

ILLINOIS POLLUTION CONTROL BOARD

October 19, 2000

IN THE MATTER OF:)
)
PETITION OF ILLINOIS AMERICAN WATER) AS 99-6
COMPANY'S ALTON PUBLIC WATER SUPPLY) (Adjusted Standard - Water)
REPLACEMENT FACILITY DISCHARGE TO THE)
MISSISSIPPI RIVER FOR ADJUSTED STANDARD)
FROM 35 ILL. ADM. CODE 302.203, 304.106, AND)
304.124)
)

ORDER OF THE BOARD (by N. J. Melas):

This matter comes before the Board on an October 2, 2000 "Motion for Correction and/or Reconsideration of Opinion and Order Dated September 7, 2000" filed by petitioner Illinois American Water Company (IAWC) for its new public water treatment facility (new facility) at Alton, Madison County, Illinois that discharges into the Mississippi River (Mississippi). In the motion¹, IAWC asks that the Board reconsider the relief provided in its September 7, 2000 opinion and order. See In re Petition of Illinois American Water Company (September 7, 2000), AS 99-6. The Illinois Environmental Protection Agency (Agency) filed a response to the motion on October 16, 2000, and generally agreed with the requests in IAWC's motion. The Board grants the motion. For the reasons below, the Board modifies its order of September 7.

IAWC's existing public water treatment facility (existing facility) in Alton had been subject to a site specific rule which allowed untreated effluent into the Mississippi. However, parts of the existing facility were over 100 years old, and it was prone to flooding which caused a service disruption to customers in 1993. IAWC constructed its new facility in approximately the same area as the existing facility, albeit 50 to 60 feet higher in order to avoid flooding. IAWC's new facility will serve the same customer base as the old facility, and the new facility's effluent is similar to the existing facility's effluent. Nov. Pet. Exh. 2 at 2; Nov. Pet. Exh. 4 at 12; Pet. at 2, 12, 13, 16, Att. B at 1-1, 3-3; In re Site-Specific Exception to Effluent Standards for Alton Water Treatment Plant (March 8, 1984), R82-3; codified as 35 Ill. Adm. Code 304.206.

IAWC filed its petition in this matter on March 19, 1999, and amended its petition on January 5, 2000. IAWC requested that the Board adopt an adjusted standard from: (1) Section 304.124 of the Board's regulations for total suspended solids (TSS) and iron in the new facility's effluent; (2) Section 304.106, which bans offensive discharges; and (3) Section 302.203, the water quality provision banning offensive conditions, which has prohibitions similar to Section 304.106. Pet. at 1. The adjusted standard is requested for the new facility's discharge to the Mississippi at approximately River Mile 204. Pet. at 12. On September 19, 1999, the Agency recommended that the Board deny the relief that IAWC requested in its petition. Res. at 1, 22-23. However, at hearing on January 6, 2000, and in its June 22, 2000 amended response to IAWC's petition, the Agency recommended that the Board grant IAWC the relief that it requested provided that IAWC engage in a ten-year sediment reduction project with the Great Rivers Land Trust (GRLT), a local land conservancy. Tr. 2 at 10; Am. Res. at 1-2, 15.

¹ IAWC's motion for correction and/or reconsideration will be cited as "Mot. at ___" and the Agency's response to the motion will be cited as "Res. to mot. at ___." IAWC's petition, including the attached "Site Specific Analysis of Potential Alternatives for Handling Public Water Supply Residuals at Proposed Alton, IL Facility" by ENSR dated March 1999, will be cited as "Pet. at ___"; IAWC's amended petition will be cited as "Am. Pet. at ___"; the Agency's response will be cited as "Res. at ___"; the Agency's amended response will be cited as "Am. Res. at ___"; the January hearing will be cited as "Tr. 2 at ___"; and IAWC's exhibits from the November hearing will be cited as "Nov. Pet. Exh. ___ at ___."

In its September 7, 2000 opinion and order, the Board found that IAWC demonstrated that the factors surrounding the request for the adjusted standard from Sections 302.203, 304.106, and 304.124 of the Board's regulations are substantially and significantly different than the factors considered by the Board in adopting these regulations. In light of the substantial costs associated with treating the new facility's effluent, the Board was persuaded that treatment would be economically unreasonable and would result in little increased environmental protection. The Board granted IAWC an adjusted standard from Sections 302.203, 304.106, and 304.124 as Section 304.124 applies to TSS. The Board did not grant an adjusted standard from Section 304.124 as it applies to iron because it deemed the relief unnecessary. The Board found that IAWC's estimated dissolved iron effluent concentration of .009 mg/L was far less than the total iron standard of 2 mg/L standard at 35 Ill. Adm. Code 304.124. In re Petition of Illinois American Water Company (September 7, 2000), AS 99-6.

