

ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
 SITE SPECIFIC RULE FOR CITY OF)
 JOLIET WASTEWATER TREATMENT)
 PLANT, FLUORIDE AND COPPER) R07-21
 DISCHARGES, 35 ILL. ADM. CODE) (Site-Specific Rulemaking - Water)
 303.432)
)

Comments of Prairie Rivers Network
 Stacy James, PhD Water Resources Scientist

The City of Joliet (hereafter, “the petitioner) Should Not Be Able to Weaken the Water Quality Standards for Hickory Creek

The proposed monthly average discharge limit for copper is 0.15 mg/L and for fluoride is 3.5 mg/L. These limits are a significant and unacceptable increase from the water quality based effluent limits of the petitioner’s current NPDES permit (IL0022519). The petition also calls for removal of the general use water quality standards for copper and fluoride in a segment of Hickory Creek. Removal of water quality standards will result in the loss of existing and designated uses of the creek, which defies the Clean Water Act and unacceptably reduces the benefits that human society and aquatic life derive from Hickory Creek. According to the Code of Federal Regulations, “[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected” {40CFR131.12(a)(1)}. The petitioner’s documentation of “occasional bank fisherman” (Page 5, Section II, Part B, Users of Affected Water Segments) confirms aquatic life and recreation as existing uses of the portion of Hickory Creek proposed for the site-specific rule, and therefore, a request for the waiver of the general use designation is unlawful. The request for permanent site-specific rules that are less protective than the general use water quality standards will result in perpetual non-compliance with the fishable/swimmable goals of the Clean Water Act. Pollutant limits should not be set so that the regulated community can comply with the law, but rather should be set so that the actions of the regulated community do not harm human and aquatic life. Finally, the petitioner seems to justify the proposed discharge limits by contending that the receiving water is the Des Plaines River, not Hickory Creek. Regardless of historic physical modifications to Hickory Creek and the Des Plaines River, the IEPA has concluded that the petitioner currently discharges to Hickory Creek, and therefore, it is the capacity of Hickory Creek, not the Des Plaines River, that must be considered.

The Petitioner Mistakenly Alleges That the Proposed Copper and Fluoride Limits Will Cause No Environmental Impacts

The petitioner states “there would be no environmental impacts with the proposed change” (Page 8, Section II, Part H, Detailed Assessment of the Environmental Impact of the Proposed Change). An increase in the concentration of pollutants discharged to waterways is an environmental impact that degrades water quality and increases the total amount of pollution in aquatic systems. The current permit limits for copper and fluoride are water quality based

effluent limitations necessary for the protection of aquatic life, primary contact recreation, and other uses that fall under the general use designation. Therefore, removing the general use water quality standards from a segment of Hickory Creek and increasing the current effluent limits to the proposed limits poses a risk to aquatic life. The petitioner did not provide adequate evidence to support the claim that the proposed limits “as applied to the discharge into the designated receiving water will be protective of aquatic life, human health, and the environment as a whole” (Page 1, Section I, Proposed Site-Specific Rule).

The Receiving Waters of Hickory Creek and the Des Plaines River are Already Impaired

Hickory Creek and the relevant segments of the Des Plaines River are on the IEPA’s 2006 303(d) impaired waters list. Hickory Creek (Segment ID IL_GG-02) has the following pollutants as potential causes of impairment: chloride, total nitrogen, total phosphorus, sedimentation/siltation, silver, total dissolved solids, total suspended solids, zinc, fecal coliform. The Des Plaines River (segment IDs IL_G-12, IL_G-23) is potentially impaired by mercury and PCBs.

The Petitioner Needs to Confirm Joliet Public Water Supply as the Source of Fluoride and Copper

In regards to fluoride, there should be a more thorough explanation of why “Joliet believes that the fluoride levels in its effluent discharge are a direct result of the fluoride concentration in the public water supply provided to the customers tributary to the Eastside WWTP” (Page 4, Section II, Part B, Affected Sources and Facilities and Character of the Area Involved). The petitioner provides no evidence for this statement.

In regards to copper, there should also be a more thorough explanation of the petitioner’s conclusion that “exceedances appear to be related to the use of a corrosion inhibitor that was used by Joliet’s public water supply in order to comply with the Safe Water Drinking Water mandate” (Page 5, Section II, Part B, Affected Sources and Facilities and Character of the Area Involved). The petition lacks information regarding copper concentrations from the water supply, whether the corrosion inhibitor is still being used, and an explanation of why a corrosion inhibitor meant to reduce copper would actually increase copper.

The Petitioner Fails to Adequately Address the Available Treatment and Control Options

The petitioner states “Joliet is not aware of any treatments or control options to reduce the level of copper or fluoride in its effluent discharge that could be utilized to comply with the water quality based effluent limits in its NPDES permit” (Page 7, Section II, Part D, Available Treatment or Control Options). The petitioner must adequately present and address the available treatment technologies for copper and fluoride, and provide information on cost and infrastructure requirements. For example, treatment technologies for copper do exist, and include ion exchange and precipitation.