



NATIONAL WILDLIFE FEDERATION®

GREAT LAKES NATURAL RESOURCE CENTER®

People and Nature: Our Future Is in the Balance

August 10, 2001

John Wachtler

Minnesota Pollution Control Agency

520 Lafayette Road

St. Paul, MN 55155

RECEIVED
AUG 14 2001

Dear Mr. Wachtler,

The National Wildlife Federation (NWF) submits the following comments on the current draft of the Interim MPCA Mercury Policy. NWF represents four million members and supporters devoted to the protection of wildlife, people and wild places. From our Great Lakes office in Ann Arbor, we pursue NWF's mission in and for the Great Lakes basin. One of our top priorities over the past decade has been to reduce discharges, emissions, and land disposal of persistent, bioaccumulative toxic substances, particularly mercury.

As implied in Appendix G of the draft Policy, NWF shares MPCA's concern about the difficulty and delay in producing mercury TMDLs, and has initiated an effort to simplify the process without sacrificing the required results. Unfortunately, MPCA's mercury TMDL proposal falls far short of the minimum elements needed to fulfill the goal of the TMDL program: the attainment of numeric and narrative water quality standards. These minimum elements are outlined in NWF's proposal, which we hope MPCA will consider.

NWF is also very disappointed in MPCA's stance on new and increased mercury emissions. Both this and the TMDL proposal are based on a faulty premise, i.e., that there is room for *any* additional mercury beyond natural sources and what we have already added to the biosphere.

I will address the MPCA positions on new and increased emissions and on TMDLs, and will then address other specific points in the draft Policy.

New and Increased Emissions

MPCA's position on new and increased emissions focuses too narrowly on local impacts, ignoring cumulative impacts across the state and beyond Minnesota borders. After repeatedly stating that most of the mercury deposited in Minnesota comes from outside the state, and that national and international action is required to reduce those sources, how can it possibly be acceptable to permit new emissions within the state so long as they do not noticeably impact *Minnesota* waters? If we care so little about the impacts on others, how can we expect them to reduce their mercury emissions for our sake?

While elemental mercury (Hg(0)) is not as readily deposited as inorganic mercury (Hg(II)), it is

not an innocuous air pollutant. Like Hg(II), Hg(0) will eventually come down somewhere—it is just more likely to come down further away from the emission point. The fact that one source will add only a minuscule amount of mercury to any particular water body is irrelevant; only minuscule amounts of mercury come to particular water bodies in Minnesota from given sources in other parts of the world. Every source adds to the cumulative problem, and every new source adds additional mercury to the global reservoir. To address this global problem, Minnesota and other states and nations must come to understand that Hg(0) is no more acceptable an emission than is Hg(II).

NWF does not believe that any increase in measurable amounts of mercury emissions should be allowed from any source. The difficulty in achieving reductions from existing sources should be reason enough to say “no” to new sources. The justification for allowing mercury emissions from existing sources simply does not exist for new sources, and this fact should be reflected in MPCA’s policy, as it is in state and federal law for NPDES discharges.

The draft Policy repeatedly states that requirements for dischargers should be more flexible, because air emissions are the largest source of the problem. In light of this statement, it makes no sense to turn around and allow new air emissions when new discharges would be prohibited. Clearly, we continue to have a mercury problem because our pollution control requirements for air pollution have lagged behind those for water pollution. MPCA’s draft Policy only serves to perpetuate this problem.

We would like to call to your attention a recent statement on new or increased discharges and emissions from the Lake Superior Binational Forum, an advisory group to the governments on implementation of the Lake Superior Binational Program. Although not as stringent as NWF’s position, it does represent a compromise position reached by industry, environmentalist, academic, and other citizen representatives. The statement reads in part:

The Forum further advises the governments that new or increased discharges and emissions of the nine critical substances of immediate concern within the Lake Superior basin shall only be allowed if the proposer provides an enforceable plan detailing how it will reduce its discharges and emissions in accordance with the virtual elimination dates established in the Stage 2 LaMP.

The reduction dates for mercury established in the Stage 2 LaMP include an 80% reduction by 2010, and virtual elimination by the year 2020. At the very least, new or expanded emissions in the Lake Superior basin should be subject to the above requirement.

Total Maximum Daily Loads

In Appendix G, MPCA lays out a proposed strategy for developing a statewide mercury TMDL within one year. While NWF would certainly welcome an adequate TMDL in that time frame, MPCA’s proposal would meet neither the requirements nor the goals of the TMDL program. MPCA proposes that the TMDL will require a 70% reduction below 1990 levels from Minnesota sources by the end of 2005, with possible future reductions to be determined sometime in the

future. In exchange for this “plan,” which does nothing more than restate what Minnesota is already doing, MPCA plans to give NPDES dischargers increased “flexibility” to continue discharging mercury.

This proposal falls far short of what is needed to meet water quality standards, which is the irreducible statutory requirement for TMDLs. 33 U.S.C. § 1313(d). To meet the TMDL requirements, scheduled reductions must be based on some defensible idea as to what reductions are necessary to eliminate the impairment to the water body. Clearly, if 30% of all mercury deposition is from natural sources, we need to eliminate more than 70% of the anthropogenic sources to eliminate mercury contamination in fish. After setting aside the 30% for natural sources (as the TMDL program requires), a 70% reduction in all other sources would lead to only a 50% reduction in mercury inputs. Does the MPCA have any basis for believing that a 50% reduction of mercury releases from 1990 levels would cure the problem?

