

Minnesota Pollution Control Agency

July 26, 1985

Colonel Raymond D. Beurket, Jr. District Engineer U.S. Army Corps of Engineers P.O. Box 1027 Detroit, Michigan 48231

Dear Colonel Beurket:

Re: Great Lakes Connecting Channels and Harbors Study Draft of Final Feasibility Report and Environmental Impact Statement May, 1985

The Minnesota Pollution Control Agency (MPCA) has reviewed the referenced document prepared by the Detroit District of the U.S. Army Corps of Engineers (Corps). We thank you for the opportunity to comment on this proposal and we would like to submit the following comments:

MPCA Position

The MPCA supports the Duluth-Superior Harbor deepening proposal provided it is conducted in an environmentally sound manner. In general, for materials in the Duluth-Superior Harbor, on-land disposal of dredged materials in a confined system or by land application in a manner which would not tend to pollute surface or ground water would be acceptable to the MPCA. In-water disposal or placement of dredged materials would require a variance and site specific evaluation.

History

We wish to enter into the hearing record a brief history of dredging in Duluth-Superior Harbor. Our purpose is not to indicate compliance with laws or to indicate the applicability of the historical situations to the present proposal, but we enter these facts for the limited purpose

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of indicating that certain issues should be familiar to the Corps. The MPCA position related to this proposal does not constitute an isolated instance; this is the same long-standing position that the MPCA has always taken related to dredging in the Duluth-Superior Harbor.

On October 9, 1975, Judge Edward Devitt ruled that the State of Minnesota had authority to require the Corps to comply with state pollution abatement requirements. Due to appeals which finally reached the Supreme Court of the United States, the Corps was determined not to be subject to the requirements of the states. This situation was clarified when the Congress of the United States passed the Clean Water Act of 1977 Section 404(t) which specified that the Corps was subject to the permit requirements of the state.

The Congressional record for December 15, 1977, discusses the intention of the Senate in passing the legislation. The record shows that the Senate clearly intended that the Corps comply with "... state water quality standards covering turbidity, suspended solids, and other parameters ... " and that since the compliance with those standards is dependent on the availability of funds, it "... is the responsibility of the Secretary of the Army to seek funds from Congress for maintenance dredging to be performed consistent with water quality standards." The record goes on to say that "In fact Congress intended that Section 404 in the 1972 Act would in its initial implementation end the open water disposal of dredged spoil." And further that "... (the) Corps of Engineers ... (dredging) ... must be performed with the same water quality standards and procedural requirements with which any other dischargers to the nation's waters must comply."

In October, 1978, a court order involving the Corps, U.S. Environmental Protection Agency (EPA) and the Minnesota Conservation Federation, Inc., ordered that the Corps consider on-land disposal alternatives and keep a current file of on-land disposal sites and alternative on-land dredge material uses for its future reviews. In addition, the EPA was ordered to revise the interim guidelines using impact related criteria. EPA was also ordered to work with the state pollution control agencies and make a good faith effort to reach a mutually acceptable sampling program for the Duluth Harbor.

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MPCA Authority

The following are specifically entered into the hearing record in response to requests by your staff members. We concur with your staff that an outline of state authorities should be submitted into the hearing record so that the role and responsibility of the MPCA with regard to the permitting process will be fully understood. The following is in response to your staff's request that we outline the MPCA powers and duties and define the source of such authorities.

Minnesota Statutes Chapter (M.S.) 115 specifically defines sewage, industrial waste and other waste to include dredge spoil (M.S. Chapter 115.01 Subdivision 4). It further defines disposal systems to mean the system for disposing of sewage, industrial waste and other wastes, (Subdivision 8) and requires any person operating or installing a disposal system to submit information and applications as required by law (M.S. Chapter 115.04). Specifically, it is unlawful for any person to construct, install or operate a disposal system or any part thereof until plans therefore have been submitted to the Agency and a written permit therefore shall have been granted by the Agency (M.S. Chapter 115.07). Dredge spoil is specifically exempted from National Pollutant Discharge Elimination System (NPDES) permits but the State requires that a State Disposal State (SDS) permit be obtained. The procedures for application are defined in Minnesota Rules (M.R.) Chapter 7001 et seq. The need for permits and the procedures under which permits are applied for are defined under those rules.

