule hearing procedures require a SONAR to be signed. Absence of a signature on the Supplementary SONAR is found not to constitute a defect in this rulemaking proceeding.

The SONAR submitted to the Administrative Law Judge on November 22, 1991, was reviewed by the MCPA Board at its meeting on November 26, 1991. At that meeting the Board passed a resolution authorizing the Agency's Commissioner to issue a Notice of Hearing, to represent the Agency at the hearing and to "perform any acts incidental thereto".

Sometime between November 26, 1991, and December 13, 1991, the Administrative Law Judge requested Staff to provide additional information regarding consideration that had been given to small businesses in connection with this rulemaking process. The concern was the need for the Agency to document in its SONAR how it considered the methods for reducing impact on small businesses, and the results of those considerations, as required by Minn. Stat. § 14.115, subd. 2.

47. On December 13, 1991, in response to the concerns raised by the Administrative Law Judge, the Agency filed a "Supplement to the Statement of Need and Reasonableness" it had filed originally. This document was available for public review at the time the PCA Staff mailed Notices of Hearing and prior to publication of the Notice in the State Register on December 13, 1991. It is found that, pursuant to the PCA Board's resolution of November 26, 1991, the Commissioner of the PCA was authorized to perform all acts incidental to the initiation of the rulemaking process, without further review or approval of the Board. When the Commissioner, acting through his Staff, responded to the request of the Administrative Law Judge and submitted a SONAR Supplement providing additional evidence and argument regarding the Agency's consideration of the factors in Minn. Stat. § 14.115, this action was consistent with the Board's authorizing resolution.

48. By filing a Statement of Need and Reasonableness with the Administrative Law Judge on November 22, 1991, the Agency complied in part with Minn. Stat. § 14.131, which requires an agency to prepare, review and make available a SONAR for public review, prepared under rules adopted by the Office of Administrative Hearings. The applicable rule is Minn. Rule 1400.0500, which requires including in the SONAR a statement (if applicable) complying with Minn. Stat. § 14.115. The SONAR filed November 22 lays out methods of reducing impact on small businesses required by the statute for consideration, states that the Agency did give "consideration to small businesses", and mentions the requirement of the statute for the Agency to incorporate into the rule any of the methods it finds feasible unless doing so would be contrary to the objectives of the enabling legislation. The Statement specifies that small fish farms or hatcheries are generally excluded from the requirement to obtain a permit because the rule is concerned generally with large production facilities only. It is found that the SONAR Statement on pp 79-81 regarding Small Business Considerations in Rulemaking does not comply with Minn. Stat. § 14.115, subd. 1, which requires an agency to document in its SONAR "How it has considered these methods and the

results". The Agency's Statement mentions only that the Agency gave consideration to small businesses and follows immediately with the result --general exclusion of small fish farms from coverage of the rule. There is no documentation of "how" the PCA considered the methods required for consideration by statute.

49. In its supplemental SONAR filed on December 13, 1991, the Agency lays out the consideration given by its Staff to the methods listed in Minn. Stat. § 14.115 for reducing impact of the rule on small businesses. It is found that the requirement for the Agency to demonstrate how it gave the required consideration is satisfied by this document. Minn. Stat. § 14.131 requires preparation, review and making available to the public of a SONAR prepared "under rules adopted by the Chief Administrative Law Judge." Assuming (1) that the quoted language means the SONAR contemplated must comply with the rule requiring compliance with Minn. Stat. § 14.115; and (2) assuming further that the SONAR issued on November 22 does not comply (for reasons stated in the preceding Finding) and that the SONAR Supplement of December 13 does comply; and (3) assuming further that because the Order for Hearing was executed on December 4, 1991, by the PCA Commissioner, it is impossible to document whether the Agency complied with Minn. Stat. § 14.115 because of the inability to determine whether the Supplemental SONAR was available for public review before ordering the notice of rulemaking, the issue is whether such non-compliance with Minn. Stat. § 14.131 means that the Pollution Control Agency cannot proceed further with this rulemaking proceeding.

50. As noted earlier in this Report, the test of whether a defect of the type noted in the preceding Findings can be disregarded is whether any person or entity was deprived of an opportunity to participate meaningfully in the rulemaking process. The record in this proceeding reveals no such deprivation. No one asked to review the SONAR prior to the first day of hearing on January 29, 1992. The supplemental SONAR had been available for public review since December 13, 1991. It is found that no persons or entities were deprived on an opportunity to participate meaningfully in the rulemaking process by the Agency's failure to explain how it considered the methods required for consideration to lessen the impact of the rule on small businesses in its initial SONAR, and that the Agency corrected that oversight with its supplemental SONAR on December 13, 1991, sufficiently ahead of time (prior to notification to the public on December 16, 1991 that the SONAR was available for public review) such that no person or entity was deprived of an opportunity to participate meaningfully in the rulemaking process.

51. If the SONAR Supplement was not prepared, reviewed and made available for public review before ordering of the publication of the Notice of Hearing, that violation of Minn. Stat. § 14.131 is found to be technical in nature and a failure to satisfy a procedural requirement that did not deprive any person or entity of an opportunity to participate meaningfully in the rulemaking process. City of Minneapolis v. Wurtele, 291 N.W.2d 386 (1980). See also Minn. Laws 1992, Ch. 494, § 4, to be codified as Minn. Stat. § 14.15, subd. 5.

52. In this connection, it is noted that proposed Part 7050.0216 contains a variance process by which small businesses regulated by the rule can seek relief from the treatment technology discharge requirements of the rule. See proposed Part 7050.0216, Subpart 5. This variance procedure incorporates the existing MPCA variance provisions found at Minn. Rules

7000.0700 and 7050.0190, which are available to small businesses or other applicants who seek less stringent compliance with reporting requirements, including relaxed schedules or simplified procedures. Insertion of the opportunity to apply for a variance into the proposed rule is found to be evidence indicating that the Agency did take small business considerations into account within the meaning of Minn. Stat. § 14.115.

53. In his letter to the Administrative Law Judge filed March 18, Mark Hanson, counsel for MAI, argues that the Agency has not demonstrated the need for and reasonableness of setting threshold requirements for cold water and warm or cool water production facilities at the levels proposed in order to bring aquaculture facilities within the jurisdiction of the rule. The Administrative Law Judge does not agree and finds the setting of threshold requirements of 20,000 pounds of harvest weight annual production for cold water fish facilities and 100,000 pounds of harvest weight annual production for warm or cool water facilities to be necessary and reasonable. The setting of production thresholds recognizes that there is no need to require a permit for all operators of aquaculture facilities, only for those who generate waste sufficient to pollute the waters of the State. The thresholds chosen are those in the federal rules. Indeed, they have to be at least as restrictive as federal regulations or the MPCA will loose its status as an agency that can issue National Pollutant Discharge Elimination System (NPDES) permits. The potential of the PCA's losing its designation as a NPDES permit issuer if the threshold production levels are not adopted is sufficient to make adoption of the designated thresholds reasonable. The Administrative Law Judge does not agree with MAI's argument that the Agency must make an independent factual showing that production above the threshold levels will cause pollution. It can review and analyze work done by others (such as the USEPA), and if the Agency finds it credible, the Agency can rely on it. It is reasonable for the Agency to rely on the prior U.S. Environmental Protection Agency (USEPA) determination. It is found that the threshold production levels let at proposed Rule 7050.0216, Subparts 1.E.(1) and 1.E.(2) are needed and reasonable.

