MAYOR JOSHUA A. GARCIA

CITY OF HOLYOKE

February 28, 2024

HAND DELIVERED

Emilio Cortes
Clerk of the Board
U.S. Environmental Protection Agency
Environmental Appeals Board
1201 Pennsylvania Avenue, NW
U.S. EPA East Building, Room 3332
Washington, DC 20460-0001

Re: City of Holyoke Wastewater Treatment Facility Petition for Review of NPDES Permit No. MA0101630

Dear Mr. Cortes:

Attached please find for filing, the City of Holyoke's Petition for Review of NPDES Permit No. MA0101630, issued to the Holyoke Wastewater Treatment Facility by EPA Region 1 on January 25, 2024. It was received by the City via email on January 29, 2024, therefore the appeal deadline pursuant to 40 CFR § 124.20 (c) is February 28, 2024.

The Petition has been prepared in compliance with the formatting and length requirements contained in the Environmental Appeals Board's Practice Manual.

Very truly yours,

Joshua A. Garcia,
Mayor, City of Holyoke, MA

Enclosure

cc: Ken Moraff, Director, Water Division Environmental Protection Agency Region 1
Carl Rossi, Public Works Director, City of Holyoke
Michael Bissonnette, City Solicitor, City of Holyoke

BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In re:

City of Holyoke

NPDES Permit No. MA0101630

NPDES Appeal No. 24-

PETITION FOR REVIEW OF CITY OF HOLYOKE WATER POLLUTION CONTROL FACILITY NPDES PERMIT ISSUED BY REGION 1

February 28, 2024

Lisa Ball, City Solicitor
City Hall Annex
Room 204
20 Korean Veterans Plaza
Holyoke, MA 01040
(413) 322-5580
balll@holyoke.org
Counsel for the Petitioner
City of Holyoke

Table of Contents

Table of Authorities

1. Cases

2. Statutes

3. Regulations

4. Other Resources

1. Introduction

Pursuant to 40 CFR § 124.19(a), the City of Holyoke, Massachusetts (the City or Holyoke), respectfully submits this Petition for Review of the National Pollutant discharge Elimination system (NPDES) Permit No. MA0101630 (Permit) dated January 25, 2024.

2. Threshold Procedural Requirements

A. The Petitioner has standing to petition for review because it submitted comments on the draft permit transmitted to the Petitioner. See Attachment ##

B. The issues raised by the Petitioner were all raised during the public comment period.

C. The Petition is timely filed. The Petitioner received notice of the permit on xxx. The Petition for Review complies with the Board's Practice Manual.

3. Factual and Statutory Background

The Petitioner owns and operates the Holyoke Water Pollution Control Facility (WPCF) in Holyoke, Massachusetts which is subject to regulation under the Clean Water Act (CWA). The WPCF has a design flow of 17.5 mgd and an industrial wastewater contribution of 0.312 mgd.

The WPCF discharges into the Connecticut River which is classified as a Class B warm water fishery with the CSO qualifier and is designated as a habitat for fish, other aquatic life, and wildlife, including for their reproduction, migration, growth and other critical functions, and for primary and secondary contact recreation.

4. Argument

4.1 Part I.A.1 Total Aluminum, Copper and Lead Effluent Limitations: EPA failed to properly conduct the Reasonable Potential Analysis (RPA) for Total Aluminum, Copper, and Lead

EPA erroneously determined that it was not appropriate to use new effluent data to reevaluate the need for the existing limits because the reasonable potential to cause or contribute to excursions of the aluminum, copper and lead criteria since reasonable potential was already established in the previous permit.

40 CFR § 122.44 (d)(i) establishes the requirement to establish water quality-based effluent limitations (WQBELs) on pollutants that either are or could be discharged at levels that have the reasonable potential to cause or contribute to violations of water quality standards. Paragraph (ii) requires the permitting authority to use procedures for evaluating reasonable potential. Most permitting authorities, including Region 1, apply a mass balance approach that considers the background concentration of a pollutant, the concentration present in the discharge and the dilution afforded by the receiving stream.

In the fact sheet, EPA stated that reasonable potential for the pollutants to cause or contribute still exists even though the levels being discharged are well below the thresholds that would cause or contribute to water quality standard violations. However, the regulation cited above does not suggest that WQBELs once established through a reasonable potential analysis (RPA) preclude a future finding of no reasonable potential to cause or contribute to water quality standard violations. In fact, federal statute requires permitting agencies to review effluent limitations every five years and revise if appropriate.[1]

EPA acknowledged the City of Holyoke's Ambient Connecticut River Study and noted that for each metal, the results were significantly lower than the prior years when the previous sampling may have been contaminated due to proximity of the sampling locations to moored boats, boat traffic and boat docks. Even so, EPA failed to consider that the reasonable potential analysis conducted during development of the previous permit was based on samples that were likely tainted and should be revisited. In addition, the chronic aluminum criterion increased from 87 ug/l to 290 ug/l.

