



Michele Duspiva
U.S. Environmental Protection Agency – Region 1
5 Post Office Square, Suite 100 (06-4)
Boston, MA 02109-3912
Telephone: (617) 918-1682
Email: Duspiva.Michele@epa.gov

05.12.2023

Subject: CRC Comment on Palmer Wastewater Treatment Plant, Three Rivers, MA, MA01080

Michele Duspiva,

I am submitting comments on the revised draft National Pollutant Discharge Elimination System (NPDES) permits for the Palmer Water Pollution Control Facility (WPCF) on behalf of the Connecticut River Conservancy (CRC), formerly the Connecticut River Watershed Council. CRC is an environmental nonprofit dedicated to protecting the entire Connecticut River valley through initiatives that support clean waters, healthy habitats and thriving communities. The Palmer WPCF discharges into the Chicopee River, a direct tributary of the Connecticut River, and so is of interest to our organization. CRC congratulates the Town of Palmer on the elimination of its historic CSOs and the progress made to reduce nutrient loading from the facility.

The first page of the draft permit does not list the segment for the receiving waters (Segment MA36-22), which is included in other permits and would be helpful to include here.

Nitrogen

The 2011 WPCF permit special conditions to optimize operations relative to total nitrogen are very similar to the 2023 draft permit requirements. It is not clear from the fact sheet or draft permit if any nitrogen removal activity was undertaken since the issuance of the last permit, and it would be helpful if relevant updates were included in the fact sheet.

CRC understands EPA's approach to holding nitrogen limits, but we are concerned that this strategy does not go far enough to reduce future nitrogen loading from this and other MA facilities, which EPA acknowledges are the source of continued impairments in LIS. While the required annual report will provide information on optimization activities and relevant data, the requirement to minimize is not defined numerically, other than holding the cap of 374 lb/day. It would be useful to establish measurable benchmarks for the facility to minimize nitrogen discharge over the life of the permit, which could result in a more substantial reduction in nitrogen loading. However, we also recognize that voluntary incentives, while they can be helpful, have not proven to be consistently effective in reducing nutrient loading to LIS.

In 2015 NEIWPCP commissioned a report to compile information on low-cost nitrogen removal projects at 29 treatment plants in the upper LIS watershed. In 2021, an update to this report found that, in most cases, nutrient removal actions were voluntary, as the facilities were largely meeting the requirements of their NPDES permits. The report concluded that 'little incentive exists to perform voluntary upgrades,' and that



the majority of facilities did not take any actions to remove nitrogen.¹ The Palmer WPCF was included in this study² and was identified as a facility that was likely doing very little nitrogen optimization but had high potential for nitrogen removal given their excess capacity and unused tankage. However, since this was written in 2015 it does seem as though some nitrogen removal activity has taken place, based on the DMR data available on the ECHO website as well as the nitrogen data Appendix A. There appears to be a substantial decrease in nitrogen total lbs/year and monthly mg/L between 2019 and the subsequent years and if this was the result of a nitrogen optimization activity, we would appreciate this context being more readily available on the ECHO website or if resources were included in the fact sheet related to how we can find information related to optimization activity.

Given that the WPCF has operated well under capacity, if the facility were to increase nitrogen loading to its total nitrogen limit of 374 lb/day, this would represent a substantial increase in actual nitrogen entering the watershed. In 2015, a primary goal of the CCMP was to further reduce nitrogen loading from more distant sources such as wastewater facilities in Massachusetts. We believe this permit does not go far enough to include actionable, specific or measurable goals to reduce the WPCF nitrogen discharges below actual loading and allows for possible increases to 374 lbs/day. The final permit should specific goals associated with optimization activities to reduce nitrogen loading below the 374 lbs/day limit at a minimum, but preferably below the annual average of 146 lbs/day.

pH

Several wastewater treatment facilities in the Connecticut River watershed, including the Palmer WCPF, have an expanded pH range of 6.0 - 8.3 instead of the state-wide standard of 6.5 - 8.3 S.U. The permit allows for the WCPF to undertake a study to determine if they want to continue this expanded range in the next permit. We realize that some facilities may opt to undertake the study while others may not. This will create inconsistent standards for facilities throughout the watershed and so we prefer that the pH range for this and other facilities with the same permit conditions be reduced to come into compliance with the MA WQS range of 6.5 - 8.3 S.U.

Phosphorus

CRC supports the requirement to conduct ambient monitoring for phosphorus, but we believe monitoring should take place April – October, as is required under 2021 NPDES permit for the Chicopee Water Pollution Control Facility. I assume that the transition to ambient monitoring is the reason why ortho-phosphorus monitoring is not included in the draft permit, but it would be helpful to have mention of this change in the fact sheet. We note that the data in Table 4 of the fact sheet is from 2008 and so we support the use of more recent information in the next permitting cycle.

Copper and lead

It is well documented that copper can be acutely toxic to many aquatic species, and so we support the more stringent monthly and daily copper limits of 45.5µg/L and 34.9 µg/L, respectively, to protect WQS. We likewise support the addition of a monthly average lead limit for the same reasons.

¹ <https://neiwpc.org/2021/06/01/assessing-nitrogen-removal-retrofits/>

² <http://neiwpc.org/wp-content/uploads/2020/08/LIS-Low-Cost-Retrofit-Appendix-B-Tech-Memo.pdf>



Essential Fish Habitat

The Chicopee River where the WPCF discharges is designated as EFH for Atlantic Salmon. Given that native population of Atlantic salmon in the Connecticut River have been extirpated and federal efforts to reintroduce the species ended in 2013, we wonder if it would instead make sense to focus EFH precautions on shortnose sturgeon, a federally endangered species identified downriver in the Connecticut River on the NOAA ESA Section 7 Mapper.³ This may not change the permit conditions but seems a more relevant species to consider when taking steps to protect and preserve EFH.

PFAS

CRC supports the efforts of EPA and DEP to characterize PFAS inputs to river systems. We support the quarterly influent, effluent, and sludge testing requirement. We understand that WWTPs are not yet equipped to limit or treat PFAS and support EPA's intent to use these data to ensure the future permits will continue to protect designated uses.

CRC appreciates the opportunity to provide comments on the draft permit. I can be reached at kwentling@ctriver.org or (413) 834-9777.

Kelsey J Wentling

Kelsey Wentling (she/her)

River Steward, MA

Connecticut River Conservancy

³ <https://noaa.maps.arcgis.com/apps/webappviewer/index.html?id=a85c0313b68b44e0927b51928271422a>