M.R. Chapter 7050 defines the classification of standards for waters of the state. Water classifications for St. Louis Bay and St. Louis River are 2B - fisheries and recreation; 3B - industrial consumption; 4A, 4B - agricultural and wildlife; 5 - aesthetic enjoyment, and navigation; and 6 - other uses. The classifications all have specific water quality standards which may vary. The specific standards for St. Louis Bay and River are derived by compiling the most restrictive standards from the various classifications. In addition, standards for discharges to waters of the state (M.R. 7050.0210) and variances from standards (M.R. 7050.0190) are defined.

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MPCA procedural rules are defined in M.R. Chapter 7000. Rules governing the procedure for issuance of all variances by the MPCA are defined in that part (M.R. 7000.0700). In addition, the determinations of the MPCA are constrained by statutes such as Minnesota Environmental Rights Law (M.S. Chapter 116B) and the State Environmental Policy Act (M.S. Chapter 116D).

Federal Statutes related to MPCA activities regarding the disposal of dredged material include but are not limited to the Clean Water Act (40 CFR 1251 et seq.) Part 313, 401, and 404(t). At the present time, MPCA 401 certification and permits for disposal of dredged material are required for any disposal to occur in Minnesota or waters of the state. No disposal of dredged material can be conducted without the issuance of MPCA permits. Dredged material is defined as a pollutant by state law and the discharge into waters of the state including Duluth Superior Harbor, will require the issuance of a variance. A copy of MPCA rules regarding variance procedures has been submitted to your staff for your information.

Section 401 certification would be required in conjunction with the issuance of state permits. We are aware of the Corps position that Congress can override state requirements in specific instances (CWA Part 404(r)). However, we see no conflict in the federal and state interest related to this project and therefore do not expect such action.

Adequacy of the Environmental Impact Statement (EIS)

The MPCA notes that the federal EIS process has not addressed the proposal in a manner equivalent to Environmental Review in Minnesota, as conducted under M.S. 116 D.04 and M.R. Chapter 4410.0000 - .7800. By State Standards, the federal EIS process, as conducted in this instance, seems premature. In Minnesota, the EIS is intended to be a permit development document. The Corps EIS does not contain sufficient detail to make permitting decisions, especially since authorization may not be implemented for several years. We understand that the federal funding process is more complex than the state process, requiring long periods of elapsed time from feasibility to implementation. Therefore, the lack of specific detail with regard to the EIS is understandable. However, once the project is implemented, we anticipate that the conditions at the time would be reconsidered and

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> the decisions related to implementation would be based on existing conditions. It may be necessary to reconduct the environmental review process, in accordance with State of Minnesota requirements noted above, prior to the issuance of MPCA permits for this project.

> The MPCA requests that more information on available alternatives be provided in the final EIS documents. discussion with your staff, we understand that the primary source of information developed for this EIS was the Duluth Port Authority. It appears that the information was primarily from documents developed by the Metropolitan Interstate Committee for disposal of dredged material. This conclusion is speculative on our part since the Corps discussion of the source of their information, including an assessment of rejected alternatives, was not included. Over the years, various alternatives have been discussed for the harbor and it would be extremely helpful to the Minnesota State Agencies if the Corps had discussed the basis for rejection of these alternatives. We are especially concerned that Hallet Dock No. 3, Clure Public Terminal, Connors Point, Erie Pier and other potential sites be kept as possible disposal options. Speculative rejection of any reasonable site must be avoided. Future decisions must be based on facts existing when final determinations are made. A listing of disposal sites and alternative sites, such as that ordered by the court in 1978, would have been useful.