NWF believes that if reduction plans are to be used as a substitute for the traditional TMDL process, those plans *must* include reduction percentages that would be sufficient to restore impaired uses. After applying a margin of safety and an allocation for natural sources, as required by the Clean Water Act, that percentage is very close to 100% of anthropogenic sources.

Based on this reality, NWF has proposed a reduction plan with the following elements, which would be adequate to serve as a substitute TMDL. First, it must include a 90% reduction in mercury air emissions by 2010 and virtual elimination of mercury air emissions by 2020. These reductions must be measured from a baseline date of 1995 or later. Second, it must require water dischargers to reduce mercury discharges to the level necessary to satisfy the appropriate water quality standards (the Great Lakes Initiative standards within the Great Lakes basin, and state standards outside of it), and to verify those reductions through discharge monitoring. Third, it must include the identification and clean up of mercury hot spots in sediments and on land that contribute to mercury entering water bodies. Ninety percent of the sites would need to be cleaned up by 2010, and 100% cleaned up by 2020. This position has been endorsed by at least twenty other environmental organizations as well, including the Izaak Walton League, the Minnesota Conservation Federation, the Lake Superior Alliance, Save Lake Superior Association, and Mississippi River Revival.

While NWF certainly does not oppose the goal of reducing mercury releases by 70% by the year 2005, a timeline to reach virtual elimination of mercury emissions must be included, along with reasonable assurance that the reductions will be achieved, before this reduction plan can serve as a TMDL. Although the TMDL process has been described as “iterative,” this does not mean that a TMDL does not have to set reductions at a level that will be effective the first time around. A TMDL in the first instance must require reductions sufficient to meet the agency’s “best estimate” at levels that would take the water body off the 303(d) list.

NWF objects to the allocation of 90% of the needed reductions to sources outside the state. First, the summary to the draft Policy states that in-state sources account for 10 to 30% of the mercury that impacts Minnesota waters. Why has the MPCA chosen the smallest amount to allocate to Minnesota?

More importantly, allocating 90% of the reductions to sources outside of Minnesota is both unrealistic and unfair. According to the draft Policy, at least 30% of the mercury that ends up in Minnesota waters comes from overseas. Much of this mercury can be attributed to coal burning plants in developing countries. For reasons that should be obvious after the recent debacle over the Kyoto protocol, demanding reductions from these countries while continuing to allow new or increased emissions in Minnesota is unlikely to be an effective policy.

The impetus for MPCA's proposal appears to be to ease the strict requirements on point source dischargers that are in place because these waters are on the 303(d) list, and are not yet subject to TMDLs. But the mere act of allocating 90% of all reductions to EPA is unlikely to have any significant impact on the actual water quality in lakes and streams. MPCA's focus on finding a way to do as little as possible within the bounds of federal law, rather than on the actual state of Minnesota's waters, is disheartening. NWF opposes the easing of restrictions on point source discharges unless and until we have some reason to believe that mercury from other sources will actually be lowered enough so that water quality standards will be met. As long as fish consumption advisories remain necessary, there is simply no justification for anyone to do less than they can to eliminate mercury from their discharges or emissions.

In summary, NWF will actively oppose a TMDL that does not include the limits necessary to remove Minnesota waters from the impaired waters list, particularly if the state intends to use the TMDL to loosen restrictions on point source dischargers.

Other Issues

The draft Policy does include a number of statements that are encouraging. NWF applauds MPCA for recognizing that fish consumption advisories are not the ultimate answer to the mercury problem. We also agree that source reduction is the best approach. We would particularly like to point out that source reduction includes using low-mercury fuel such as natural gas rather than coal.

The discussion on page 8 of the draft regarding the problems inherent in moving mercury from the earth's crust to the biosphere is particularly welcome. We need this level of recognition at all levels of government and industry if we are ever going to truly solve this problem. In general, the entire discussion of land disposal and applications is good, in both the text and Appendix A. NWF appreciates MPCA's acknowledgment that much remains unknown about the stability of mercury in various materials. We would only add that these materials should not be used in the environment until those questions are answered.

On the other hand, we are disappointed that MPCA continues to put off a systematic approach to Pollution Minimization Plans until the next permitting cycle. As MPCA acknowledges, putting these plans into place immediately could result in far fewer variances five years from now. More importantly, it would result in a significant decrease in mercury released to the environment over the next five years. There seems to be no reason for waste water treatment plants to wait until they know how much mercury is in their discharge before attempting to reduce it as much as

possible. Pollution Minimization Plans should be required of any plant that is likely to discharge mercury above background levels.