54. MAI maintains that systems for collection and treatment for in situ (in water) facilities are not commercially available. MPCA Exhibit 126 identifies contacts the PCA Staff made in identifying whether systems vendors were available. The Staff concluded that even absent the commercial availability of a collection system for in situ facilities, it is technologically feasible to design and construct a system which will meet the discharge limits prescribed in the rule. This is a consideration separate from economic feasibility. The Staff notes that the testimony of Gene Soderbeck, a registered professional engineer licensed in the State of Minnesota, to the effect that it is technologically feasible to design and construct a collection and treatment system for in situ facilities has not been refuted on the record.

Minn. Rule. Part 7000.0700, Subpart 2.F. provides:

> "If the applicant seeks a variance on the grounds that compliance is not technologically feasible, [the application must contain] a report from a registered professional engineer, or other person acceptable to the Agency, stating fully the reasons why compliance is not technologically feasible"

It is noted that the above-quoted existing rule requires consideration of situations, should they exist, where construction of collection and treatment systems cannot be achieved, but it is found that the record contains evidence sufficient to establish that collection and treatment systems are technologically feasible.

55. The Agency has established, based on its experience with MAI's facility near Chisholm, Minnesota, that operation of in situ aquaculture facilities can cause violations of MPCA water quality standards in the absence of collection and treatment. The Staff maintains that water quality standards will be violated to the extent that waste feed and feces from an in situ facility are not collected and treated prior to discharge to receiving waters. Therefore, they believe that it is reasonable to require compliance with existing water quality standards.

56. The Staff argues further that requiring collection and treatment is consistent with the MPCA's overall approach towards abating pollution in the state and is consistent with Minn. Rule Parts 7050.0211 and 7050.0212 for all other dischargers within the state. They maintain that it is reasonable to be consistent with other permitted facilities. They also argue that it is reasonable to require the same minimum collection and treatment for the entire aquaculture industry as opposed to having a different set of regulatory standards for specific types of facilities. The Staff recognizes that comparative costs to accomplish the required collection and treatment will vary as to types of facility, but do not believe that operators should be allowed to make an economic selection that compromises environmental protection. They maintain that the costs of providing collection and treatment systems should be considered up front by operators in selecting the type of facility they will build as opposed to waiting until after operation is initiated.

57. MAI argues that collection and treatment should not be required when the expense for compliance is prohibitive. It argues that aeration and proper feeding techniques, coupled with polyculture and a mixing of the waters underneath the net pens holding the fish with the rest of the water body can accomplish the goal of preventing pollution. MAI maintains the Agency should consider the ability of the receiving water to assimilate waste products as well. On behalf of MAI, Mr. Joel Schilling argues that these techniques, and proper siting of a facility, should constitute the "best practicable technology" for presenting pollution by aquaculture operations. In response, the Staff maintains that fish in intensive net pen aquaculture facilities are being fed with heavy external nutrient loads that find their way into the receiving waters (the balance of the lake), and the waste nutrients then remain and continue to accumulate in the lake. They believe that feeding of fish in net pen aquaculture clearly provides a significant pollutant discharge of nutrient and organic wastes to lakes and that such discharges would not occur in the absence of the net pen facility. The Staff cites Exhibit 129, in which MAI admits that the nutrient load placed on the lake environment from its aquacultural operations has increased biological activity and biological demand in the receiving waters. The Staff notes that aeration is a permissible treatment method under the rule, but only following the collection of the wastes.

58. The Agency has made the policy decision that the prevention of pollution, rather than attempted after-the-fact pollution remediation, is critical to long-term water quality protection consistent with the governing statutes. This policy decision is found to be reasonable (it has a rational basis --the record shows fish farming does pollute water). It is found further that the decision to prevent pollution by requiring collection and treatment of wastes is within the statutory authority granted to the MPCA to adopt rules prescribing water quality permit standards for aquaculture facilities.

59. MAI maintains that the PCA has not complied with the requirements of Minn. Stat. § 17.494, which requires that state agencies shall adopt rules establishing approval time lines with respect to aquaculture facilities. MAI's argument is misplaced. Minn. Rule Part 7001 (MPCA Permits), a pre-existing PCA rule, establishes approval time lines and no further statement of time limits for the Commissioner to decide whether to grant a permit is necessary within proposed Rule 7050.0216. MAI also cites the nondegradation standard in Minn. Rule 7050.0185, Subpart 1, which it paraphrases as existing to protect waters from "significant degradation" and to maintain "existing water uses". The argument is that aquaculture facilities currently operate in waters used to assimilate waste from their facilities, and that the maintenance of such a beneficial use should be of primary concern to the Agency. The Staff replies that while the cited rule provides that the potential capacity of water to assimilate additional wastes is a valuable public resource, it is the policy of this state to protect all waters from significant degradation from point and nonpoint sources and to maintain existing water uses, "and the level of water quality necessary to protect these uses." See Minn. Rule 7050.0185, Subpart 1. The Staff points out that Subpart 3 of Minn. Rule 7050.0185 requires compliance with applicable water quality standards found elsewhere in Minn. Rule Part 7050 and the maintenance of all existing beneficial uses in the receiving water. They also argue that no further assimilative capacity currently exists in lakes where the only permitted net pen aquatic animal production facility in existence in the state (MAI) is located. It is found that the MPCA's decision not to rely on the assimilative capacity of receiving waters as a treatment system for fish wastes, requiring collection and treatment prior to discharge instead, has a rational basis, is needed and reasonable, and is within the Agency's statutory authority.

60. Minn. Stat. § 17.498 requires the PCA to consider "best available proven technology" in development of its rule governing aquaculture facilities. The Staff argues that the record, and MAI's argument on this issue made in its letter to the Administrative Law Judge of March 18, 1992, confuses the terms "best available proven technology" as used in the statute and the federal EPA term "Best Available Technology". In its March 23 Response to Comments, the Agency Staff argues that both terms are descriptions of "discharge limits" which are different from, and not to be confused with "water quality standards".

