

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
WATER QUALITY STANDARDS AND)
EFFLUENT LIMITATIONS FOR THE) R08-09
CHICAGO AREA WATERWAY SYSTEM) (Rulemaking - Water)
AND LOWER DES PLAINES RIVER:)
PROPOSED AMENDMENTS TO 35 ILL.)
ADM. CODE 301, 302, 303 AND 304)

**QUESTIONS SUBMITTED ON BEHALF
OF EXXONMOBIL OIL CORPORATION**

These questions are submitted for response by the Illinois Environmental Protection Agency ("Agency") witness[es] at the scheduled Chicago, Illinois, January 28 through February 1, 2008 hearings in this proceeding. They address proposed changes which could adversely affect the ExxonMobil Oil Corporation's Joliet Refinery ("Joliet Refinery") located at I-55 Bridge and Arsenal Road in Channahon, Illinois. The subject matter of these questions is as they appear in order in the Agency's Statement of Reasons.

Questions will pertain to the completeness of the proposal, submission of technical data to support the Agency's proposal, proposed water quality and recreational standards for the Lower Des Plaines River and the Upper Brandon Island Pool segment into which the Joliet Refinery discharges, and questions regarding the Agency's information on economic reasonableness for proposing to apply water quality standards that directly impact the discharge from the Joliet Refinery.

We request that the Agency provide answers to the specific questions raised in this submittal. In addition, the Joliet Refinery reserves its right to conduct follow-up questioning of the Agency witnesses, and requests that the Hearing Officer allow such questioning to occur in an orderly manner.

I. STATUTORY BASIS AND LEGAL FRAMEWORK

A. Illinois Environmental Protection Act

1. The Illinois Environmental Protection Act (“Act”) states that in considering the Agency’s rulemaking proposal, the Illinois Pollution Control Board (“Board”) is required to take into account whether the Agency has sufficiently addressed the following required criteria: “... the existing physical conditions, the character of the area involved, including the character of surrounding land uses, zoning classifications, the nature of existing air quality, or receiving body of water, as the case may be, and the technical feasibility and economic reasonableness of measuring or reducing the particular type of pollution.” 415 ILCS 5/27(a).

a. How has the Agency addressed the issue of surrounding land uses in its rulemaking proposal? If the Agency has addressed this issue, has the Agency provided in its rulemaking proposal all data or other information on which it relied in considering surrounding land uses? If the Agency has not addressed this issue, or has not provided all data or other information on which it relied, can the Agency provide a response that does address this issue and/or does provide such data and information?

b. How has the Agency addressed the issue of technical feasibility in its rulemaking proposal? If the Agency has addressed this issue, has the Agency provided in its rulemaking proposal all data or other information on which it relied in considering surrounding technical feasibility? If the Agency has not addressed this issue, or has not provided all data or other information on which it

relied, can the Agency provide a response that does address this issue and/or does provide such data and information?

c. How has the Agency addressed the issue of economic reasonableness in its rulemaking proposal? If the Agency has addressed this issue, has the Agency provided in its rulemaking proposal all data or other information on which it relied in considering economic reasonableness? If the Agency has not addressed this issue, or has not provided all data or other information on which it relied, can the Agency provide a response that does address this issue and/or does provide such data and information?

B. Applicable Board Regulations and Regulatory History

1. Some of the uses of the Lower Des Plaines River cited to establish the Secondary Contact classification in the 1968 Sanitary Board's approval of Regulation SWB-15 are still of concern today. They include: commercial vessel and barge shipping, recreational boating transit, and withdrawal and return of industrial cooling and process water. How did these uses of the Lower Des Plaines River affect the Agency's decisions on what recreational use designations to propose for the Lower Des Plaines River? How did these uses of the Lower Des Plaines affect the Agency's decisions on what aquatic life use designations to propose for the Lower Des Plaines River? Has the Agency included in its rulemaking proposal all data and other information on which it or its contractors relied to analyze these issues?

II. REGULATORY PROPOSAL: PURPOSE AND EFFECT

A. Introduction – Description and History of the Chicago Area Waterway System (CAWS) and Lower Des Plaines River

1. The Agency's Statement of Reasons states that: "The Lower Des Plaines River was modified from its original configuration to accommodate shipping traffic and increase flow for the CAWS." Shipping traffic continues in this viable commercial waterway, and the waterway is considered one of the most used waterways in the country, but neither the Agency nor its contractors has provided detailed data on traffic volume or safety issues in the waterway. Can the Agency provide the data it used in determining the impact of the proposed water quality and recreational use standards on shipping in the Lower Des Plaines River?

B. Description of the Lower Des Plaines River and CAWS – Reach Geography and Hydrological Function

1. The Statement of Reasons defines the Upper Dresden Island Pool of the Lower Des Plaines River as an 8.1 mile reach of the impoundment that is upstream of the I-55 Bridge and part of the UAA. It further states that the Upper Dresden Island Pool is more natural than the Upper Brandon Island Pool and has a fair amount of natural shoreline and side channels. Neither the UAA nor the proposal define what a "fair amount" is, nor do they establish what percentage of shoreline is owned by industry/city versus public access land. Can the Agency provide this information?