The Board also ordered that IAWC enter into a contract to provide a minimum of \$4,150,000 in year 2000 dollars to GRLT for a sediment loading reduction project (GRLT Project) over the next ten years. GRLT estimated that the project would offset sediment discharges from the new facility by a ratio of two to one. *Id.*

DISCUSSION

In examining a motion for reconsideration, the Board "will consider factors including, but not limited to, error in the decision and facts in the record which are overlooked." 35 Ill. Adm. Code 101.246.

Iron

In its motion, IAWC requests that the Board reconsider its denial of the requested relief from Section 304.124 of the Board's regulations as that section applies to total iron. IAWC states that total iron in the effluent from the new facility may exceed 2 mg/L. As proof, in its motion IAWC submits copies of sampling reports which show that amounts of "total recoverable iron" in the effluent from IAWC's existing facility were often above 2 mg/L. Three samples were collected each day for five days during December 1996. Eight of the samples showed total recoverable iron levels below 2 mg/L, and the other seven samples showed levels above 2 mg/L. Levels of total recoverable iron in the samples varied widely, even among samples taken on the same day. For example, the lowest and highest readings among all of the samples (.253 mg/L and 7.062 mg/L, respectively) were recorded on December 19. Mot. at 1-2, Exh. A. The Agency joins in IAWC's request for an adjusted standard from the effluent limit for total iron. Res. to mot. at 1.

The Board now recognizes that IAWC has a legitimate request for an adjusted standard from the regulation of general applicability at 35 Ill. Adm. Code as that section applies to iron. However, in determining whether or not IAWC is entitled to the relief, the Board must examine the factors at Section 28.1 of the Environmental Protection Act (Act) which determine if a petitioner is entitled to relief from a regulation of general applicability. IAWC has the burden to prove that it has satisfied those factors, which are:

1. factors relating to that petitioner are substantially and significantly different from the factors relied upon by the Board in adopting the general regulation applicable to that petitioner;
2. the existence of those factors justifies an adjusted standard;
3. the requested standard will not result in environmental or health effects substantially and significantly more adverse than the effects considered by the Board in adopting the rule of general applicability; and
4. the adjusted standard is consistent with any applicable federal law.

In granting an adjusted standard, the Board may impose conditions that may be necessary to accomplish the purposes of the Act. 415 ILCS 5/28.1(a) (1998). Section 28.1 of the Act also requires that the adjusted standard procedure be consistent with factors governing rulemaking at Section 27(a) of the Act. 415 ILCS 5/27(a) (1998).

Substantially Different Factors

In adopting the regulation of general applicability, the Board stated that “[w]hile iron’s toxicity to man is low, excessive iron can cause a nuisance for domestic uses or undesirable bottom deposits.” Effluent Criteria, Water Quality Standards Revisions, Water Quality Standards Revisions for Intrastate Waters (SWB 14) (January 6, 1972), R70-8, R71-14, R71-20, slip op. at 16. IAWC claims that the iron content in the new facility’s effluent will not affect domestic use and will not significantly increase bottom deposits or turbidity. Pet. at 68. Furthermore, IAWC predicts that bottom deposits from the new facility will be so slight that they will be difficult to measure vertically. Pet. at 51-58, Att. B at 5-6 to 5-11, 5-30 to 5-31.

In its initial response, the Agency disagreed, and stated that the effluent from the new facility will have solids that will contribute to bottom deposits. The Agency claimed that IAWC has failed to make its case that it is substantially different from other water treatment facilities and thus has not met the justification for an adjusted standard. Res. at 18. The Agency also stated that, unlike the older facilities which were built in the “pre-regulatory era,” IAWC is constructing its new facility with full knowledge of State and federal effluent and water quality requirements. As a result, the Agency claims that IAWC should be held to a different standard than the other facilities along the Mississippi. Res. at 9-10. In its amended response, the Agency recommended that the Board grant IAWC’s amended petition, including relief from the effluent standard for iron at Section 304.124 of the Board’s regulations. Am. Res. at 1.

Although the Board agrees that there may be an environmental benefit in holding IAWC’s new facility to a higher standard, the Board does not find such reasoning compelling enough to deny IAWC relief in this case. The Agency also offers little data to back up its concerns about bottom deposits while IAWC’s consultants conducted an in-depth study. The Board finds that the iron in the effluent from IAWC’s new facility will not contribute to the concerns that the Board expressed in adopting the effluent standard for total iron.