The MPCA requests that the final BIS contain information related to the specifics of proposals, as would be required for a State of Minnesota BIS and permit process. For example, discussion of the use of the silt curtain is included in the document; however, no discussion of the effectiveness of such a curtain was included. Also from the documents and discussion with your staff, it is not clear whether the Corps intends to cap the material with clean sand or take other protective measures as part of mitigation for this proposal. The effectiveness or feasibility of such a measure was not discussed. Since the disposal methodology has not been clearly defined, the cost and benefits, as they are affected by the environmental considerations, are also left unresolved.

The MPCA requests that the final EIS analyze project costs in an incremental manner and in significantly greater detail. While it appears that the benefits have been thoroughly analyzed, the costs are not presented in an incremental manner, such as a unit cost for various dredging modes. This makes it difficult to evaluate the costs of any specific proposal against any alternative proposals. Cost evaluations of hydraulic versus mechanical methods of dredging and incremental costs of distances transported should be provided. Also, the economic benefit of dredge spoil re-use should be considered in the benefit analysis. Only on this basis can the ultimate costs of mitigation be calculated and the cost effectiveness of such measures be thoroughly analyzed.

The MPCA supports comments made into the hearing record in Duluth, that the final EIS include a comprehensive analysis of project related issues. The MPCA is suggesting that the Corps take a more comprehensive look at their duties and responsibilities with regard to the harbor and that this comprehensive investigation include the thorough look at all aspects of the harbor. This includes tying the existing environmental and feasibility reports presently under review into one comprehensive document as well as examining the maintenance dredging and management of dredged material. This also includes a comprehensive look at watershed erosion control and prevention, soil transport in and to the harbor, as well as management of the disposal of material removed by the maintenance dredging process. A comprehensive planning effort conducted by the Corps and other federal agencies in conjunction with the states and local governmental bodies affected by the harbor projects should be considered.

The MPCA supports testimony presented at Duluth requesting that the Corps investigate potential methods of reducing maintenance dredging in the harbor. We would strongly support studies for upland erosion measures along the St. Louis, Pokagama, Little Pokagama, Red River and several intermittent streams in northwestern Wisconsin which may be contributing major volumes of eroded soils into the harbor.

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The MPCA requests that the final EIS address the secondary impacts of the proposal in a more detailed manner. The secondary impacts of the deepening including the vessel propwash, increased use for private ship dredging, and the effect of the changes in depth on the benthic habitat have only briefly been considered. If in fact there are unacceptable secondary impacts, this could have a significant effect on the cost of mitigation.

6. Open Water Disposal

The MPCA has reviewed the proposal for in-water disposal of dredge material. The review consisted of 1) collecting the pertinent sediment data available to us since 1979, 2) classifying the sediment according to "Guidelines for the Pollutional Classification of Great Lakes Harbor Sediments" (USEPA, 1977), and 3) mapping the sediment locations by pollutional classification.

The pertinent sediment data used for the review was obtained from four sources. They were:

MPCA. 1979. Unpublished Data. Monitoring and Analysis Section, Roseville, MN. (Samples collected in 1979.)

Limno-Tech, Inc. 1984. Field Methodology and Results for Duluth-Superior Harbor, Duluth, MN. Limno-Tech, Inc., Ann Arbor, MI. (Samples collected in 1984.)

Environdyne Engineers. 1984. Letter to Jim Galloway on January 17, 1984 from Judith C. Stone. (Samples collected in 1983.)

Detroit U.S. ACE. 1982. Unpublished Data. U.S. Army Corps of Engineers, Detroit, MI. (Samples collected in 1982.)

Data from samples taken with a ponar dredge or surface portions of cores were used for the review. The sediment data was classified according to USEPA guidelines on Great Lakes Harbors. The sediment was rated as non-polluted, moderately polluted or heavily polluted. These classifications were then used to "judge" an overall (all parameters combined) rating for the sediment sample. The criteria used to make the overall ratings were:

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Non-polluted - Sample does not contain toxic parameters at heavily polluted levels and few parameters at moderately polluted levels.