2. The Agency's general statement about "natural shoreline" in the Upper Dresden Island Pool implies a non-industrialized area, while further on Page 17 of the Agency's Statement of Reasons, the Agency states that the waterway is one of the busiest

inland commercial navigation systems in the nation. How are these statements consistent?

C. Description of the Secondary Contact and Indigenous Aquatic Life Use Designations

1. Some of the characteristics that lead to the establishment of the Secondary Contact Use and Indigenous Aquatic Life Use designations for the Upper Dresden Island Pool in the early 1970s still exist: most adjacent property is commercially owned and access is limited, the main channel is used daily throughout the year for commercial barge traffic, and the waterway carries a massive wastewater loading, including CSO's during wet weather. If these situations still exist, why is Upper Dresden Island Pool Recreational Use being proposed as "Incidental Contact Recreation" rather than the next level of "Non-Contact Recreation"?

2. Per the Aqua Nova summary of the UAA, the Lower Des Plaines River continues to be a highly modified water body that does not resemble its pre-urbanized state. Furthermore, the UAA stated that while there were improvements, it did not find the Lower Des Plaines River to be capable of full attainment of the aquatic life and the recreational goals of the CWA for unimpacted waters in the foreseeable future. Since this contradicts the findings of the later Yoder report being used for the Agency's proposal, what findings have required the Agency to propose water quality standards more stringent than the State's current "General Use" requirements for this waterbody?

3. In its Statement of Reasons, the Agency states that it believes that this regulatory proposal establishes comprehensive stand-alone use designations and water quality standards necessary to protect those uses. As a result, the Agency expects there will be no need to reopen these uses and standards when changes in the general use

category are considered for the rest of the state. Does the Agency expect that these standards will not be required for statewide use in the future?

III. REGULATORY PROPOSAL: REGULATORY LANGUAGE

1. Incidental Contact Recreation – The Agency’s Statement of Reasons indicates that recreational use surveys and other forms of research were conducted during the UAA process to determine which specific activities were taking place on the waterways and need to be protected. How was this analysis performed with regard to the Lower Des Plaines River? ExxonMobil cannot locate any reference in the Agency’s rulemaking proposal to such surveys or research for the Lower Des Plaines River – can the Agency provide the surveys and research on which it relied? (The Agency’s Statement of Reasons at page 25 cites to “Attachment B at 1-11,” but Attachment B does not relate to the Lower Des Plaines River.)

2. Incidental Contact Recreation – Is it the Agency’s position that the use of the Upper Dresden Island Pool for commercial barge traffic poses no safety risk to persons who might use the waterway for incidental contact recreation uses? If that is not the Agency’s position, what risks are posed to persons who would use the waterway for recreational purposes? If that is the Agency’s position, can the Agency provide the data or other information on which it relied to reach this conclusion?

3. Non-Contact Recreation – What are the reasons that the Agency did not propose to designate the Upper Dresden Island Pool as Non-Contact recreation? In making this determination, did the Agency consider the volume of commercial barge traffic in this waterbody? Did the Agency consider the numerous industrial facilities that discharge to this waterbody? Did the Agency consider the minimal number of access

points in the waterbody? Is the Agency aware that in the recent past, wakes from commercial traffic have caused fatalities in the Upper Dresden Island Pool? If so, did the Agency consider that fact in determining not to propose to designate the Upper Dresden Island Pool as Non-Contact recreation?

4. Security – At page 36 of its Statement of Reasons, the Agency notes that recreational uses of the waterways at issue in this rulemaking may be affected by “Special Homeland Security issues” that “may apply to Port District Properties.” Has the Agency considered the impact that security measures in place at facilities on the Lower Des Plaines River would have on recreation in the waterway? Has the Agency otherwise reviewed safety and security risks within the specific discharge areas of the Lower Des Plaines River facilities? If the Agency has conducted any of these reviews, did it do so in conjunction with the impacted facilities or in conjunction with the appropriate federal and/or state agencies with jurisdiction over security issues at these facilities?

5. The Agency notes at page 37 of its Statement of Reasons that:

Existing recreational uses in CAWS and Lower Des Plaines River were determined from:

- 1) Waterway surveys performed by UAA contractors and stakeholders;
- 2) Public input at UAA and other public meetings; and
- 3) Input during numerous phone, letter, e-mail, UAA website ... and other meeting inquiries.

Has the Agency in its rulemaking proposal provided all written documentation that resulted from these activities? If not, can the Agency provide such documents?