I was puzzled by the statement on page 3 of the draft, that “[f]or statewide releases, the MPCA reaffirms its commitment to reach the state mercury reduction goal for 2005—in part through voluntary reduction agreements—as long as the current mix of strategies seems to be effective.” Does this mean that MPCA is not committed to the goal if the current strategies prove not to be effective? If so, this directly contradicts my understanding of the Mercury Reduction Initiative agreement. Although I was not involved in that agreement, my understanding was that if the voluntary approach did not work, we would move on to a regulatory approach. I was also under the impression that the efficacy of the voluntary approach would first be assessed in October of 2001, in the report that MPCA is preparing for the legislature. Is MPCA backing off of its commitment to the reduction goal for 2005?

Although NWF agrees that reducing mercury methylation bears further investigation, and particularly that sulfur dioxide emissions should be reduced in part because they can contribute to increased mercury methylation rates, we caution that water flow regimes should not be manipulated in an attempt to address mercury methylation. Flow regimes are extremely important to many different types of ecosystems, and using this avenue to address methylation will almost inevitably lead to detrimental impacts on wildlife habitat.

The first two full paragraphs on page 12 regarding NPDES permits for existing dischargers appear inconsistent. Will dischargers with current data be given permit limits and compliance schedules following a “reasonable potential” analysis in the next permit cycle? If so, what does it mean that voluntary agreement programs will be available to them, with the “subsequent permit cycle . . . open to all regulatory initiatives, including reasonable potential determinations, effluent limitations,” etc.?

Finally, NWF is skeptical of MPCA’s apparent assurance that the 6.9 ng/l numeric water quality standard outside of the Lake Superior basin is sufficient to make Minnesota’s lakes and streams fishable. The use of default bioaccumulation factors and the recently promulgated EPA water quality criterion (in the form of a fish tissue level) for protection of human health results in water concentrations as low as one-half the above standard. And the EPA criterion itself is not as protective as it could be for all populations. At the very least, all sources throughout the state that discharge mercury above background concentrations should be required to implement pollution prevention plans. There is no justification for any source to discharge mercury unnecessarily, regardless of the numeric limit of the receiving water.

Thank you for this opportunity to comment on the MPCA’s draft plan. If you have any questions or concerns about these comments, I can be reached at 218/382-3377 or 612/724-4235.

Sincerely,


Jane Reyer

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August 17, 2001

Mr. John Wachtler
Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, Minnesota 55155

Re: Comments of the Federal Water Quality Coalition
on Draft Interim Minnesota Pollution Control Agency Mercury Policy

Dear Mr. Wachtler:

On behalf of the Federal Water Quality Coalition (the "Coalition"), we are filing the following comments on the draft Interim Mercury Policy that was issued in July 2001, by the Minnesota Pollution Control Agency (the "Agency").

The Coalition is a group of industrial companies, municipal entities, agricultural parties, and trade associations that are directly affected, or have members that are directly affected, by regulatory requirements imposed under the Federal Clean Water Act. The Coalition's members, for purposes of these comments, are as follows: Alcoa Inc., Alliance of Automobile Manufacturers, American Chemistry Council, American Forest & Paper Association, American Iron and Steel Institute, American Petroleum Institute, Black Beauty Coal Company, City of Indianapolis (IN), City of Lafayette (IN), City of Lima (OH), City of Superior (WI), Edison Electric Institute, Gary (IN) Sanitary District, General Electric Company, Mid America Crop Protection Association, Minnesota Power, National Association of Home Builders, National Mining Association, Olin Corporation, Pharmaceutical Research and Manufacturers of America, Rubber Manufacturers Association, Utility Water Act Group, Western Association of Arid States, and Western States Petroleum Association. The conditions imposed by the proposed Interim Mercury Policy will have significant impacts on Coalition members that operate facilities in the State of Minnesota, and also could pose significant precedential issues with respect to requirements that may be imposed on Coalition members with facilities in other States, and it is for those reasons that we are filing comments.

We commend the Agency for recognizing that mercury regulation poses difficult policy, technical and legal issues, particularly during the time period before total maximum daily loads (TMDLs) are completed. We also support the Agency's recognition that point source discharges to waterbodies are very small contributors to any mercury-related impacts to water quality. However, we believe that the way in which point sources are addressed in the draft Policy will involve tremendous cost with little environmental benefit. We believe that the policy could be improved to address those concerns, and we have provided our suggested changes below.¹

¹In addition to providing these comments, the Coalition wishes to note its interest in participating in the ongoing dialogue concerning the Agency's mercury efforts. For example, Appendix G of the draft Policy discusses possible development of a statewide mercury TMDL.

I. BASIC CONCEPTS IN DRAFT POLICY

Before discussing our concerns with the draft Policy, we thought that it would be helpful to review the key concepts that are included in that draft. Those concepts are outlined below.

A. Permit Limits For Existing Dischargers

During the time period before mercury TMDLs are completed, the Agency proposes to require mercury monitoring using the low-level detection method (Method 1631) for the initial round of permits issued to existing dischargers, where those dischargers have not collected data using the new method. These existing dischargers will retain their current limits in this first permit reissuance. Those dischargers that do have current low-level mercury data will be evaluated for reasonable potential as their permits come up for reissuance.