The Federal Clean Water Act established the goal that all waters are to be fishable and swimmable and charged the USEPA to establish water quality criteria and rules necessary to meet this goal. USEPA has adopted water quality criteria and requires the states to adopt standards at least as restrictive as the criteria. The Clean Water Act recognized that the assimilative capacity of waters of the U.S. was a resource to be protected,

rather than to be used as a primary means of diluting or "treating" pollution. Therefore, minimum treatment levels or minimum "effluent limits" for discharges were to be established. Minnesota responded to the requirement for water quality standards by adoption of Minn. Rules Chapter 7050. Within Part 7050, the MPCA has adopted minimum treatment requirements (discharge limits) for municipal and industrial dischargers at Parts 7050.0211 and 7050.0212, respectively. Part 7050.0212, Subpart 1.A. incorporates by reference the Code of Federal Regulations, Title 40, Parts 401-469. With that incorporation, the Agency adopted the USEPA's provisions of minimum discharge limits, which includes achievement of effluent limitations for point sources through application of the "Best Available Technology" (BAT) economically achievable to abate pollution. See 40 CFR § 401.12 (b).

61. As demonstrated in Exhibit 25, no BAT exists for abating pollution caused by aquaculture net pen facilities. The MPCA Staff does not dispute this. However, under the provisions of Minn. Rules 7050.0212, Subpart 1.B. if no applicable BAT exists, the minimum effluent limits of Minn. Rules 7050.0211 shall still apply.

62. MAI argues that if no BAT exists, no treatment is necessary and the appropriate method of protecting lakes from pollution is proper siting, polyculture (stocking the receiving water with fish that eat the wastes generated and feed on the lake bottom), proper feeding methodologies, temperature control by aeration of the water where the fish are penned and mixing of the sediments escaping from the bottom of the pens with the balance of the receiving water. The Staff points out that, to the extent that there would be no violations of water standards, MAI's analysis is correct. However, they argue that the record shows clearly that net pen facilities do cause violations of Minnesota's water quality standards and the regulations are clear that the discharger must meet these applicable standards regardless of the availability of BAT.

It is found that water quality problems can occur due to waste discharges from net pen concentrated aquatic animal production facilities and that operation of a net pen facility without collection and treatment systems will impact receiving waters adversely.

63. Exhibit 99 establishes that water quality standards have been impacted as a result of existing net pen discharges in connection with MAI's operations. The Staff believes that, absent strict control over the wastes discharged by net pen facilities to fresh water, violations of standards of purity established in Part 7050 will likely result. The issue that then arises relates to whether it is technologically feasible to control the wastes generated by a net pen facility so as to comply with Part 7050.

Minn. Stat. § 116D.04, Subd. 6 prohibits "state action" (such as granting a NPDES permit) which will cause pollution if there is a feasible and prudent alternative and implies further that economic considerations alone shall not justify the granting of such permits. As noted earlier, the Staff believes that land-based aquatic animal production facilities which collect and treat their wastes to meet Part 7050 are a "prudent and feasible" alternative to net pen facilities. Accordingly, absent collection and treatment of net pen wastes, the Staff maintain that net pen facilities should not be issued a permit because of the inherent likelihood of resultant pollution, impairment and destruction of waters of the state. It is found

that the MPCA has established by an affirmative presentation of facts that land-based aquatic animal production facilities that collect and treat production wastes are a feasible and prudent alternative to any net pen facilities for which collection and treatment facilities prove not to be technologically or economically feasible. Urban Council on Mobility v. Minn. Dept. of Natural Resources, 289 N.W.2d 729 (1980)

64. It is found that the MPCA's decision to require collection and treatment of wastes resulting from permitted aquaculture facilities is within the statutory authority granted to the Agency. The availability of "best available proven technology" is only one consideration set out by the legislature for the Agency to contemplate. Minn. Stat. § 17.498 also requires the Agency to consider "best management practices, and water treatment practices that prevent or minimize degradation of waters of the state considering economic factors, availability, technical feasibility, effectiveness and environmental impacts". It is found that the record demonstrates that the MPCA considered all of these factors, and all the other factors listed in Minn. Stat. § 17.498(a) in arriving at its decision to require collection and treatment of waste produced by permitted facilities prior to a discharge of these wastes to receiving waters. The record shows that the Agency Staff has balanced the considerations required by the legislature and that a rational basis exists for requiring collection and treatment. It is found that it is necessary for the proposed rule to establish a methodology to protect the waters of the state from pollution, and that selection of collection and treatment to accomplish the necessary protection is reasonable. The Legislature has not authorized the waters of the state to be used as waste water treatment facilities.

65. The treatment methodology advocated by MAI includes the dispersion of solid wastes deposited by fish feeding operations. The Staff notes that the use of net pen facilities has been almost exclusively in ocean type settings where underwater currents carry aquaculture wastes away. While the methodology of dispersing the solids tends to diminish the concentration of an aquaculture facility's wastes within the receiving waters, the Staff argues that if assimilative capacity of the receiving water has already been exceeded, then dispersion of nutrients and oxygen-depleting materials found in the deposits of aquacultural wastes to the sediment at the bottom of the receiving waters is undesirable. They note that Exhibit 99 indicates that the assimilative capacity of the receiving water where MAI is operating has been exceeded already for dissolved oxygen.

66. MAI questions the availability of commercial net pen waste collection systems. The Staff replies that even if such systems are unavailable commercially, the technical knowledge and hardware exists such that waste collection and treatment systems can be fabricated for implementation. Because the record demonstrates that pollution, as defined by statute, exists with aquaculture net pen facilities, it is reasonable to require waste collection and treatment to comply with applicable laws. MAI's arguments against waste collection systems for net pen facilities use vendor letters as a basis for the arguments. The Staff responds that the letters fail to note that the majority of all salmon net pen aquatic animal production facilities in the world are conducted in ocean type settings where underwater currents carry the wastes away. Because of tidal action, such systems are most often located away from shore. As a result, those operations have experienced problems with net pen waste collection due to high bottom

currents, high wave heights and no reliable power source, in addition to problems inherent in attempts to settle wastes in floating settling tanks at the off-shore sites under wave conditions. By contrast, sheltered areas such as the Iron Range mine pit lakes where MAI operates have no bottom currents similar to those in the ocean, have net pens moored to shore, have reliable sources of power, can settle the collected wastes on shore and generally have the best conditions to implement waste collection and treatment.

66. The two most common types of waste collection and treatment systems for aquaculture operations are closed-bag systems and unit funnel collection systems. The Staff has used 100% enclosure and treatment (closed-bag systems) for the purposes of establishing cost estimates provided in the SONAR. The literature presented in the record makes it clear that funnel collection systems are even more economical and will add less per pound to the price of marketed fish.

67. It is found that the record supports the MPCA Staff's conclusion that waste collection and treatment systems, as required in the proposed rule, are technologically and economically feasible. This Finding supports further the Finding made above that requiring permittees to collect and treat their waste before returning the discharge to waters of the state is necessary and reasonable and does not violate any applicable statutory authority granted to the Agency.

68. Mr. Joel Schilling, of the consulting firm of Short, Elliot, Hendrickson (SEH) also filed comments on behalf of MAI with the Administrative Law Judge on March 18, 1992. In addition to commenting on specific rule proposals, the substance of which have been addressed in earlier Findings, Mr. Schilling argues that the MPCA did not involve the regulated public sufficiently in the process of formulating its proposed rule, and consequently the proposal should be withdrawn until after further consultation. The Judge cannot agree. For reasons stated earlier in this Report, it has been found that the Agency took into consideration the impacts of the proposed rule on small businesses, on the affected public, and considered the economic consequences of its proposals. Those Findings are reaffirmed here. The Agency may proceed to adoption of its rule as finally proposed.

