Connecticut River Conservancy

Clean water. Healthy habitat. Thriving communities.

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Subject: Holyoke Water Pollution Control Facility, Holyoke, MA, NPDES Permit No. MA0101630

Michele Duspiva,

I am submitting comments on the revised draft National Pollutant Discharge Elimination System (NPDES) permits for the Holyoke 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 Holyoke WPCF discharges into the Connecticut River and so is of interest to us. Thank you for your consideration of our comments.

1. Both the permit and the fact sheet identify Connecticut River Segment MA 34-05 as the receiving waters for the WPCF. This segment includes 15.9 miles from the Holyoke Dam to the Massachusetts/Connecticut border in Longmeadow. However, several of the Holyoke CSOs (018, 019, 020, 021, 023) discharge upstream of the Holyoke dam into segment, MA34-04, which includes the stretch of river from the confluence with the Deerfield River to the Holyoke Dam and so would be considered receiving waters for some CSOs included in this permit. MA 34-04 is impaired due to E. Coli, as well as water chestnut and PCB in fish tissue.[1]
2. CRC supports the addition of a required WWTF Major Storm and Flood Events Plan under section I.C.1. This is a commonsense approach and a first step in preparing for the increased frequency of flood events expected in the northeast as the the area experiences the impacts of climate change.[2]
3. The median pH for the Holyoke WPCF was 7.3 S.U. in the review period, with no exceedances of their current limits and a minimum. EPA is extending the expanded allowable pH range for this facility of 6.0 - 8.3 S.U., instead of the state-wide standard of 6.5 - 8.3 S.U.. As with several recent draft permits in the watershed, the Holyoke permit allows the WPCF 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 narrowed to come into compliance with the MA WQS range of 6.5 - 8.3 S.U.
4. In the draft permit, EPA proposes to increase discharge limitations for both copper and lead. CRC has concerns about the justification for these increases.

[1] https://www.mass.gov/doc/final-massachusetts-integrated-list-of-waters-for-the-clean-water-act-20182020-reporting-cycle/download
[2] https://www.epa.gov/climate-indicators/climate-change-indicators-river-flooding

a. The 2016 permit allows for a monthly average copper limit of 3.5 ug/L, a daily maximum copper limit of 4.7 ug/L, and a monthly average lead limit of 0.73 ug/L. The 2023 draft permit increases this to a copper daily maximum of 25.1 ug/L and monthly average of 21.6 ug/L, while lead increases to 1.6 ug/L. The fact sheet explains the justification for this increase.
b. The City of Holyoke conducted an Ambient Connecticut River Study which sampling of ambient conditions for aluminum, copper, and lead in the Connecticut River upstream of Holyoke's discharge. I could not find this study online and it does not appear to be a public document, nor is the full citation available in the fact sheet. The methodology and results of this study are important for the public to understand when considering EPA's justification of the increase in copper limits. Based off the brief narrative description of the study, it seems the the permittee conducted ambient sampling for aluminum, copper and lead for three months in the summer of 2020 and that the results of these samples were compared to WET test from 2010-2014. There is no indication of how many samples were taken in the 2020 time period nor the suitability of the comparison of the results from the 2020 study and the WET test results. The fact sheet draws the following conclusion: "For each metal, the results were significantly lower than the prior years, and the report indicates that the previous sampling may have been contaminated due to proximity of the previous sampling location to moored boats, boat traffic and boat docks." It is not clear how the report came to this determination and the conclusion does not appear to be sufficiently justified. It is also not clear how 'significantly lower' is defined numerically, though this information is likely in the 2020 study. We are not aware of any out of the ordinary boating activity in this specific stretch of river compared to other nearby portions of the Connecticut River. The closest marina is the Redcliffe Canoe Club three miles upstream of the WPCF and another small marina roughly four miles upstream; both marinas are above the Holyoke dam.
c. The fact sheet notes that the new (2020) sampling location is one mile downstream of the old sampling location in an area less likely to be impacted by 'these type of contamination'. CRC request further specification on the sources of contamination and the methods by which the 2020 study identified boats activity as the source of contamination.
d. CRC requests information about the coordinates of the new sampling location. The draft permit indicates that WET test samples should be taken immediately upstream of the zone of influence (we note that the draft permit lacks a definition for the zone of influence). Given the new sampling location used in the 2020 study, what will be the location of WET testing for the final 2023 permit? Without this information, it is difficult for us to understand how the change in sampling locations impacts sample results.
e. In its characterization of ambient conditions, EPA considered both the results of the 2020 study as well as WET testing results from the review period. EPA is uncertain as to whether the recent WET sampling was taken at the old or new sampling location. It seems that the WPCF would be able to readily provide this information and CRC requests that the WPCF and EPA work to identify the location of the sampling during the review period and update the fact sheet with this information for the final permit issuance. Given our concerns about the results of the 2020 study, outlined in 4(b) of our comments, we do not believe it is appropriate at this time to include the 2020 results in the characterization of ambient conditions.
f. CRC agrees with EPA's assessment that, considering both CWA § 402(o) and 303(d)(4)(B), it is accurate to state that the provision (303(d)(4)(B)) applies to copper and lead limits only insofar as the limits are consistent with antidegradation. CWA § 402(o) prohibits "effluent limitations which are less stringent than the comparable effluent limitations in the previous

permit except in compliance with section 1313(d)(4) of this title." 303(d)(4) does allow for revision of an effluent load *only* if the revision is consistent with the state's antidegradation policy. EPA notes that the adjustment of limits to the current actual load would not represent a new or increased actual discharge and that EPA conferred with MassDEP and determined this reasoning is aligned with Massachusetts' antidegradation policy. Massachusetts antidegradation policy includes a 3-step review to determine if the discharges undergoing permit renewal will impact existing uses. These steps are: (1) An identification of existing uses; (2) A determination of water quality impact; and (3) A comparison with criteria.[3] Documentation of this process is not included in the draft permit or fact sheet, and it is unclear whether this review took place. Given this, CRC does not agree that the increased limits for copper are aligned with the requirements under CWA 303(d)(4)(B), which stipulates that effluent limitations may only be revised if they are consistent with state policy.[4] Additionally, the facility has not met any of the exemptions under CWA § 402(o)(2). Rather than increase the copper and lead limits, it would be more appropriate for EPA and MassDEP to undertake an antidegradation study before increasing the allowable limit for copper and lead.