After dischargers that do not currently have low-level data have collected representative data using the new low-level techniques, the Agency proposes to conduct a “reasonable potential” analysis to determine whether effluent limits should be placed in subsequent permits. The chronic water quality standard for mercury will be applied to the discharge point for the reasonable potential analysis. Where reasonable potential is demonstrated, a limit and compliance schedule, including a pollutant minimization plan, will be placed in the permit. Where dischargers are unable to meet the water quality-based effluent limit, variances may be pursued. In the permitting process, other procedures and requirements will also be utilized, including specific facility-wide mercury reduction programs, which may contain mass balance requirements.

B. Permit Limits For New or Increased Dischargers

During the pre-TMDL phase, new or increased dischargers will be expected to monitor effluents using the low-level mercury method. The permits for these dischargers will contain effluent limits based on a wasteload allocation using the chronic water quality standard applied at the end of pipe. These limitations will be effective when the new or expanded discharge is initiated

If the new or increased discharger can demonstrate through monitoring that no reasonable potential exists, then the discharger may request the removal of the limit. In this case, the discharger will still be required to participate in the voluntary reduction program. If monitoring instead demonstrates reasonable potential, then the permit limit is retained, and participation in the mercury reduction program through a pollutant minimization program would be required. In all cases, continued monitoring would be required. In the Lake Superior basin, the permit limits will not be removed during the first permit issuance.

C. Variances

This is an issue in which the Coalition is very interested, and we will glad to provide our thoughts concerning development of mercury TMDLs as the Agency proceeds with its efforts.
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Variances will be needed in those cases where dischargers are unable to meet the Water Quality Based Effluent Limit (WQBEL). This is most likely to occur in the Lake Superior basin, where the water quality standard is 1.3 ng/l. Each discharger needing a variance would need to submit its own individual application and show that it meets one of the tests for granting a variance, such as that failure to issue a variance would result in “substantial and widespread social or economic impact.”

Variances for new or expanded discharges in the Lake Superior basin are allowed only when it can be demonstrated that there would be “imminent and substantial danger to public health and welfare” if a variance is not granted. Outside of the Lake Superior basin, new or expanded dischargers unable to meet a WQBEL for mercury would be eligible for variances.

II. COALITION CONCERNS AND RECOMMENDATIONS

In the draft Policy, the Agency states that point sources are only minor contributors to the mercury levels in Minnesota waters. Requiring point sources to meet water quality standards at the end of pipe will require the installation of costly control equipment with very little environmental benefit. Moreover, it is anticipated that many sources will apply for individual variances. This will require a tremendous commitment of resources from the agency to process, review, and approve or disapprove the variance requests. We believe that there are other, better ways to address the mercury problem.

A. Reasonable Requirements for Existing Discharges

In a situation where it is apparent, before a TMDL is conducted, that point sources are minor contributors to the overall loadings to the waterbody, the State should be able to reissue a permit without imposing new limits on mercury levels. (Existing limits should be retained.) Point sources should not be penalized with stringent permit limits when waterbodies are primarily contaminated from other sources. Placing limits on the point sources would have no significant impact on attainment of water quality standards. Therefore, any such new limits would not be authorized by Section 301(b)(1)(C) of the Clean Water Act, which requires “any more stringent limitation necessary to meet water quality standards.” (emphasis added)

While new permit limits for mercury are not appropriate during the pre-TMDL period, we recognize the need for progress toward attainment of standards in waterbodies that are currently impaired. We believe that the role of point sources in this process can best be implemented through the use of minimization plans, where those are already required, in combination with voluntary mercury reduction programs. Then, when TMDLs are developed, agencies will be able to reassess the need, if any, for reductions in point source loadings.

In the Lake Superior basin, minimization plans must be included in permits. These provisions will require dischargers to develop plans, monitor their effluents, assess possible sources and control methods, and implement feasible reduction measures. However, even where those plans are not required, the Agency can achieve much the same results through an active voluntary reduction program. Many point sources of mercury, including Coalition members, are

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already taking significant steps, without a regulatory requirement, to reduce mercury levels in their discharges. In many cases, this is being done in active cooperation with the relevant State and local agencies. In Minnesota, we are aware, the State has a Mercury Reduction Initiative. Fourteen companies have already entered into voluntary agreements as part of that Initiative.

B. New and Expanded Sources

The Agency is proposing to apply the chronic water quality criteria to the discharge at the end of pipe. The Coalition strongly believes that when point sources - including new and expanded point sources - are minor contributors to a water quality problem, they should be allowed to discharge at levels above the criteria applied at end-of-pipe. This concept recognizes that the reductions needed to attain standards (if the standard is attainable at all) can only be achieved from other sources. Reductions in those loadings to attain standards must be recognized in the TMDL process - by a phased TMDL, if necessary. Once those reductions are factored in, there is no basis, factual or legal, to require reductions in point source loadings. Water quality-based limits can only be imposed, under Section 303(b)(1)(C), if they are necessary to attain standards. Obviously, if the reductions needed to attain standards are coming from other sources, then new or expanded point sources should not be subject to TMDL-based permit limits.

There are at least two mechanisms that we are aware of that could be employed to allow new and increased discharges at levels above the criterion applied at end of pipe: offsets and programmatic reduction plans. As an initial matter, we want to emphasize that whatever approach is followed, it is very important that dischargers get appropriate credit for past reductions.