6. Allowed Mixing, Mixing Zones and ZIDs - The proposal provides that all proposed water quality standards must be met at every point outside of any area volume

of a receiving water within which mixing is allowed. Midwest Generation discharges from four facilities into the CAWS and the Lower Des Plaines, and has an Adjusted Standard for temperature that applies to these discharges and that extends in the Lower Des Plaines River approximately five miles past the I-55 Bridge. Other dischargers discharge into the waters affected by Midwest Generation's discharge. If the water temperature within this area does not comply with the Agency's proposed temperature standards as a result of Midwest Generation's discharge, would these other dischargers be allowed to utilize a mixing zone for their discharges? If not, how would these dischargers attain compliance with the proposed thermal limits?

7. What is the purpose of adopting "Acute Standards," "Chronic Standards," and "Human Health Standards" in proposed Section 302.407 directly from the parallel provisions in Section 302.208 - Numeric Standards for Chemical Constituents, which applies to General Use waters?

8. Given that the Aqua Nova's UAA proposed a "Modified Use" standard for the Lower Des Plaines River due to its current use, why has the State's rulemaking proposal set "General Use" water quality standards for each of the following constituents: arsenic, cadmium, chromium, copper, cyanide, lead, mercury, nickel, total residual chlorine, zinc, benzene, ethyl benzene, toluene, and xylene?

9. On what did the Agency rely in deciding to propose "General Use" water quality standards for chlorides, iron, selenium, and sulfates?

10. In formulating its final proposed rules, did the Agency seek information from all impacted facilities regarding the technical feasibility and economic impact of complying with the rules?

11. In its Statement of Reasons, the Agency indicates that in the CAWS and Lower Des Plaines, the Agency “expects that there will be violations of the [proposed] chloride standard during the winter months when road salting takes place.” How has the Agency determined the effect of industrial dischargers on chloride levels in the waterways, and differentiated between those effects and surface runoff? Has the Agency considered the ability of dischargers to comply with the proposed new chloride standard for these waters?

12. Temperature - The proposal establishes a period average and a daily maximum temperature limit, as opposed to the current standard which includes only a daily maximum. The rationale for the period average is that it would recognize “the realities of within season temperature variations and the thermal tolerances of fish.” Statement of Reasons at 86. The period average would change twice per month during five months out of the year, and monthly during the rest of the year. Did Mr. Yoder’s study and the Agency’s proposal take into account the operational impact to a facility that would be required to adjust its discharge every two weeks for five months of the year in order to comply with the changing temperature limit?

13. If the proposed rules are promulgated as proposed by the Agency, and the CAWS or the Lower Des Plaines are found not to be in compliance with the new thermal or other limits, would the Agency designate these waterbodies as in “nonattainment” status for such limits? If yes, would such a designation then lead to the development of Total Maximum Daily Loads (TMDLs) for these waterbodies?

14. Does the Agency consider the General Use thermal limits protective of all uses in general use waters in the State? If yes, why is the Agency proposing monthly

thermal standards in the Upper Brandon Island Pool that are more stringent than the current State "General Use" standard?

15. What scientific and technical support did Mr. Yoder and the Agency utilize to determine that excursions from the proposed temperature criteria should be capped at 2% of the time? If the current General Use excursion is capped 1% and Secondary Contact Use at 5%, why not set the cap at 3% in these rules, especially since a more stringent thermal standard is being proposed?

IV. OTHER QUESTIONS RELATING TO THE PROPOSAL

1. On June 6, 2002 and July 18, 2002, the Three Rivers Manufacturing Association ("TRMA") submitted letters to the Agency regarding its members' concerns related to the initial UAA process and the State's effort to change the Lower Des Plaines River waterway from Secondary Contact Use to General Use. Did the Agency ever respond to these letters? If not, can the Agency provide a response to the issues raised in these letters?

2. Proper planning, budgeting and construction of control equipment are essential to ensure compliance with any rulemaking. To avoid duplication and minimize the socio-economic impact to the facilities located on these waterways, all studies, including the recently approved AIWA should be completed before adopting the proposed revised water quality standards. What is the planned completion date of the AIWA study, and how does that relate to the date by which facilities would have to comply with these rules?

3. What is the Agency's proposed implementation plan for transitioning from the current Secondary Contact standards to the proposed new standards? How and when would this transition occur?

4. Other than Midwest Generation and the MWRDCG, has the Agency in its rulemaking proposal discussed the economic impact to dischargers to the CAWS and the Lower Des Plaines and how long it may take for those dischargers to obtain, install and test control equipment necessary to comply with these rules?

5. Prior to the February 2007 open meetings established by the Agency, the CAWS and Lower Des Plaines River systems were being treated as separate proposals. Why is the Agency seeking to combine all these waterways into a single rulemaking?

6. Would the Agency be amenable to revising this rulemaking such that waterway segments that have the highest water quality/recreational use potential (CAWS other than the CSSC) are addressed first, and more time for modeling and input is available for waterways with lower water quality/recreational use potential (CSSC and the Lower Des Plaines River)? If not, why not?

Respectfully submitted,

EXXONMOBIL OIL CORPORATION

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