69. MAI takes exception to the fact that the MPCA proposes a more restrictive definition of "concentrated aquatic animal production facilities" at Subpart 3. E. (3) than is found in USEPA Regulations. The EPA exempts facilities that discharge to receiving waters fewer than 30 days per year, but the MPCA proposes no such exemption. It is found that the Staff's decision not to set a minimum discharge frequency requirement is consistent with the authorizing legislation and is needed and reasonable. The federal rules allow states to adopt more restrictive standards. Also, Minn. Stat. § 115.01, subd. 12 defines "discharge" as ". . . the addition of any pollutant to the waters of the state or to any disposal system." In light of the principle embodied in the governing statutes to prohibit any pollution of the waters of the state, it is reasonable and within statutory authority for the Agency to have potential regulatory authority over any aquaculture facility that may pollute those waters irrespective of the frequency of incidents.

70. MAI argues that the proposed definition of "existing beneficial uses" found at Subpart 1.G. is inconsistent with the term "all existing, beneficial uses" as it is used in Minn. Rule 7050.0185 (Nondegradation for all

waters). The Administrative Law Judge cannot agree, and adopts the reasoning of the Staff on this issue, found at pp. 21-22 of its March 23, 1992 submission. It is found that the term "all existing, beneficial uses" as used in part 7050.0185 applies in the context of protecting from degradation waters which exceeded (as of January 1, 1988) in purity the water quality standards for their classification in Part 7050.0220. "Existing beneficial uses" as used in the proposed rule under consideration here has a different meaning -- it means beneficial uses of the receiving waters during the time a permitted aquaculture facility has operated or is anticipated to operate. The term is applied in proposed Subpart 5.A.(1), which conditions the granting of a variance on non-impairment and protection of "existing beneficial uses" as defined. It is found that the definition of "existing beneficial uses" in the proposed rule is consistent with all other parts of Minn. Rule Chapter 7050 and is necessary and reasonable.

71. MAI argues that the word "facility" as used in the proposed rule needs a separate definition, and offers one in its proposed draft rule (which refers to the statutory definition of "aquatic farm" at Minn. Stat. § 17.47, subd. 3). In response, the Staff argues that such a definition would be confusing and that the Agency's proposed definition of "Concentrated aquatic animal production facility", coupled with the clarification in Subpart 2 (discussed later in this Report) is sufficient and clear. The Administrative Law Judge agrees with the analysis of the Staff, and it is found that addition of a definition for "facility" is unnecessary.

72. MAI maintains that because the Agency states in the SONAR that the design of waste treatment systems must be reviewed before a permit can be granted, the requirement should be specified in the rule if it is to be enforced. The Administrative Law Judge does not agree. Proposed Subpart 3 addresses discharge requirements and requires compliance with specified effluent standards. It is reasonably implied that, in granting a permit to a covered facility, the Agency will review the proposed design of any treatment system. A requirement to so state in Minn. Rule 7050.0216 if found to be unnecessary. The Agency could add it if it chose to -- it would not be a substantial change -- but the rule can not be said to be incomplete or unreasonable without the addition.

73. MAI argues that in requiring collection and treatment for all concentrated aquatic animal facilities "the MPCA has the burden of showing that it is necessary for all facilities" (Hanson letter of March 18, p. 13). As noted above, the Agency has established the need for and reasonableness, as well as the statutory authority, for making such a requirement. It does not have to show on this record that collection and treatment is needed for all conceivable facilities or for those operated specifically by MAI or any other operator. In addition, the proposed rule contains a variance option which allows any potential permittee the opportunity to demonstrate the lack of a need for installing collection and treatment systems on a specific case-by-case basis.

74. MAI notes that under proposed Subpart 5.C., a variance applicant must wait two years before operations can commence because that Subpart requires pre-operational data over that time period to determine the baseline quality of the receiving waters. This argument ignores the fact that the requirement is modified by the word "equivalent", which was defined in the Agency's final proposal. That final proposal is found specifically to be

needed, reasonable and not a substantial change later in this Report. If a permitted facility has monitored its receiving waters for the required parameters in the past, or if the data exists from other sources, there may be no need to wait for sufficient future sampling before a variance application can be filed. MAI's concern is limited to waters where the necessary sampling has not been done or data does not exist. This is insufficient to render unreasonable the requirement that sufficient baseline data accompany a variance application.

75. As noted above, MAI submitted a draft rule for the consideration of the Administrative Law Judge and the MPCA. The MPCA Staff has declined to recommend adoption of MAI's proposal and, as noted herein, has filed a proposal modifying that which it published originally. This Report reviews the Agency's final proposal on the issues of statutory authority, need and reasonableness. The Judge has reviewed the draft proposal submitted by MAI, as well as all other proposals on the record. Many of them, if proposed for adoption by the Agency, would also be found necessary, reasonable, and in line with the applicable statutes. However, a rule is not unreasonable simply because a more reasonable alternative exists or a better job of drafting might have been done. The Agency must explain what evidence it is relying on and how that evidence connects rationally with the agency's choice of action to be taken. It must explain assumptions made, resolve conflicts in the evidence, articulate its policy judgments and make a reasoned determination. See Manufactured Housing Institute v. Pettersen, 347 N.W.2d 238, 246 (Minn. 1984). In this case, the MPCA Staff has complied with these requirements.

76. Pages 21-24 of Mr. Hanson's March 18 filing contain MAI's "Premise for Draft Rule". The argument advanced is that the MPCA's imposition of effluent standards for aquaculture facilities, applicable in all "waters of the state", goes beyond statutory authority. The allegation is that such regulation is overbroad and ignores Minn. Stat. § 115.03, which grants to the Agency the power to "establish pollution standards for any waters of the state in relation to the public use to which they are or may be put", and ignoring further that the legislature, in passing Minn. Laws 1991, Ch. 309, provided for the development of aquaculture, which the Agency in its proposals has failed to recognize. From this, it is argued that aquacultural uses of waters of the state are a resource allocation and use issue first and a water quality issue second. Thus, if fish culture does not impact other public uses (as with MAI's "perched" mine pit lake facilities), regulation should not focus on receiving waters but at the "discharge", which MAI defines for purposes of this argument to be at the point of runoff. If there is no runoff, and the waters are being put to no other use, there is no need to regulate the activity.

MAI's argument seems to concede the fact that fish farming causes pollution. To the MPCA, that is precisely the point. Much of the nutrient-rich fish food goes uneaten, and the fish defecate, urinate and sometimes decompose after dying. The Agency has decided that the pollution caused by aquaculture must be controlled in order to be consistent with § 10 of Minn. Laws 1991, Ch. 309, codified as Minn. Stat. § 17.498. The statute requires the Agency, in developing its rules, to consider a wide variety of factors. This legislation has been interpreted by the Agency to emphasize protection of the quality of all waters of the state, regardless of whether they have outlets or impact any location outside their basins. This decision is consistent with the directive to consider "water treatment practices that

prevent and minimize degradation of waters of the state. . ." found at Minn. Stat. § 17.498 (a)(1).