As for offsets, this State has already used the concept, in the Rahr Malting situation. If an applicant can show that an increase in loading will be offset by an equivalent reduction by itself or other sources in the same watershed, the increase should be allowed to occur during the pre-TMDL period, since it will not result in any further impairment to the waterbody.

Similarly, an increase should be allowed to occur if it happens within the context of a reduction plan. Such a plan could be developed for a specific watershed by the Agency and the stakeholders in that area. It would consist of a set of measures, including programs undertaken without a regulatory requirement, that will lead to reductions in loadings to the waterbody during the years in which a TMDL is being developed. (Of course, the measures could also continue after the TMDL is done, and be part of the set of programs that will lead to eventual attainment of standards.) Since the State of Minnesota already has an active Mercury Reduction Initiative, in which companies can and have entered into voluntary reduction agreements, those agreements could form part of the basis for programmatic reduction plans. If a reduction plan is expected to lead to, say, a 25% reduction in overall loadings over the next five years, then there is no reason why one discharger should not be allowed to make an increase in its discharge, which may lead to an insignificant increase in overall loadings. Since the overall trend in loadings to the waterbody would still be downward by a substantial amount, the small increase would not be inconsistent with the goal of making progress toward attainment of the mercury standard.

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C. Statewide Variances

We believe that the Agency can take all of the above-described actions based on the existing regulations. However, if the Agency believes that its authority to provide relief to point source dischargers needs to be embodied in a more specific provision, the Coalition would encourage adoption of a statewide variance mechanism, as has been adopted in Ohio and approved by U.S. EPA. Using such a mechanism, each discharger would not have to make its own individual demonstration of "social or economic impact," with the enormous expenditure of public and private resources that would result. Rather, as long as the discharger can show that there is no readily apparent means for them to meet the mercury limits other than expensive end-of-pipe controls, it would be allowed to be covered by the statewide variance. Administered properly, the State-wide variance mechanism could be an effective way for dischargers to move forward with mercury reduction measures while avoiding the enormous costs (with little environmental benefit) that would result from having to meet part-per-trillion permit limits for mercury.

D. Mercury in Stormwater

In the draft Policy, the Agency states that it is interested in coordinating with EPA and other states in evaluating and monitoring mercury in stormwater. As the Agency moves forward in this area, the Coalition wants to note that drawing conclusions about pollutant loadings and likely effects on water quality based on stormwater monitoring is very problematic. As EPA has stated:

Storm water discharges are highly variable both in terms of flow and pollutant concentrations, and the relationships between discharges and water quality can be complex. The water quality impacts of storm water discharges are related to the uses designated by States and Tribes in their WQS, the quality of the storm water discharge . . . and quantity of the storm water.

61 Fed. Reg. 57,425, 57,426 (Nov. 6, 1996). The problem of analyzing stormwater data is exacerbated in the case of mercury, because of the presence of mercury in rainwater. The Coalition believes that any initiatives related to monitoring mercury in stormwater need to recognize these analytical difficulties and proceed within the limits of sound science.

III. CONCLUSION

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August 17, 2001

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We appreciate the opportunity to provide these comments. Please feel free to call if you have any questions, or if you would like any additional information regarding any of the issues raised in these comments.

Sincerely,

Fredric P. Andes

cc: Members of Federal Water Quality Coalition

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AUG 22 2001

August 20, 2001

Mr. John Wachtler
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Re: Minnesota Chamber of Commerce Comments on Draft Interim MPCA Mercury Policy

Dear John,

The Minnesota Chamber of Commerce (MCC) appreciates the opportunity to review the revised draft Interim MPCA Mercury Policy (dated July 2001). The MCC previously provided extensive comments to the MPCA (dated December 19, 2000) on the October 12, 2000 draft of the MPCA Mercury Policy. In addition, we provide the following comments to reiterate some of our earlier points, and respond to changes in the draft Mercury Policy.

GENERAL COMMENTS

We agree with the MPCA that this document does not really establish new policy, but instead summarizes existing programs. As such, this is not so much a policy document as it is a status report. We believe that in order to establish effective policy, some of the issues we have raised in the past and also express in this letter should be addressed.

Some components of the mercury policy, such as how water discharges in the Lake Superior basin, and new and expanded emission sources will be addressed, have the potential to significantly impact economic prosperity and electricity supply and reliability, among other things. This should be addressed in the document.

The MPCA should explore more seriously the issue of credits or banking to allow new or expanded sources. There should be some allowance for sources that have achieved reductions in mercury releases to expand or construct a new facility. We are willing to work with the MPCA to develop this.

The MPCA should also explore additional NPDES permitting opportunities. The MCC agrees that a great deal of flexibility needs to exist in the NPDES permitting process prior to TMDL development for wastewater dischargers. A coordinated approach for the reissuance of NPDES permits, both pre-TMDL and with load allocations established as a result of a TMDL, is critical.

The MCC supports the concept of a statewide mercury TMDL.

COMMENTS ON SPECIFIC SECTIONS OF THE POLICY DOCUMENT

Summary Section

We agree with the MPCA that there are many issues associated with mercury that limit state level policy options, and that the complex relationship between the various mercury programs, developing programs, and the scientific uncertainties provides a barrier to developing a coherent regulatory framework for mercury reductions in Minnesota. For these reasons, we support your commitment to not pursue broad state mercury regulations, in order to allow for the voluntary approach to work.

