



Significant Nutrient Regulation Changes on Tap December 2018

Voluntary Incentive Program Helps Offset Potential Impacts

The Colorado Department of Public Health and Environment (CDPHE) has advertised its intent to adopt new stream water quality standards through 2027. The proposed changes include more stringent standards for nutrients (nitrogen, phosphorus and chlorophyll-a), cadmium, temperature, arsenic, ammonia, and selenium. These new standards will be enforced at the first permit renewal after adoption and will apply to ALL wastewater dischargers, regardless of size. CDPHE's proposed adoption schedule is:

- 2021 – Adopt cadmium, arsenic and temperature standards statewide
- 2022 – Adopt chlorophyll-a standards for streams
- 2022 – Adopt total nitrogen and total phosphorus standards for high-priority lakes
- 2027 – Adopt ammonia, selenium, total nitrogen and total phosphorus standards statewide

These new nutrient limits will have the largest impact on facilities that discharge to streams classified as drinking water supply or have low flow dilution capacity.

The proposed stream water quality standard for Total Nitrogen (TN) is 2 mg/l for cold water streams and rivers and 1 mg/l for warm water. The proposed stream water quality standard for Total Phosphorus (TP) is 0.7 mg/l. These are slated for adoption in 2027. These proposed concentrations are much lower than currently applied standards. CDPHE has not released information on proposed changes to ammonia standards.

Voluntary Incentive Program

To help offset financial impacts to wastewater utilities, CDPHE has created the Voluntary Incentive Program. Facilities that either currently meet Reg 85 limits or make “voluntary” improvements before 2027 to meet Reg 85 are eligible for the program. Qualifying facilities in this program will receive compliance schedule extensions in proportion to the duration of compliance achievement before 2027. The program allows a maximum extension of seven years for TN compliance and seven years of extension for TP compliance, with a maximum combined TN and TP compliance extension of 10 years. To be eligible for this program you must sign up before December 31, 2019.

Funding Impacts

If the proposed standards affect your facility, there very likely will be large capital costs involved to achieve compliance...and this is in addition to all the other annual maintenance and replacements that must take place. We strongly encourage building monetary reserves as soon as possible and recommend implementing improvements in a more incremental fashion as opposed to “all at once”. 2027 may sound far off but the reality is that facilities need to start acting now as financing is always one of the biggest hurdles.

Prudent stewardship requires thoughtful planning. SGM understands the challenges that our clients face, and looks forward to helping prepare our clients for pending regulations as effectively as possible.

Regardless of the intended means of financing, a utility's finances must be in order to undertake these types of projects, which means reserves have to be in place (whether for direct payment or as matching funds), existing debt needs to be paid off, and acceptable debt ratios need to be maintained. This process takes time, often several years, and the first step is facility planning so that the magnitude and timing of improvements and their costs can be understood.

Plan for the Future

The bottom line is regulatory changes are coming, and districts and municipalities providing wastewater treatment services need to be in front of them. If you have questions on your particular situation, please contact SGM. We would be glad to consult with you on facility performance, plant optimization, potential facility planning and the benefits to you for entering the Voluntary Incentive Program.

Considerations Regarding Planning and Long-Term Operations

Costs

Currently construction costs are very high. Will this continue? If your system is prepared to bid required capital projects if/when the construction market favors owners more, then your rate payers could experience significant long-term savings.

Facility Planning

A well-developed Facilities Evaluation is essential to understanding the relationship of current operations, both water and wastewater treatment facilities, that affect wastewater effluent quality. Are there process improvements that should be made now under the Voluntary Incentive Program to maximize compliance deferral credit?

Funding

How will your community pay for all the studies, permitting, legal, survey, engineering, etc.? These costs are in addition to annual infrastructure replacement that is vital to maintaining service levels. What will be the funding source? Does your community prefer a "large" rate increase later or a gradual rate increase with a smaller adjustment when costs are better known?

Rate Study

It is highly likely that the costs to comply with these pending regulations will not be able to be covered by reserves or grant funds. Rates, fee, and/or tax increases will be needed. A comprehensive Rate Study can chart a well-planned course for raising the funds for debt repayment and increased operational costs of advanced treatment.

Operator Training

Enhanced nutrient removal plants are very complex and difficult to operate. There are very few operators in Colorado that have run such facilities, and many ORCs are nearing retirement. How are you going to recruit, train and retain skilled operators, and pay for their higher salaries? We encourage utilities to start the thought process now and begin a systematic training program to slowly build expertise.



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