Environmental / Health Effects

The Agency has concerns about the effect that the new facility’s effluent will have on aquatic life in the Mississippi, but those concerns deal with total suspended solids, not iron. IAWC determined, to the Board’s satisfaction, that there is no mussel community in the Mississippi immediately downstream of the new facility’s discharge pipe. In addition, both native and transitory fish in the Mississippi are highly adaptive to the conditions at River Mile 204. See In re Petition of Illinois American Water Company (September 7, 2000), AS 99-6, slip op. at 25-27; Nov. Pet. Exh. 4 at 15; Pet. at Att. B at 5-19. The Board finds that the untreated effluent from the new facility, including the iron in the effluent, will not harm human health and will protect aquatic life immediately downstream of the discharge.

Justification

The factors relating to IAWC are substantially and significantly different than the factors which the Board relied upon in adopting the regulations at issue herein. The proposed adjusted standard will not harm the human health or the environment. As a result, the Board finds that IAWC has properly justified its petition for an adjusted standard from the generally applicable effluent standard for iron at 35 Ill. Adm. Code 304.124.

Federal Law

There are no federal categorical effluent regulations for drinking water facilities. 33 U.S.C. § 1314(b) (1998). In place of these regulations, the Agency issues National Pollutant Discharge Elimination System (NPDES) permits to public water supplies on a case-by-case basis pursuant to the Clean Water Act. 33 U.S.C. § 1342 (1998); 40 C.F.R. § 125.3(c)(2) and 125.3(d) (1998). The Board has stated previously that federal directives give it “broad discretion in determining the appropriate standard of control to apply to discharges from water treatment plants.” In re Site Specific Exception to Effluent Standards for the Illinois American Water Company, East St. Louis Treatment Plant (February 2, 1989), R85-11, slip op. at 10.

The Agency states that the U.S. Environmental Protection Agency would not object to the instant adjusted standard petition. Res. at 19; Am. Res. at 14.

The Board finds that the requested adjusted standard from the effluent limit for iron at 35 Ill. Adm. Code 304.124 is consistent with existing federal law.

Section 27(a) Factors

The Board's analysis of Section 27(a) factors with respect the effluent limit for iron is very similar to the Board's September 7, 2000 analysis of the other regulations from which IAWC sought relief. Several of the other compliance alternatives that IAWC explored for treating its effluent prior to discharge could harm the character of the surrounding land uses. The Board found that none of the compliance alternatives for treating the effluent from the new facility were economically reasonable. The only alternative which was technologically feasible (the construction of a lagoon settling system coupled with offsite landfilling of silts) would not significantly improve the water quality of the Mississippi. The iron in the new facility's untreated effluent will not greatly effect the water quality in the Mississippi. See In re Petition of Illinois American Water Company (September 7, 2000), AS 99-6, slip op. at 8-12, 13-19, 24-25.

Dechlorination

In its petition for the adjusted standard, IAWC indicates that sulfur dioxide will be used at the new facility to dechlorinate the effluent. Pet. at 19; In re Petition of Illinois American Water Company (September 7, 2000), AS 99-6, slip op. at 5. In the motion, IAWC indicates that sulfur dioxide is not the only chemical that will be used in the dechlorination process at the new facility and that other chemicals, such as thiosulfate, may be used. Mot. at 2. The Agency supports IAWC's request regarding dechlorination. Res. to mot. at 2. The Board takes notice of the other chemicals that IAWC may use in the dechlorination process.

IAWC Payments to GRLT

In its September 7, 2000 opinion and order, the Board held that

IAWC must provide a minimum average of \$415,000 per year to GRLT during the span of the GRLT Project. Payments will be equal to year 2000 dollars pursuant to the United States Consumer Price Index (CPI). By the conclusion of the project, IAWC will have provided to GRLT a minimum payment of \$4,150,000 in year 2000 dollars according to the CPI. In re Petition of Illinois American Water Company (September 7, 2000), AS 99-6, slip op. at 29.

IAWC claims that neither it nor GRLT contemplated indexing payments to the CPI. IAWC also claims that the record does not support indexing. It asks that the indexing provision be deleted. Mot. at 2. The Agency states that it has no involvement in the indexing matter, which it deems an issue between IAWC and GRLT. Res. to mot. at 2.