We do believe, also, that there is some flexibility in how the MPCA administers existing programs that can achieve further mercury reductions without unduly burdening industry and business in Minnesota. It appears that the MPCA agrees with this, by stating that "...our intent is to allow as much flexibility as possible for most wastewater discharges."

Section 2.2 New or Expanded Air Emission Sources

The first paragraph in this section indicates that there currently are no standards that apply to new or expanded coal-fired boilers. Actually, since coal- and oil-fired electric utility steam generating units have been added to the list of sources to be regulated under section 112 of the Federal Clean Air Act, new or expanded facilities fitting this description will be subject to a case-by-case Maximum Achievable Control Technology (MACT) determination. This will result in mercury emission limits, eliminating the need for the MPCA to regulate further.

The two goals listed in the second paragraph are too restrictive and will effectively preclude any industrial development within Minnesota if there is even any miniscule amount of mercury emissions associated with the development.

The MPCA states that its goals are to:

1. "*ensure* that the facility does not *significantly* increase fish contamination or exceed water quality criteria through localized impacts. [Emphasis added.]"
2. "*ensure* that total mercury emissions are as low as *possible*, in order to help reach the statewide mercury emissions reductions. [Emphasis added.]"

It is impossible to technically "ensure" that the first goal is met by a particular facility. The MPCA discusses the limitations of the current state of the science with respect to atmospheric transport and deposition of mercury emissions. Furthermore, the MPCA admits that the mercury cycling is not completely understood. Based on these factual statements, it is impossible to "ensure" that this goal is being achieved.

The claimed goal is no significant increase in fish contamination, yet the term "significant" is not defined. Considering the limitations on the state of the science, it may only be possible to get a qualitative assessment of fish tissue concentrations.

To “ensure” that mercury emissions are as low as “possible”, will require that industry install controls or minimize emissions to nearly zero without regards to the cost of these actions. Opponents to the project could effectively argue that emissions could always be lower than the developer proposes.

We propose that language such as follows be used:

1. minimize the localized impact that mercury emissions might have on fish tissue concentrations and water quality
2. minimize total emissions through the use of economically practicable measures in order to help reach the statewide mercury emission reduction goals.

Section 2.3 Multi-Pathway Risk Assessment

Considering the state of science, it is not practicable to develop a risk assessment screening tool for oxidized mercury emissions. We would be more comfortable with the Policy stating that the MPCA will investigate the potential to develop a screening tool. Without seeing more details on the concepts of the screening tool, we believe that such a tool is not feasible.

We agree with the MPCA that it is most appropriate to allocate resources at reducing mercury releases. However, imposition of a risk screening tool will result in less resources being spent on reductions. The speciation of mercury emissions with respect to facility design is not well understood. If the MPCA intends to apply this tool only where oxidized mercury emissions exists, then many project proposers will be forced to conduct a detailed and difficult analysis that might result in uncertain mercury speciation profiles. To place the burden of a risk assessment on emissions speciation will only deflect funds away from reductions into the speciation analysis.

3.0 Releases to Land

This section is somewhat confusing. The fifth paragraph states that “Once geological mercury is applied to the surface of soil and subject to bacterial processes, moisture, and sunlight, a significant proportion will eventually be volatilized to the atmosphere and added to the atmospheric pool of mercury that causes fish contamination.”. Yet the next paragraph raises a series of questions that imply that in actuality we really do not know the fate of mercury that is land applied.

We suggest that the decision whether or not to allow land application should be based on actual data on the fate of the mercury in those materials. It is our understanding that the MPCA has begun requiring those who currently do land application to conduct annual monitoring. It is also our understanding that the University of Minnesota is conducting a study that includes an assessment of the fate of mercury from land-applied materials. Furthermore, a significant mercury fate study is being conducted in Canada (called METALLICUS) using mercury isotopes to assess how mercury reacts and moves in the environment. The MPCA should be able to utilize this information, along with other available information, to make a determination within a few years as to whether there truly is an environmental reason to continue to disallow this practice.

4.1 Interim Water Quality Permitting Strategy for NPDES Discharges: Overview

The MCC agrees with the concept that the interim guidance on monitoring is designed to provide necessary information to develop load allocations through the TMDL process. This concept does seem to carry through in the remainder of the sections addressing discharges to water. Section 4.2 seems to take a different approach, that being, permit limits would be established after the first permitting cycle where monitoring has occurred.

The MPCA should further outline how the pre-TMDL and NPDES permitting approaches will be coordinated such that the regular NPDES re-issuance approach will not, in fact, be a de-facto TMDL. Anti-backsliding needs to be addressed as part of this discussion. Appendices E and F would need to be revised should the MPCA include any of the MCC water related recommendations outlined below.

4.2.1 Interim Program Monitoring and Limits

Where it is apparent, before a TMDL is conducted, that point sources are minor contributors to the overall loadings to the waterbody, the MPCA should re-issue a permit without imposing new limits on mercury levels. (Existing limits should be retained.) Point sources should not be penalized with stringent permit limits when waterbodies are primarily contaminated from other sources. Placing limits on the point sources would have no significant impact on attainment of water quality standards. Therefore, any such new limits on existing sources would not be authorized by Section 301(b)(1)(C) of the Clean Water Act, which requires “any more stringent limitation necessary to meet water quality standards.”