Moreover, MAI's argument ignores the long-term impacts of its activities. There will come a time when MAI is no longer using its current facility for aquaculture. The waters will then be available for other uses. It would be imprudent, and inconsistent with the State's environmental policy, to ignore further generations and future uses. See, generally, Minn. Stat. §§ 116B.01, 116D.01 and 116D.02.

77. In his March 23 letter to the Administrative Law Judge, Mr. Hanson requests a denial of admission to the record of the Agency's Revised Exhibit 3, a certificate from the PCA Commissioner containing the Board's authorizating resolution which reads differently than the original Exhibit 3. The request is denied.

Even if Revised Exhibit 3 were not added to the record, it is found that the resolution in original Exhibit 3 grants power to the PCA Commissioner sufficient to allow him or his Staff to prepare a Supplement to the SONAR without prior review by the Board, by granting him the authority to "call a hearing" and "perform any acts incidental thereto".

Other Proposals

78. The Minnesota Association of Soil and Conservation Districts and Region III of the Soil and Water Conservation Districts in the State of Minnesota propose that the Agency establish a moratorium on any further aquaculture facility permitting in the area of the Biwabik Aquifer. The Biwabik Aquifer is the underground water supply system situated along a 50-mile long and 1-mile wide area just south of the Laurentian Divide in northeastern Minnesota. The Aquifer serves as the drinking water supply for most Iron Range cities. A great deal of testimony and documentary evidence from residents of the area, particularly citizens of Chisholm, Minnesota, support the moratorium.

The MPCA has declined to propose any rule imposing such a moratorium. Its decision not impose a moratorium, or to make the provisions of the proposed rule of anything less than statewide applicability is found to be necessary and reasonable. The rules are designed to protect existing classifications of receiving waters throughout the state through the imposition of effluent standards and do not attempt to regulate the water quality in receiving waters directly. Nor do they attempt to exercise jurisdiction over the quality of drinking water in the state (a Department of Health function). If receiving waters are polluted by aquaculture operations, the MPCA can terminate the permit authority of such operations or require different conditions in particular permits on a case-by-case basis. The Agency's decision to adhere to that system in protecting the waters of the state is found to be reasonable and is consistent with the statutory authority granted to the MPCA to develop rules governing aquaculture facilities.

79. It is noted that the record contains evidence implying that water can move from a mine pit lake supporting an aquaculture operation to a lake containing a municipal water supply during stages when the surface elevation of the lake with the aquaculture operation is higher than that containing the municipal water supply. The record shows that movement of such water may be

abetted by the existence of natural fissures and abandoned mine tunnels in rock layers between the lake basins. It is noted that the quality of drinking water in Chisholm has declined and that the municipal water treatment facility has been forced to add additional chlorine since MAI began operations in a mine pit near that community in 1989. It is presumed that the Agency Staff considered these facts in its decision not to impose a moratorium throughout the area of the Biwabik Aquifer, a decision which has been found above to be reasonable and not contrary to the Agency's statutory authority.

80. Other commentators support the designation of aquaculture operations in any trout streams as "concentrated aquatic animal production facilities" that should be subject to the permit requirements of the rule. The Staff declines to recommend such designation because they believe trout streams are protected sufficiently by the fact that designated trout streams are given a specific classification (2A) in Minn. Rule 7050.0220, Subpart 3. Class 2A waters have more stringent water quality standards for dissolved oxygen and more restrictive temperature standards. The Staff reason that to the extent that proposed facilities would violate such standards, they would be subject to designation as concentrated aquatic animal production facilities and be required to obtain a permit. Therefore, they decline to recommend a blanket designation requiring obtaining of a permit for all facilities operating in trout streams. Nor do the Staff support the suggestion of commentators advocating a moratorium against all permitted aquaculture operations in trout streams generally. It is found that the Staff's decision to limit its regulation of aquaculture operations in trout streams to the case-by-case designation of concentrated aquatic animal production facilities as provided in proposed Rule 7050.0216, Subpart 1 (3) is necessary and reasonable.

Rule Amendments Proposed by MPCA's Staff

81. Prior to the close of the record, the Agency Staff filed amendments to the rules as published in the State Register of December 16, 1991. The great majority of these proposals were filed as Attachment 2 ("Changes and Corrections to the December 16, 1991 Proposed Minn. Rules Part 7050.0216") to the Staff's Post Hearing Comments on March 18, 1992 and in its Response to Comments on March 23. The proposed changes are detailed below.

82. Any changes or corrections to proposed Minn. Rules 7050.0216, as published on December 16, 1991, not commented upon in subsequent Findings are found to be necessary and reasonable. The changes not commented on specifically are clerical, grammatical or organizational in nature, intended to clarify the text. They are found not to constitute substantial changes within the meaning of Minn. Rule 1400.1100.

83. Proposed Subpart 1.B. defines "aquatic animal production" and Subpart 1.H. defines "fish food". Both definitions are proposed for amendment to clarify that the rules apply only to situations where aquatic animals are fed inanimate materials, excluding those where aquatic animals may be stocked in a effort to control the trophic state (nutrition balance) of waters. At Subpart 1. B., the clarification is accomplished by adding the words "where such animals are fed fish food" to the end of the definition published on December 16. This additional language is found to be necessary and reasonable to clarify the scope of the rule and is found not to be a substantial change.

84. The definition of "cold water aquatic animals" is proposed for an amendment that drops the words "included . . . but not limited to" to clarify that the classification means fish belonging to the family Salmonidae (such as salmon and trout). This clarifying change is found to be needed and reasonable and is not a substantial change.

85. The definition of "warm and cool water aquatic animals" at Subpart 1.J. is clarified by a proposed change to define that class simply as "all other aquatic animals not included in the Salmonidae family of fish". The definition published in the State Register read that the class "included, but (was) not limited to" a subsequent listing of five families of fish with four specific examples. The proposed change in this definition is found to be a necessary clarification and is reasonable. It is found not to constitute a substantial change.

86. Subpart 1.E. defines the operations to which the rules apply- "Concentrated aquatic animal production facilit(ies)". The Agency has proposed some changes in that definition from the time of State Register publication. During the hearing and in response to comments received from the aquaculture industry, the Staff proposed the inclusion of the term "harvest weight" to clarify what was meant by the term as it is used in the rule. See Ex. 56. The rule as proposed applies to facilit(ies) that produce a threshold quantity of product, determined by "harvest weight". It is found that further definition of "harvest weight" is needed to clarify the scope of the rule.

87. Proposed Subpart 1.E. (4) reads:

> "(4) Harvest weight is considered the weight of aquatic animal product which leaves a production facility, minus the weight of aquatic animal product which enters the same production facility."

