

New DNR Water Quality Standards Are You Prepared?

Overview

The Iowa Department of Natural Resources (IDNR) is proposing revisions to the Iowa's water quality standards in response to threatened lawsuits by the Iowa Environmental Council and the Sierra Club among others.

IDNR is proposing to change the General Use stream classification for low flow streams to warm water designations containing numerical water quality standards, and delete the protected low flow concept, which protects aquatic life that would normally be present during spring high flows. In addition, the proposed rules would apply the "fishable and swimmable" national goal from the Clean Water Act to almost all streams, regardless of the natural, base flow rate. This will result in more stringent discharge limits for many dischargers to low flow receiving streams with little improvement in environmental quality.

Finally, the approach IDNR is using presumes that all waters are fishable and swimmable and require a stream and use assessment to determine if fishable and swimmable designations are appropriate for a selected stream. Unfortunately, the IDNR is changing designations prior to conducting the appropriate assessments, instead requiring the assessments be conducted after the fact on a case-by-case basis. The assessment results will undoubtedly face opposition from environmental groups if a downward change in designation is determined.

General use designation: This designation is currently given to nearly 85% of streams in Iowa. The change will require DNR to designate all rivers and streams as fishable and swimmable. Only after completing a use attainability analysis to determine the true use of the water, will that river or stream be allowed a lesser degree of protection. The protected flow exemption has been an important tool for communities whose treated effluent discharge is the only flow in certain Iowa waters.

Protected flow: This has traditionally been applied to streams with low flow regimes and is associated with wastewater load allocations. The protected flow concept protects the aquatic life present during the higher spring flow period with the approach that the same aquatic life will not be present in the warmer, low flow conditions present in the late summer. The rule package will eliminate use of protected flow and instead set the level of aquatic life protection at the critical low flow. This change will require end of pipe measurements for dischargers rather than allowing for a dilution factor.

Antidegradation policy. The state has an antidegradation policy but no implementation guidance. The policy states that waters will not decline from their current state. The guidance document that goes through rulemaking will define the implementation procedures and those waters to receive special protection. This will impact wastewater load allocations

Warm Water Protocol. This protocol will define the procedures used by DNR to define the use designation of a stream. All waters in Iowa will be immediately assumed to be fishable and swimmable. Only after using the warm water protocol is it possible for a water to receive a lesser degree of

protection. Part of the revisions to the warm water stream designations and the warm water protocol is to protect low flow pooled conditions, and provide for designations of human consumption of lesser quality fish such as creek chubs.

Impact

The proposed water quality revisions will have significant impact to municipal and industrial point source discharges and ultimately non-point sources due to creation of impaired waterways and total maximum daily load requirements. Point sources will initially be faced with more stringent ammonia standards requiring most aerated lagoons systems on the affected streams to change to mechanical activated sludge treatment systems. Changing from general use to a warm water designation will likely result in disinfection requirements for wastewater plants. These plants will also be impacted in the future by nutrient removal requirements and potentially total dissolved solids and chloride limits. In total, IDNR anticipates that 357 facilities will be impacted. IDNR does not anticipate that controlled discharge lagoons will be impacted at this time, but would be considered for future action.

The fiscal impact of the proposed rule revisions is huge. IDNR has identified 334 continuous discharge wastewater treatment facilities that are impacted by the “fishable and swimmable” concept. They identified only those facilities that would be impacted by more stringent ammonia discharge limits.

The IDNR’s projected fiscal impact to municipal, industrial and semipublic wastewater treatment facilities from this rule-making effort ranges from \$790 million to \$956 million. The primary cost will come from those facilities that use aerated lagoons being forced to move to a mechanical facility to comply with the end of pipe requirements.

Actual engineering estimates indicate that the construction costs for complying with more stringent ammonia and disinfection are much higher. The total projected capital cost for 185 cities is \$630,000,000. The 20-year extra cost for O&M is \$422,000,000, for a total of over one billion dollars to the ratepayers of the 185 communities.

The projected costs are as follows:

Cities less than 1,000 population

Capital & 20 year O&M cost \$ 229,000,000
Total projected rate increase: \$60-70/mo./service

Cities from 1,000 to 5,000 population

Capital & 20 year O&M cost \$ 585,000,000
20-year extra O&M \$ 225,000,000
Total proj. rate increase: \$35-45/mo./service

Cities above 5,000 population

Capital and 20 year O&M cost \$ 238,000,000
Total projected rate increase: \$25-35/mo./service

Semi-public communities: greater than \$100/mo./service

Rulemaking Status – The Environmental Protection Commission issued a Notice of Intended Action for these rules at its August meeting. The draft rules are now available for public comment. Public hearings are scheduled for six locations between October 4 and October 14 (schedule attached). The draft rules, list of impacted dischargers, and the public hearing schedule are included in the Notice of Intended Action on the IDNR web site. To view the Notice, go to the IDNR web site www.iowadnr.com, click on “Commissions and Boards” on the lower left side of the screen, click on “Environmental Protection Commission” in the top paragraph of the screen, click on the August Agenda, then click on Agenda Items 16 and 17 for the Notices of Intended Action. The following are the direct website addresses for the two Notices of Intended Action:
<http://www.iowadnr.com/epc/05aug/16.pdf>
<http://www.iowadnr.com/epc/05aug/17.pdf>

What Can You Do: Communities must become involved. There are several things you can do:

- ? Become familiar with the proposed changes and how it might impact your NPDES permit.
- ? Let your city council or governing board know about the potential costly changes that will be required of your wastewater system.
- ? Contact your legislators and let them know what the DNR is proposing and how it will affect your community. You can find your legislator by going to www.legis.state.ia.us and clicking on “Find Your Legislator”.
- ? Provide comment at the public hearings DNR will hold around the state about the impact these changes will have on your community and wastewater system. If you don't go to the hearings and provide either written or oral comment, DNR will think that communities are okay with the proposed rule!

Where Do I Get More Information: Need more information or have specific questions? You can find what you need at www.iawpca.org, www.iowaruralwater.org and www.iowaleague.org.