While new permit limits for mercury are not appropriate during the pre-TMDL period, the MCC recognizes the need for progress toward attainment of standards in waterbodies that are currently impaired. The MCC believes this can best be accomplished through the use of minimization plans in combination with voluntary mercury reduction programs. In the Lake Superior basin, minimization plans must be included in permits. These provisions will require dischargers to develop plans, monitor their effluents, assess possible sources and control methods, and implement feasible reduction measures. However, even where those plans are not required, the Agency can achieve much the same results through an active statewide voluntary reduction program. Many point sources dischargers have or are already taking significant steps, on a voluntary basis, to reduce mercury levels in their discharges. This type of program can play an active role in bringing about mercury loading reductions from point sources as part of the State's efforts to make progress toward attainment.

A phased TMDL approach that provides for evaluation of each phase will give an opportunity to reassess the need for point source reductions.

4.2.2 Variances

Requiring point sources to meet water quality standards at the end of pipe will require the installation of costly control equipment with very little environmental benefit. The MCC anticipates that many sources will apply for individual variances. This will require a tremendous commitment of resources from the agency to process, review, and approve or disapprove those requests.

Source reductions obtained through Pollutant Minimization Plans and Voluntary agreements will play an important role in lowering mercury levels. However, the MCC questions whether these efforts will be significant enough to meet water quality standards, particularly in the Lake Superior Basin.

The MCC recommends that a statewide mercury variance be established, much like as has been approved for use in Ohio by EPA. Under such a provision, each discharger would not have to go through the enormous expenditure and use of public and private resources to make its own individual demonstration of "social or economic impact." Rather, as long as the discharger can show that there is no readily apparent means for them to meet the mercury limits other than expensive end-of-pipe controls, it would be covered by the statewide variance. Properly administered, the statewide variance mechanism could be a valuable way for dischargers to move forward with mercury reduction measures while avoiding the enormous costs (with little environmental benefit) that would result from having to meet part-per-trillion permit limits for mercury. This may also apply to Section 4.3.3

4.2.3 Exemptions/Inclusions

4.3.1 Interim Program Permit Limits (New or Expanded Discharges)

The MCC believes that where point sources (including new or expanded sources) are minor contributors to a water quality problem, they should be allowed to discharge at levels above the criteria applied at end-of-pipe. This concept recognizes that the reductions needed to attain standards (if the standard is attainable) can only be achieved from other sources. Reductions in those loadings to attain standards must be recognized in a phased TMDL process. Once those reductions are factored in, there could be no basis to require reductions in point source loadings. Water quality-based limits can only be imposed, under Section 303(b)(1)(C), if they are necessary to attain standards. If the reductions needed to attain standards are coming from other sources, then new or expanded sources should not be subject to TMDL based limits.

There are at least two mechanisms that could be employed to allow new and increased discharges at levels above the criterion applied at end of pipe: offsets and programmatic statewide reduction plans. The MPCA has already used the offset concept, in the Rahr Malting situation. If an applicant can show that an increase in loading will be offset by an equivalent reduction by itself or other sources in the same watershed, the increase should be allowed to occur during the pre-TMDL period, since it will not result in any further impairment to the waterbody. Likewise, an increase should be allowed to occur if it happens within the context of a programmatic statewide reduction plan. The programmatic statewide reduction concept is consistent with the MN Mercury Reduction Initiative. The MPCA and the stakeholders in that area could develop such a plan for a specific watershed. It would consist of a set of initiatives, including voluntary programs that will lead to reductions in loadings to the waterbody during the years in which a TMDL is being developed. (Of course, the measures could also continue after the TMDL is done, and be part of the set of programs that will lead to eventual attainment of standards.) Since the State of Minnesota already has an active Mercury Reduction Initiative, where companies can and have entered into voluntary reduction agreements, those agreements could form part of the basis for a programmatic statewide reduction plan. If a reduction plan is expected to lead to, say, a 25% reduction in overall loadings over the next five years, then there

is no reason why one discharger should not be allowed to make a small increase in its discharge. Since the overall trend in loadings to the waterbody would still be downward by a substantial amount, the small increase would not be inconsistent with the goal of making progress toward attainment of the mercury standard.

4.3 Stormwater

The MCC cautions the MPCA if it should move forward with stormwater monitoring. There are numerous technical concerns that need to be appropriately addressed. One example is the content of mercury in rainwater.

Appendix D Mercury Multi-Pathway Risk Assessment

In the section entitled "ATR Relationship With Permit Review Procedure for New or Expanded Sources", it states in the second paragraph: "The hazard of ingestion after bioaccumulation is currently not included in an ATR for a proposed facility." Actually, the current ATR Guidance addresses inhalation exposure only, but if a bioaccumulating chemical is emitted, a multipathway assessment is requested of the proposer.

Further on in the same paragraph it states "...it is not current MPCA policy to request such an analysis (multipathway)..." again this is not true. The current ATR guidance does not require it but MPCA staff request multipathway analysis if a bioaccumulating chemical is emitted.