The language clarifying the meaning of "Harvest weight" for purposes of the rule, found necessary in the preceding Finding, is found to be reasonable and not a substantial change. The language acknowledges facilities handling large amounts of fish for short periods of time. Generally, these facilities conduct only minor feeding operations which consequently generate little waste. It is a common practice in the industry for producers to rear fish in one place and then transport them to a different facility just prior to marketing. The proposed language assures that the last facility will not be considered the place where the fish gained all their weight, only that portion attributable to that facility.

88. In addition to designating as "concentrated animal production facilities" those operations producing over 20,000 pounds of cold water fish or over 100,000 pounds of warm or cool water fish per year, the rule proposes to extend that designation, on a case-by-case basis, to any facility designated by the Commissioner of the Pollution Control Agency if it "may cause a violation of an applicable state or federal water quality rule or regulation". The quoted language in the preceding sentence is proposed to replace "is a significant contributor of pollution to the waters of the State" as published in the State Register on December 16. The new language is found to be necessary and reasonable because it is based on an objective standard. The originally-proposed language was vague and arguably gave the Commissioner

overbroad discretion. The substituted language does not constitute a substantial change.

89. The Staff proposes deletion of subpart 1.E.(3)(d), one of four factors listed originally for the Commissioner to consider in designating concentrated aquatic animal production facilities. The item, intended as a catch-all, read "other relevant factors". The concern was that such a consideration allowed overly-broad discretion in the hands of the Agency head. The Staff has determined that deletion of that clause should not have a substantial effect on the Commissioner's ability to assess adequately whether facilities should be designated as subject to the rule, that is, whether they pollute receiving waters sufficiently to cause rule violations. Deletion of "other relevant factors" where proposed is found to be needed and reasonable and does not constitute a substantial change.

90. In response to a concern that facilities proposed for designation as concentrated aquatic animal facilities, and thus subject to the rule, have a recourse if so designated, the Staff proposes to add a sentence to the end of Subpart 1.E.(3) to make clear that such facilities are entitled to a contested case hearing regarding being subjected to the rule. The proposed language reads:

> A permit will be required under this subitem only after the facility has been given notice of the commissioner's determination and an opportunity to request a hearing as provided in parts 7000.1000 and 7001.0130.

The Administrative Law Judge finds that the proposed addition detailed above is necessary and reasonable. It is found not to be a substantial change.

91. The originally-published rule provided for an inspection by the Agency and a determination by the Commissioner that a facility "should and could" be regulated under the permit program (i.e., be subject to the rule). The words "should and could" are now proposed for deletion from Subpart 1.E.(3), to be replaced by "is required to". The proposed change clarifies the rule and removes a standard that was vague. It is found to be needed and reasonable and does not constitute a substantial change.

92. In Exhibit 98 introduced at the hearing and in its submission on March 18, the Staff proposed modifications of the originally-published definition of "fish food". The word "processed" is substituted for "commercial", the words "not limited to" are deleted due to overbreadth and living organisms (forage fish, crustaceans, worms) are deleted from the definition. Language was added to include dead animals or parts thereof, and some syntax was rearranged to clarify the text. All the changes to Subpart 1.H. detailed in this paragraph are found to be needed and reasonable and do not constitute substantial changes.

93. In the December 16, 1991 State Register, the Agency separately defined "in situ" (in waters of the state) and "on land" facilities. Since the requirements for obtaining a permit are identical for any concentrated aquatic animal facility, regardless of its physical situation on land or in a water body, the Staff now proposes to delete the two definitions. The Staff believes it is confusing to distinguish between "in situ" and "on land" facilities in the absence of any regulatory differences. The Judge finds that

deletion of orginally-proposed subparts 1.I. and 1.J. serves to eliminate confusion and clarifies the scope of the entire rule proposal. The proposed change makes clear that the MPCA will regulate aquaculture facilities consistently regardless of type or location of the system employed. Therefore, deletions noted here are found to be necessary and reasonable. They do not constitute substantial changes.

94. In Exhibit 98, admitted to the record on February 13, 1992, the Staff proposed addition of a definition of "Recirculating flow", at (renumbered) Subpart 1.I., to read:

> "Recirculating flow' means wastewater, within a concentrated aquatic animal production facility, which is collected from aquatic animal rearing units, treated and then returned to aquatic animal rearing units for reuse."

It is found that the above language is needed to clarify the meaning of a term used elsewhere in the rule. It is found that the language is reasonable because it emphasizes waste collection and removal, consistent with the concept of recirculating flow as generally understood by the aquaculture industry.

95. Subpart 2 of the proposed rule covers the Agency's regulatory authority. It provides that no person may construct, operate or maintain a concentrated aquatic animal production facility without a permit from the MPCA. It its March 18 submission, the Staff proposed an additional sentence to clarify when a permit is required, which reads:

> Production levels of multiple projects and multiple stages of a single project that are connected actions or phased actions will be considered in total under subpart 1.E.

The Administrative Law Judge finds the proposed additional sentence to be clarifying in nature, needed and reasonable and not a substantial change. It incorporates rationale expressed in the SONAR to the effect that a permit will be required in situations where a concentrated aquatic animal production facility is part of larger operation and that a single permit will be issued to facilities whose aggregate production meets the threshold criteria for regulation as a concentrated aquatic animal production facility.

96. The Staff proposes major editorial changes in Subpart 3 -- Treatment Technology Discharge Requirements, but maintains that the changes are not substantial in effect. The first paragraph of the Subpart is proposed for deletion because it was basically a preamble that had no substantive effect not detailed elsewhere in the rule. The Administrative Law Judge agrees, and finds deletion of the first paragraph necessary and reasonable and not a substantial change.

97. The Staff proposes to retain the collection and treatment requirement at Subpart 3.A., requiring all facilities subject to the rule to collect, remove and properly dispose of unconsumed fish food and fish wastes. The statutory authority to impose a collection and treatment scheme on permittees is discussed earlier in this Report. The second sentence in the original text of the Subpart, which referred the reader to Subpart 6.A. for

specifics (monitoring, testing, and reporting) involving mass discharges is proposed for deletion. Subpart 6.A. covers such special conditions, and the Staff believe it is appropriate to confine the requirements for monitoring, testing, and reporting there without introducing monitoring, testing, and reporting requirements in the Subpart detailing treatment technologies. Deletion of the sentence is found to be an editorial change that is necessary, reasonable and not a substantial change.

98. The originally-published rule separately listed discharge requirements for on-land and in-situ facilities. The requirements for each type facility were identical. As a result, the Staff reasoned that there was no need to list the same requirements in tandem. In addition, the requirements detailed in the December 16 publication are a reiteration of requirements already contained in Minn. Rule 7050.0212, Subparts 1-6. Therefore, listing of limiting concentrations or ranges for 5-day carbonaceous biochemical oxygen demand ($CBOD_5$) fecal coliform group organisms, total suspended solids (TSS), oil, phosphorus, pH, and toxic or corrosive pollutants has been deleted and replaced by a reference to applicable parts of Minn. Rule 7050.0212. This change is reflected in revised Subpart 3.B.