g. CRC also does not agree with EPA's reasoning that, "adjusting these limits to the current actual load (if higher than the permitted load) would not be a new or increased discharge of pollutants and would, therefore, be consistent with antidegradation at this time." Under this logic, when a facility discharges a pollutant at a rate higher than permitted, that would justify increasing pollutant loading to match the actual discharge, which would be backsliding. CWA § 402(o) refers to "effluent limitations," and not to actual loading amount.

h. EPA sets the copper and lead limits based on 95th percentile values for effluent data in the review period. Section 5.1.10.1 states that there is limited site-specific data, it is not clear why this method is used to determine the appropriate copper and lead effluent limits. Facilities that have limited site-specific data are subject to hardness-dependent criteria, outlined in Appendix C: Calculation of Hardness-Dependent Fresh Water Dissolved Metals Criteria Values of the Massachusetts Surface Water Quality Standards. EPA instead uses a mass-balance evaluation to determine the revised limits. This results in proposed limits that are higher than nearby wastewater facilities, such as the Westfield WWTP, which has draft copper limits of 18.6 µg/L average monthly and 22.5 µg/L daily maximum.

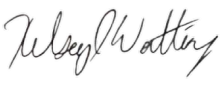
i. CRC supports the proposed WET testing as well as the total Aluminum limit requirement.

5. The fact sheet states that the rolling average nitrogen load ranged from 403 lb/day to a maximum value of 668 lb/day and the draft permit proposes a nitrogen limit of 730 lb/day. The 2016 permit included a special condition target for the facility to average 696 lb/day of nitrogen. The facility has achieved that during the review period, yet the proposed limit in the draft permit is set at 730 lb/day. CRC does not believe this approach to capping nitrogen at the 730 lb/day limit works towards the goals of the CCMP to reduce out-of-basin nutrient loading; the extended cap of 730 lb/day seems to be a step backwards from the 2016 permit. Specifically, if over the lifetime of the 2023 permit the facility were to fully realize the proposed cap, this would represent a nitrogen loading increase of 62 lb/day. While the permit requires implementation of optimization methods to ensure minimization of total nitrogen, this requirement to "minimize" is vague. At a minimum, we believe it would be helpful to provide the WPCF with measurable benchmarks in nitrogen reduction to establish expectations for reduction in nitrogen so that both the facility and the public can understand the goals set out for the next five years.

[3] https://www.mass.gov/doc/antidegradation-implementation-procedures-0/download
[4] https://www3.epa.gov/npdes/pubs/pwm_chapt_07.pdf

6. In determining whether to require phosphorus monitoring in the draft permit, EPA draws on data from fifteen years ago, which represents that most recent available phosphorus data. This is and of itself demonstrates the need for more recent phosphorus data. EPA indicates that the next permit will require phosphorus monitoring, at which point the permit may be drawing on data two decades old. The Chicopee WPCF 2021 NPDES permit, a facility similar in size and with fewer CSOs, includes phosphorus monitoring requirements from April – October with the following justification, "To be able to quantitatively determine the potential that phosphorus discharges from the Chicopee Water Pollution Control Facility may cause or contribute to the development of excessive plant growth in the Connecticut River in the next permit cycle, the Draft Permit includes the requirement to monitor phosphorus monthly on a seasonal basis, from April 1st through October 31st." CRC believes that it would be reasonable and consistent to likewise require phosphorus monitoring at the Holyoke WPCF.
7. 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 wastewater facilities 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.
8. 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. This may not change the permit conditions but seems a more relevant species to consider when taking steps to protect and preserve EFH.
9. We are glad that the Holyoke LTCP was finalized during the review period, and we are supportive of the actions outlined in the recent 2023 consent decree with EPA, MassDEP and the City. The 2016 response to comments included *Table 2: Untreated CSO discharge from Outfall 009*, which helped us to understand if the outfall is discharging the number of times it was designed to do so and how these discharges have changed year-to year. CRC requests that information regarding the number of CSO untreated discharges from Outfall 009 during the review period be included in the fact sheet; the number of events in Appendix A is helpful information but does not seem to separate out the number of days the outfall was active, and the number of days combined overflow was discharged into the Connecticut River untreated. The draft permit requires an annual report with annual precipitation compared to that in a 'typical' year as assumed in the CSO modelling system. How is a typical year defined in this case?
10. Finally, CRC supports the requirements of the draft permit and of *An Act Promoting Awareness of Sewage in Public Waters*. We have reviewed Holyoke's public notification plan and are supportive of the efforts to create an interactive map and email notification of CSO discharges. The interactive map and the maps found in the public notification plan are very clear and are easier to read than the map included in the fact sheet; it could be helpful to include one of these maps in future fact sheets if possible. Information regarding the most recent CSO discharge is essential for people to be able to safely access and enjoy the Connecticut River, and public notification requirements are a positive step forward in increasing communication about these events and their impacts.

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



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