Appendix G Multi-Media: Total Maximum Daily Load

Since there are several approaches which could be undertaken to develop a Statewide Mercury TMDL and the document mentions a stakeholder group will be used to develop a TMDL, the MCC recommends deleting the portion of the Appendix G titled "One Potential Minnesota Statewide Approach Summarized."

Thank you again for the opportunity to review and provide comments on the draft Interim Mercury Policy. Please contact me at 651-731-9121 if you have any concerns or questions related to these comments.

Sincerely,



Mike Robertson

~~RECEIVED~~

OCT 29 2001

October 26, 2001

VIA FAX AND U.S. MAIL

Gary Kimball
Environmental Research and Reporting Section
Environmental Outcomes Division
Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155-4194

Dear Mr. Kimball:

On behalf of the Minnesota Environmental Science and Economic Review Board (MESERB), I would like to submit the following comments for consideration as the MPCA prepares its Interim Mercury Policy. Our staff spoke last week with John Wachtler and it is our understanding that a final version of the Policy will be issued at the end of October. MESERB's comments address the July 2001 staff draft of the Policy.

In its August 10 comment letter, the National Wildlife Federation observed that air pollution control requirements for mercury lag well behind water pollution controls. MESERB strongly concurs. According to the Policy, "in most waters in Minnesota, over ninety-five percent of the mercury falls from the atmosphere in rain or as dry fall-out." Despite this observation, the draft Policy's summary states that "most major dischargers and some smaller ones will likely be ... required to monitor using low-level techniques." Monitoring requirements place an expensive and largely unnecessary emphasis on a tiny part of the problem. Monitoring may be required in some cases where years of mercury data already exists, and in other cases where there is no indication that mercury emissions pose any adverse health or environmental effects.

As you are aware, Minnesota Statutes Section 116.915 directs the MPCA Commissioner to implement the mercury reduction strategies found on pages 31 through 42 of the "Report on the Mercury Contamination Reduction Initiative Advisory Council's Results and Recommendations," released in March 1999. The statute says nothing about requiring low-level mercury monitoring, and to the extent the Advisory Council's report recommends lowering U.S. Toxics Release Inventory (TRI) monitoring thresholds from 10,000 pounds per year to 50 pounds per year, it also recommends that state funding should support the monitoring. Both the statute and the report recommend voluntary mercury reduction strategies for sources emitting more than 50 pounds of mercury per year.

The draft Policy makes clear that the MPCA believes it is in Minnesotans' best interest to require municipal wastewater treatment facilities to conduct low-level mercury monitoring, although these dischargers are only a small part of the overall mercury problem. If the state intends to require low-level monitoring for the benefit of all Minnesotans, then the state should provide the funding for this monitoring as the Advisory Council recommended. MESERB prefers the approach taken in H.F. 2002 (Howes) / S.F. 1829 (Dille), introduced during the 2001 session, which would implement a voluntary low-level mercury monitoring pilot project for at least ten major dischargers. This legislation would allow dischargers and the MPCA to assess the necessity and effectiveness of this monitoring before the monitoring is expanded. This legislation would also provide the state funding needed to conduct these programs.

MESERB also agrees with contentions made by the Federal Water Quality Coalition in its August 17 letter, and by the Minnesota Chamber of Commerce in its August 20 letter, that the way in which the draft Policy addresses point dischargers involves tremendous cost with little environmental benefit. NPDES permit limits should comply with Section 301(b)(1)(C) of the Clean Water Act and should not be more stringent than necessary to meet water quality standards. The role of point source dischargers in mercury contamination, small as it is, can and should operate through voluntary mercury reduction efforts that are supported through funding by the state.

MESERB also agrees that Minnesota should implement a statewide variance mechanism similar to that adopted in Ohio and approved by the Environmental Protection Agency. The variance would apply if a discharger could demonstrate that there is no readily apparent means for meeting mercury limits other than expensive end-of-pipe controls, without the discharger and the MPCA having to expend large amounts of time and money considering a demonstration of "social or economic impact."

As always, MESERB appreciates the opportunity to comment on the development of the Interim Mercury Policy. We hope that MPCA will consider implementing our suggestions, and we look forward to hearing MPCA's response. Written responses may be addressed to Mr. Christopher M. Hood at Flaherty & Hood, P.A., 444 Cedar Street, Suite 1200, St. Paul, MN 55101.

Sincerely,

Minnesota Environmental Science and Economic Review Board (MESERB)

A handwritten signature in cursive script that reads "Ken Robinson".

Ken Robinson, President

cc: John Wachtler

From: Lea Foushee [\[SMTP:lfoushee@mtn.org\]](mailto:lfoushee@mtn.org)

Sent: Wednesday, October 03, 2001 10:27 AM

To: Wachtler, John

Subject: RE: Draft study mrtcurey

I found the draft study to be extremely troubling on at least three points:

- 1) no mention yet of the need for an environmental justice analysis of the entire program in spite of the blatant racism of the process 2) the disgusting concept that the agency would even consider a variance to allow an accommodation of more mercury and 3) the complete failure to include even a preliminary analysis for coal plant reduction to meet the goals.