99. In connection with consolidating the applicable requirements and in order to avoid confusion, the Staff proposes to exclude any reference to rule 7050.0212, subpart 2, the animal feedlot exemptions, which are not applicable to aquatic animal production facilities. The finally-proposed subpart 3.B., a single sentence replacing 165 lines of the December 16 text, reads:

> B. Discharge requirements. All concentrated aquatic animal production facilities that discharge industrial or other wastes to waters of the State shall comply with the requirements of part 7050.0212, subparts 1,3,4,5, and 6.

100. Concentrated aquatic animal production facilities are not a type of point source discharger of industrial wastes governed by standards published at 40 C.F.R. pts. 401-469. As a result, they come under Subpart 1.B. of rule 7050.0212, which requires compliance with effluent limitations set for municipal sewage dischargers under rule 7050.0211, Subpart 1. Limits contained in that Subpart for $CBOD_5$, TSS, pH and oil are identical to the limits for those substances published on December 16. Subparts 4 and 6 of 7050.0212 refer likewise to requirements in 7050.0211, Subpart 1 identical to those published on December 16 for phosphorus and toxic or corrosive pollutants, respectively.

101. All of the compliance requirements of Minn. Rule. 7050.0211 and 7050.0212 were proposed for imposition on concentrated aquatic animal production facilities by operation of Subpart 4 as originally published on December 16, 1991. As a result, 7050.0212, Subpart 3, the anti-backsliding provision, was already included.

102. Subpart 5 of 7050. 0212 contains an exemption for dischargers using stabilization and/or aerated ponds, which is detailed at Minn. Rule 7050.0211, Subpart 3. Concentrated aquatic animal production facilities that qualify as pond facilities are proposed to be granted this exemption.

103. It is found that the editorial changes detailed in the preceding five Findings are necessary and reasonable. They do not constitute substantial changes.

104. By proposing reference to Part 7050.0212, rather than listing limiting concentrations or ranges specifically in the proposed rule, the Staff proposes to delete disinfection requirements for fecal coliforms, for which a concentration limit was proposed in the State Register on December 16. Upon further consideration of the potential presence of fecal coliforms, the Staff believe that the permit application process will establish information relevant to the specific facility, on a case-by-case basis, regarding the actual presence or potential presence of sewage, fecal coliform organisms or other viable pathogenic organisms. If fecal organisms are present or if the potential is present, a fecal coliform requirement for the facility can be established in that case-by-case determination process. The Staff believe that the deletion of specific limits for that pollutant will not affect the ability to regulate the facilities' fecal coliform.

The Judge finds that the Staff's proposal to delete the originally-published concentration limit for fecal coliforms is necessary and reasonable because of evidence in the record that facilities engaged in aquatic animal production do not generally produce such organisms in the ordinary course of their operations. Fecal coliforms are the product of warm-blooded animals' wastes, which may or may not be present in the discharge from an aquaculture facility, so regulation of these substances on a case-by-case permitting basis addresses the concern adequately. Deletion of specific concentration limits for fecal coliforms does not constitute a substantial change.

105. At Subpart 3 C, the Staff propose to delete reference to "in situ" or "on-land" facilities employing recirculating flow systems. The originally-published reference to proposed alternative concentration limits is replaced by a requirement to apply for a variance. These changes are found to be editorial and not substantial in nature and are found to be necessary and reasonable.

106. Regarding proposed Subpart 4 (Additional requirements), the requirements to comply with Minn. Rule 7050.0213, 7050.0215 and 7050.0216 are proposed for deletion, along with the words "if applicable". Part 7050.0213 establishes advanced wastewater treatment requirements, Part 7050.0215 applies to animal feedlots, and Part 7050.0216 is the very rule under consideration. Exclusion of them from the listing of rules with which regulated facilities must comply obviates the need for the words "if applicable". The changes proposed for Subpart 4 are found to be necessary and reasonable and not substantial changes.

107. In Subpart 5.A. (Variance) the Staff propose deletion of the words "in its discretion may" and substitution for them of word "shall" in the first sentence. This proposal is found to be needed and reasonable in order to remove a potential defect for overbroad discretion. It is found not to constitute a substantial change. The same result is found for the editorial change adding reference to "items A or B" of subpart 3, made necessary in order to avoid repetitious language or confusion resulting from the proposal approved above to incorporate a specific variance option in subpart 3 C.

108. At Subpart 5.A.(5) the Staff propose to substitute the word "submitted" for "approval" to reflect that approval of a closure plan is not a prerequisite to granting of a variance. The requirement to submit a completed variance application is proposed for addition as Subpart 5.A.(8). The above-noted changes are found to be necessary and reasonable and not substantial in nature. They serve to clarify the Agency's intent.

109. The Agency proposes addition of Subpart 5.A.(9) to the variance requirements, which will require a finding by the MPCA that receiving waters will be returned to baseline quality within three years of initiation of closure. In the originally-published proposal the MPCA required, at subpart 5.D., that receiving waters be returned to baseline quality (levels not statistically significantly different from preoperational levels) if a variance is granted. Item (9) states what was implied originally by the closure requirement --a restoration to baseline quality of the receiving waters-- is necessary if a variance is granted. Conversely, it is appropriate to require a finding by the MPCA that a restoration to baseline will follow closure before the granting of a variance is appropriate.

110. Subpart 5.A.(9) also contains reference to a time limit for restoration to baseline of three years after initiation of closure. The Staff believes restoring receiving waters to baseline qualities is a key component to granting any variance and that requiring the applicant to affirm it can be done in three years will constitute assurance that closure will be completed. This is an editorial change made for consistency with a change proposed for subpart 5.E., discussed below.

111. The Staff's proposed Subpart 5.A.(9) is found to be necessary and reasonable and not a substantial change, for reasons detailed in the preceding two findings.

112. Subpart 5.A.(7) is proposed for amendment from its original publication, specifically to delete the words "obtained a permit" and insertion of "submitted a permit application" in their place. This change is found to be necessary and reasonable and not a substantial change because it clarifies the MPCA's intent to encourage applicants to request a variance during the permit process before constructing a facility or commencing operations.

113. At Subpart 5.B.2., the Staff propose deleting the words "agency approved" in order to clarify that submission of a proposed closure plan is a requirement for a variance application and approval of the plan is not a precondition to granting the variance. Deletion of the words "agency approved" is found to be necessary and reasonable and is not a substantial change.

114. Subpart 5.C. details the methodology for establishing baseline quality. As originally published, this establishment was to be based on two years of data "or equivalent". Two clarifying sentences have been proposed for addition to this Subpart in order to detail the equivalent of two years' data, and monitoring requirements such as sampling frequency and the parameters to be measured. The proposed changes are found to be necessary and reasonable and do not constitute substantial changes.

