
March 25, 2024

The Johns Hopkins Center for a Livable Future
Bloomberg School of Public Health
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Disclaimer: The opinions expressed herein are our own and do not necessarily reflect the views of The Johns Hopkins University.

Dear Mr. Whitlock,

The Johns Hopkins Center for a Livable Future (CLF) is an interdisciplinary academic center based within the Johns Hopkins Bloomberg School of Public Health. Our mission is to promote science and systems thinking to build a healthy, just, equitable, and sustainable food system. Since its inception, CLF has recognized that diet, food production, the environment, economic opportunity, and public health are interwoven elements of a complex system.

We appreciate the opportunity to comment on the proposed Clean Water Act Effluent Limitations Guidelines and Standards for the Meat and Poultry Products Point Source Category (Docket ID EPA-HQ-OW-2021-0736). In the proposed rule, EPA describes its preferred regulatory option (Option 1) and requested comment on alternative options (Options 2 and 3).

We encourage the EPA to adopt Option 3. Of the options presented, we believe Option 3 is the most sound and rigorous approach to address the public health and environmental concerns posed by effluent from Meat and Poultry Product (MPP) facilities. Below, we describe further our rationale for supporting Option 3.

Option 3 will not have a significant impact on smaller, independent MPP facilities.

We reviewed EPA's rationale for selection of Option 1 versus Options 2 or 3; we paid particular attention to section VII.E., in which EPA details its rationale for rejecting the more stringent options. EPA highlights several concerns, including the potential for Options 2 and 3 to impede the Biden Administration's efforts to promote competition in agricultural markets by hindering expansion of independent meat and poultry processing capacity.ⁱ

As food systems researchers concerned with the resilience of our food supply chains, we agree with the Biden administration that an "overreliance on just a handful of giant processors leaves us all vulnerable."ⁱⁱ We recognize the value of building the capacity of small and mid-sized meat and poultry processing operations, as they can decrease reliance on consolidated national and global supply chains.ⁱⁱⁱ However, based on EPA's analysis, it appears that only about 0.1 percent of existing processors (53 facilities) would be at risk of closure due to the costs of implementation of Option 3 (as compared to 16 facilities for Option 1).^{iv} Further, in its regulatory analysis, EPA noted that the Small Business Advocacy Review panel's analysis found that none of the options were found to have a significant impact on a substantial number of small businesses within the MPP industry.^v

Notably, these analyses do not appear to factor in the significant support and resources USDA has directed toward bolstering local and regional processing facilities in recent years—namely via \$500 million in investments for expanded meat and poultry processing capacity.^{vi} These efforts may further lessen the impact of implementing Option 3 for small MPP facilities.

Option 3 has benefits that are underestimated and not easily quantifiable.

Many of the pollutants discharged in MPP wastewater effluent pose a serious risk to public health and the environment, including nutrients such as nitrogen and phosphorous, organisms that are human pathogens, including some that are resistant to antimicrobials, and pharmaceuticals. In the proposed rule, EPA noted that the MPP industry releases the highest phosphorous levels and the second highest nitrogen levels of all industrial categories.^{vii} Many studies have observed an increased risk of adverse health outcomes with ingestion of water nitrate levels, with the strongest evidence (in addition to methemoglobinemia) related to colorectal cancer, thyroid disease, and neural tube defects.^{viii}

While the EPA's Benefit-Cost Analysis (BCA) sought to quantify and monetize costs and benefits of the regulatory options, it was limited to qualitative discussion about the human health benefits from surface water quality improvements. The BCA also underestimates the benefits of regulating MPP wastewater effluent by omitting available evidence related to the climate change related benefits of reducing nutrient pollution,^{ix} the economic impact of algal blooms on human health,^x and drinking water treatment costs.^{xi} These and other limitations of the BCA result in an underestimation of the benefits of regulating MPP wastewater effluent, particularly related to human health and ecosystem effects.

This feedback is not meant to suggest any delay in promulgating the rule. However, we believe that the proposed rule omits important considerations that would justify the more protective approach of Option 3.

Additionally, we recommend the following measures:

- Inclusion of *E. coli* as a regulated parameter, within the published limits (9 MPN or CFU per 100 mL) for direct wastewater discharge.
- Implementation of Best Available Technology (BAT) for the control of chlorides to alleviate the burden on Publicly Owned Treatment Works (POTW)s and prevent adverse impacts to aquatic organisms.
- Conditional waivers should only be granted if the POTW can demonstrate full treatment of MPP wastewater effluent without passthrough or interference, and without additional operational expenses borne by the administering authority of the POTW.

Thank you for your consideration and the opportunity to comment on this important effort to improve water quality and protect human health and the environment. We appreciate your efforts to improve regulation of effluent from MPP facilities, and we support promulgating a final rule as soon as possible.

Sincerely,

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ⁱ Proposed rule at 4493.

ⁱⁱ Fact Sheet: The Biden Harris Action Plan for a Fairer, More Competitive, and More Resilient Meat and Poultry Supply Chain. The White House (2022). <https://www.whitehouse.gov/briefing-room/statements-releases/2022/01/03/fact-sheet-the-biden-harris-action-plan-for-a-fairer-more-competitive-and-more-resilient-meat-and-poultry-supply-chain/>

ⁱⁱⁱ Johns Hopkins Center for a Livable Future. Letter to Rural Business Cooperative Service on Food Supply Chain Loan Guarantee Program (2022). <https://clf.jhsph.edu/sites/default/files/2022-02/letter-about-food-supply-chain-loan-guarantee-program.pdf>

^{iv} Regulatory Impact Analysis 9-9.

^v Regulatory Impact Analysis 9-9, 9-10.

^{vi} USDA Announces \$500 Million for Expanded Meat & Poultry Processing Capacity as Part of Efforts to Increase Competition, Level the Playing Field for Family Farmers and Ranchers, and Build a Better Food System. USDA (2022). <https://www.usda.gov/media/press-releases/2021/07/09/usda-announces-500-million-expanded-meat-poultry-processing>.

^{vii} Proposed rule at 4480.

^{viii} Ward, M. H., Jones, R. R., Brender, J. D., de Kok, T. M., Weyer, P. J., Nolan, B. T., Villanueva, C. M., & van Breda, S. G. (2018). Drinking water nitrate and human health: An updated review. In *International Journal of Environmental Research and Public Health* (Vol. 15, Issue 7). MDPI AG. <https://doi.org/10.3390/ijerph15071557>

^{ix} Beaulieu, J., Kopits, E., Moore, C., & Parthum, B. (2021, April 21). Climate Benefits of Reducing Nutrient Pollution in Aquatic Ecosystems. *Social Cost of Water Pollution Workshop, Virtual*.

^x Kouakou, C. R. C., & Poder, T. G. (2019). Economic impact of harmful algal blooms on human health: A systematic review. *Journal of Water and Health*, 17(4), 499–516. <https://doi.org/10.2166/wh.2019.064>

^{xi} A Compilation of Cost Data Associated with Impacts and Control of Nutrient Pollution. US EPA Office of Water (2015). <https://19january2021snapshot.epa.gov/sites/static/files/2015-04/documents/nutrient-economics-report-2015.pdf>