Moderately polluted - Sample contained one toxic parameter at heavily polluted levels or several parameters at moderately polluted levels.

Heavily polluted - Sample contained two or more toxic parameters at heavily polluted levels and several parameters at moderately polluted levels.

COD, TKN, PO_4 , and Oil & Grease were not used in the overall rating.

Results The following are the results of the analysis based on EPA criteria rating system which the MPCA reviewer utilized as noted above. This does not constitute a final determination for the purpose of compliance with State laws.

Duluth Entry - non-polluted.

Duluth Harbor Basin - non-polluted except near Hearding Island where As, Ba, Mn have been found at heavily polluted concentrations.

Superior Harbor Basin - Moderately polluted at most locations. Heavily polluted with As at several sites and Hg at one site, moderately polluted with Cu, Mn, Hg, Ni and Zn at other sites. PAH compounds were not sampled.

Front Channel - Moderately polluted at most stations. Heavily or moderately polluted with PAH compounds at some sites. Moderately polluted with As, Cr and Pb at some sites.

Interstate Hole - Heavily polluted at two stations with Fe, Mn and Zn. Moderately polluted with PAH compounds.

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The MPCA has long questioned the use and validity of the EPA guidelines to determine acceptability of disposal options. (This issue was raised as part of the 1978 court order.) It should be noted that while any elevated levels in the sediments are of concern to the MPCA, the discharge of pollutants causing destruction or impairment of the state's natural resources is prohibited by state law. Such actions can be conducted through the variance process provided the feasible and prudent alternatives have been adequately considered.

The primary concern of the MPCA is that open water disposal of dredged material can result in violations of water quality standards and potentially can cause elevated concentrations of bioaccumulative and other toxic materials. While water quality in St. Louis Bay has improved dramatically, the Minnesota Department of Health (MDH) has issued a fish consumption advisory for Northern Pike Walleye, White Sucker and Shorthead Redhorse. The contaminants of concern in these cases are mercury and PCBs. Sediments in St. Louis Bay have also been found to be high in arsenic, chromium, copper and polyaromatic hydrocarbon compounds. We dispute the hearing testimony, which was provided by nonregulatory agencies, indicating that deep hole disposal will not be environmentally harmful. The MPCA feels this testimony was premature. Decisions on the acceptability of deep hole disposal must be made on a site specific basis and are of an incremental nature which must evaluate the proposal on the basis of the feasible and prudent alternatives. Final decisions must be firmly based on the best available information at the time the permit requests are submitted. If alternatives to the on-land disposal of dredged material seem infeasible, we recommend a detailed sediment and water quality monitoring program be developed in conjunction with the MPCA prior to final determinations of acceptable disposal options.

In summary, the EIS and feasibility study are insufficient for the State of Minnesota to make determinations on the permit issuance decisions which would be required under state law. Prior to the issuance of permits, a variance must be obtained and information must be provided by the permit applicant which addresses, in detail, the potential impacts and proposed mitigation necessary to bring the project into compliance with state laws or to provide effective mitigation. The development of this information must be provided prior to issuance of permits and may require the implementation of the state

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environmental review process, including an EIS, for the project. We hope that this information will be useful in your determinations and that, in the final analysis, implementation of this project will be based on the best available information.

If you have any questions regarding our position, please feel free to contact me or Mr. Louis Flynn of my staff at (612) 296-7355.

Sincerely,

Thomas J. Kalitowski Executive Director

TJK:nmf

cc: Robert F. Welford, U.S. Fish and Wildlife Joseph Alexander, Commissioner, Minnesota Department of Natural Resources

C.D. Besadny, Secretary, Wisconsin Department of Natural Resources

Val Adamkus, Regional Administrator, Environmental Protection Agency