115. In Subpart 5.D. the Staff proposes to substitute the word "permittee" for "responsible person" in order to specify who is responsible for closure. The proposed change is found to be clarifying in nature, not a substantial change, and is needed and reasonable.

116. Subpart 5.E. lays out requirements for the closure plan. In the first sentence the Staff proposes to add language making it clear that the closure plan should be submitted with the variance application. This language is found to be necessary and reasonable and does not constitute a substantial change because variance applicants are required to submit closure plans in the rule as originally published.

117. During the hearing, comments were raised as to when closure must take place, how one insures restoration is complete, and what are the "most protective water quality parameters" as the term was used in subpart 5.E., as originally published.

118. Subpart 5, and the variance process embodied therein, constitutes the Agency's response to the Legislative mandate to consider "temporary reversible impacts versus long-term impacts on water quality." See Minn. Stat. § 17.498 (a)(3). Subpart 5.A.(5) requires a variance applicant to submit a closure plan to ensure that the restoration of the receiving waters is technologically and environmentally sound and that post-closure monitoring is done properly.

119. Commentators questioned the length of time it would take to restore the receiving water to baseline. At page 39 of the SONAR, the Agency stated that restoration of the receiving waters to baseline quality should "in most cases" be completed within one calendar year after the date of closure of the aquatic animal production facility. Questions were raised at the hearing about the length of time it would take to restore the receiving water to baseline quality and it was suggested by the Administrative Law Judge that if restoration to baseline quality is something that needs to be accomplished within a certain time frame, the MPCA should consider specifying the time frame in the rule. In response, the Staff replied that while they generally expected a restoration to baseline conditions within a year of closure as stated in the SONAR, it was reasonable to set a limit of three years. This amount of time was suggested as "more realistic" by Minnesota Aquafarms, Inc. (see Testimony of Daniel Locke, MAI's CEO, T.II, p. 114)

120. Subpart 5.E. as finally submitted proposes language requiring a description in the closure plan of the methods and processes that will implemented to restore the receiving waters to baseline quality within three years of initiation of closure, and requiring a demonstration that no additional restoration is needed beyond three years. It is found that insertion of a time limit for restoration to baseline quality is necessary (in order to meet the statutory mandate that pollution caused by aquaculture is "reversible"), and that the choice of three years from the start of closure as the time frame for accomplishing that restoration is reasonable. Because the issue of a time limit for restoration was raised in the SONAR and discussed at the hearing by the only entity (MAI) now known to be subject to the proposed rule (due to its level of production), it is found that the three-year limit for restoration to baseline does not constitute a substantial change.

121. As originally published, subpart 5.E. provided that restoration to baseline quality "shall ensure that the most protective water quality parameters are restored". This language was vague and failed to specify which parameters were of concern. It its March 18 filing the Staff proposed language specifying the parameters that required a restoration to baseline (dissolved oxygen, total phosphorus, chlorophyll-a). It is found that the language requiring restoration to baseline of the parameters identified is clarifying in nature and makes the rule more specific. As such, it is found to be necessary and reasonable and does not constitute a substantial change.

122. Subpart 5.G. establishes limiting concentrations or ranges for "control pollutants" in order to prevent irreversible pollution and to protect existing beneficial uses. These limits can never be violated because such levels of pollution threaten human health and the environment. At page 49 of the SONAR, the Staff stated:

> "If the baseline quality of a pollutant is greater than the control pollutant limit, or less in the case of a lack of dissolved oxygen, the baseline quality of the pollutant should be used as the control pollutant limit."

In its final submission, the Agency proposed adding the SONAR language quoted above as the final sentence of Subpart 5.G.

It is found that the addition of the language quoted above at the end of Subpart 5.G. is necessary and reasonable. It is found to be a clarifying change and not a substantial one. It is suggested that the word "shall" be substituted for "should" in the sentence in order to add specificity, but failure to make that change will not render the rule defective. Adoption the change suggested is found to be necessary and reasonable and not a substantial change.

123. Subpart 6.A. specifies monitoring, testing and reporting requirements for facilities covered by the rule. As originally published, separate requirements were laid out for on-land and in-situ facilities, which distinction is rendered unnecessary by the consolidation of these terms detailed earlier in this Report. In its March 18 filing, the Staff proposed substitution of the word "permittee" for "facilities" as the entity required to perform the monitoring, testing, and reporting in order to clarify that only facilities covered by the rule need to comply. This language change is found to be necessary and reasonable for purposes of clarification and is not a substantial change.

124. In its March 18 filing, the Staff notes that all requirements of Subpart 6 in the rule published on December 16 are duplicative of the authority currently granted MPCA under Minn. Rule 7001.1050, subpart 2.B., except for the requirement to report aquatic animal production and the amount of fish food used. The Subpart as finally proposed deletes all other language for the purposes of clarity. Also, the words "amount of" are inserted before "fish food used" to clarify that the Agency is requiring data on the mass of fish food used.

The changes proposed for Subpart 6.A. noted in this Finding are found to be needed and reasonable and do not constitute substantial changes.

125. At Subpart 6.C., the Staff proposes deletion of the words "but not limited to" after "including" in the sentence detailing required entries in the operation record books of concentrated aquatic animal production facilities. This change removes a defect of overbroad discretion and is found to be necessary and reasonable. It does not constitute a substantial change.

126. Subpart 6.E. refers to water treatment and chemical additives. As originally published, the Subpart required that discharge of the additives "not be in toxic amounts, cause adverse human health concerns, or violate water quality standards". In its March 18 submission, the Staff propose to delete the quoted language and substitute "comply with parts 7050.0218 and 7050.0220" in order to make its intentions specific. The cited rules detail toxicity limits thoroughly and reference to them is found to be necessary and reasonable. The proposed substitution of a reference to specific standards for the originally-published narrative is found not to constitute a substantial change.

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

CONCLUSIONS

1. That the Minnesota Pollution Control Agency gave proper notice of the hearing in this matter.

2. That the MPCA has fulfilled the procedural requirements of Minn. Stat. §§ 14.14, and all other procedural requirements of law or rule, except as noted at Findings 13, 37 and 49-51. The procedural defects are disregarded for the reasons stated at Findings 13, 14, 37 and 51.

3. That the MPCA has documented 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 MPCA has demonstrated the need for and reasonableness of the proposed rules by an affirmative presentation of facts in the record within the meaning of Minn. Stat. §§ 14.14, subd. 2 and 14.50 (iii).

5. That the additions and amendments to the proposed rules which were suggested by the MPCA 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. § 14.15, subd. 3, Minn. Rule 1400.1000, Subp. 1 and 1400.1100.

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

7. That a finding or conclusion of need and reasonableness in regard to any particular rule subsection does not preclude and should not discourage the MPCA from further modification of the rules based upon an examination of the public comments, provided that no substantial change is made from the proposed

rules as originally published, and 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 consistent with the Findings and Conclusions made above.

Dated this 8th day of May, 1992.

Richard C. Luis
Administrative Law Judge

Reported: Court Reported
Transcript prepared by Lori Case, Janet Shaddix and Associates