



PROVIDENCE

LDEQ ADOPTED EPA AMMONIA CRITERIA - WHAT DOES IT MEAN & HOW DOES IT AFFECT LPDES PERMITS?

BACKGROUND

LDEQ adopted the EPA ammonia criteria in 2020. Now that the criteria are final, LDEQ is implementing ammonia limitations in LPDES discharge permits per regulations. This means that LDEQ is **screening all LPDES permitted discharges with design flows above 0.1 million gallons per day (MGD) to determine if limits for ammonia are required based on the new criteria.** There are two steps necessary to determine if a limit is warranted. First, the site-specific ammonia criteria calculation is completed. Second, the water quality screening calculations are completed to determine if a water quality-based limit is warranted and, if so, what that limit will be.

HOW DOES THIS AFFECT LPDES PERMITTING?

There are several variables that LDEQ can use in these calculations, given that both are site-specific based on characteristics of the discharge and receiving stream. **For facilities that discharge into low flow streams, the new criteria typically result in a calculated limit that is not achievable by most sanitary wastewater treatment facilities.**

The ammonia criteria calculations are directly impacted by variations in pH (primary driving factor), temperature & flow. **Lower pH streams** are projected to more rapidly convert NH_3 to NH_4 , and therefore **receive higher ammonia limitations.** There are adjustments that facilities can ask LDEQ to make in carrying out the calculations, but even after these adjustments, many treatment plants may end up with permits that have ammonia limitations that are unachievable.

NEXT STEPS

All permitted facilities will be given a **three-year compliance schedule to meet the new limitations** upon renewal of the LPDES permit. Facilities must implement an approach and solution to comply with the ammonia limits or if additional data and information is available, request a modification and recalculation of the limitation.

HOW CAN PROVIDENCE HELP?

Our water quality experts can help with any questions and concerns facilities will face when approaching the new ammonia criteria. We are able to bridge both the technical and communication gap with LDEQ - our expertise is a trusted resource during any permitting and compliance project, and we can help prevent significant upgrades to sanitary wastewater treatment systems for ammonia removal.