The Board inserted the CPI indexing provision in order to ensure that the GRLT Project had adequate funding. However, the Board agrees with the Agency and recognizes that IAWC and GRLT are best able to negotiate the details of the contract without interference. The Board's primary concern with the GRLT Project is that it will provide the projected reduction in the sediment loadings from Piasa Creek to the Mississippi River. The Board requests that IAWC and GRLT ensure that sediment loading reduction is the paramount objective in the contract.

Sunset Provision

The Board notes that the Agency plans to study the GRLT Project in five years to determine its effectiveness. If the GRLT Project is on schedule, it will be halfway complete in five years. See In re Petition of Illinois American Water Company (September 7, 2000), AS 99-6, slip op. at 22. In order for the Board to consider the results of the

Agency's determination of effectiveness, IAWC must request an extension of this adjusted standard for the GRLT Project past its seventh year. The seven year sunset provision should provide enough time for the Agency to conduct its determination of effectiveness and enough time for IAWC to apply for the extension to the adjusted standard.

CONCLUSION

The Board grants IAWC's motion and modifies its September 7, 2000 order. The Board grants IAWC an adjusted standard from the regulation of general applicability for the level of total iron in effluent at 35 Ill. Adm. Code 304.124. The Board takes notice that IAWC may use other means to dechlorinate its effluent other than sulfur dioxide. The Board deletes references to indexing payments from IAWC to GRLT. However, the Board requests that the contract between IAWC and GRLT will ensure the sediment loading reductions that the parties projected at hearing. The Board will also extend deadlines in the order to reflect the time that has elapsed since September 7.

MODIFIED ORDER

The Board hereby adopts the following adjusted standard, pursuant to the authority of Section 28.1 of the Environmental Protection Act:

1. This adjusted standard will expire on October 16, 2007. Illinois American Water Company (IAWC) may file a petition with the Board for an extension of this adjusted standard.
2. No facilities with outfalls or discharges to the Mississippi River (Mississippi) will benefit from the relief provided in this order except for IAWC's new public drinking water supply treatment facility (new facility) at Alton, Madison County, Illinois.
3. The general use water quality standard for offensive discharges at 35 Ill. Adm. Code 302.203 will not apply to a one mile stretch of the Mississippi which receives effluent from the new facility and is immediately downstream from the new facility's discharge.
4. The effluent standard for offensive discharges at 35 Ill. Adm. Code 304.106 will not apply to the effluent discharged from the new facility.
5. The effluent standard for total suspended solids (TSS) at 35 Ill. Adm. Code 304.124 will not apply to the effluent discharged from the new facility.
6. The effluent standard for total iron at 35 Ill. Adm. Code 304.124 will not apply to the effluent discharged from the new facility.
7. The Board grants the adjusted standard pursuant to the following conditions:
 - a. IAWC will send all of its discharges from its new facility only to the Mississippi at River Mile 204. IAWC will not send new facility discharges to tributaries of the Mississippi. IAWC will not send new facility discharges to any other body of water or to land.
 - b. IAWC will cease discharges to the Mississippi from its existing public water treatment facility for Alton once the new facility is operational and supplying water to all of IAWC's customers in the Alton, Illinois area.
 - c. No later than December 1, 2000, IAWC must enter into a contract with the Great Rivers Land Trust (GRLT) for a sediment loading reduction project (GRLT Project) that GRLT will manage.
 - d. The contract must specify that IAWC will provide a minimum of \$4,150,000 to GRLT for the GRLT Project.

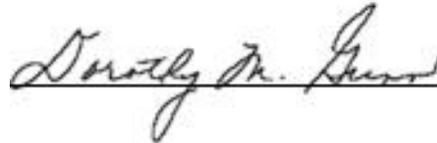
- e. Within ten (10) days of entering into the contract with GRLT, IAWC must provide a copy of the contract to the appropriate personnel at the Agency and shall file a copy of the contract with the Clerk of the Pollution Control Board.

IT IS SO ORDERED.

Board Member G.T. Girard abstained.

Section 41 of the Environmental Protection Act (415 ILCS 5/41 (1998)) provides for the appeal of final Board orders to the Illinois Appellate Court within 35 days of service of this order. Illinois Supreme Court Rule 335 establishes such filing requirements. See 172 Ill. 2d R. 335; see also 35 Ill. Adm. Code 101.246, Motions for Reconsideration.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above order was adopted on the 19th day of October 2000 by a vote of 6-0.

A handwritten signature in cursive script, reading "Dorothy M. Gunn", written over a horizontal line.

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board