Table 1 summarizes the review of Holyoke's 2017-2022 effluent data and clearly demonstrates that there is no reasonable potential for the plant's discharge to violate instream standards for aluminum, copper and lead. For aluminum, the downstream concentration is unchanged from the upstream concentration and the chronic aluminum criterion is nearly 4 times greater than the downstream concentration (the concentration in the receiving stream after mixing with the Holyoke effluent). For copper the chronic criterion is 13 times greater than the downstream concentration and for lead, the chronic criterion is 40 times greater than the downstream concentration.

The data set (Table 2) used for the 2016 permit's RPA, excluding non-detects, consisted of 11 aluminum samples, 17 copper samples and 13 lead samples. As shown in Table 3, the 95th percentile[2] of the aluminum data was 181 ug/l, the 95th percentile of the copper data was 52 ug/l, and the 95th percentile of the lead data was 3 ug/l.

The data sets (Tables 4 and 5) available for the 2024 permit's RPA consisted of 32 samples collected using non-clean sampling technique and 28 samples using clean sampling technique. As shown in Table 4 (clean sampling data), the 95th percentile of the aluminum data was 58.4 ug/l, the 95th percentile of the copper data was 17.3 ug/l, and the 95th percentile of the lead data was 1.4 ug/l. As shown in Table 5 (non-clean sampling data), the 95th percentile of the aluminum data was 67.8 ug/l, the 95th percentile of the copper data was 26 ug/l, and the 95th percentile of the lead data was 1.4 ug/l.

The larger data set and the implementation of clean sampling for the pollutants of concern, aluminum, copper and lead provide a more accurate representation of the effluent than the data set used to conduct the RPA for the previous permit.

The availability of a larger data set, updated chronic criterion for aluminum, and improved sampling techniques warrant reconsideration of the reasonable potential for aluminum, copper and lead to violate water quality standards.

---

[1] 33 U.S. Code § 1311 (d)

[2] For comparison purposes, the Excel formula for 95th percentile (inclusive) was used.

Table 1: Reasonable Potential Evaluation (10/31/2017 – 9/30/2-22)[1]			
Parameter	**Aluminum**	**Copper**	**Lead**
Units	**ug/l**	**ug/l**	**ug/l**
mean	39.3	12.2	1.1
std dev	13.7	5.15	0.3
95th %ile Concentration	66.2	21.3	1.5
Downstream Concentration	79	0.3	0.02
Chronic Criterion	290	4	0.8
Reasonable Potential ?	**No**	**No**	**No**
Stream flow (mgd)	1195.1	1195.1	1195.1
Discharge flow (mgd)	17.5	17.5	17.5
Background stream concentration	79	0	0

[1] Clean Sampling Technique Implemented in June 2020

Table 2:
2016 Reasonable Potential Analysis Data

Parameter	Aluminum	Copper	Lead
Units	ug/L	ug/L	ug/L
3/10/2010	35.0	10.3	1.2
6/08/2010	48.3	11.6	1.9
9/08/2010	46.0	22.7	1.6
12/08/2010	56.0	116.0	1.7
3/08/2011	161.0	21.9	2.6
6/10/2011	40.0	9.1	2.6
9/14/2011	73.4	6.2	2.9
12/07/2011	36.6	9.5	1.0
3/14/2012	47.0	11.0	1.0
6/12/2012	54.0	8.4	1.2
12/12/2012	ND	13.0	ND
3/14/2013	ND	12.0	1.3
6/25/2013	ND	12.0	1.9
12/05/2013	ND	14.0	ND
3/13/2014	ND	22.0	ND
5/29/2014	ND	11.0	ND
12/03/2014	200.0	36.0	3.1
Sample Size	11.0	17.0	13.0
mean	72.5	20.4	1.8
std dev	55.1	25.7	0.7
95th %ile	180.5	52.0	3.0

Table 3:
Reasonable Potential Analysis Data Using Non-Clean Sampling Technique

Parameter	Aluminum	Copper	Lead

	Monthly Ave	Monthly Ave	Monthly Ave
Units	ug/L	ug/L	ug/L
10/31/2017	47.5	11.00	0.99
11/30/2017	44.0	14.00	1.10
12/31/2017	40.0	14.00	<1
1/31/2018	46.0	27.00	<1
2/28/2018	63.0	11.00	1.90
3/31/2018	36.0	26.00	1.10
4/30/2018	73.0	26.00	1.20
5/31/2018	41.0	6.00	1.20
6/30/2018	26.0	7.90	0.66
7/31/2018	52.0	16.00	1.40
8/31/2018	28.0	7.90	<1
9/30/2018	13.0	6.20	<1
10/31/2018	32.0	21.00	1.00
11/30/2018	19.0	6.20	<1
12/31/2018	34.0	7.80	<1
1/31/2019	32.0	9.40	1.30
2/28/2019	70.0	19.0	1.00
3/31/2019	42.4	10.50	<1
4/30/2019	39.0	17.00	<1
5/31/2019	37.0	11.00	<1
6/30/2019	38.0	7.70	2.10
7/31/2019	36.0	10.00	1.00
8/31/2019	37.0	8.20	1.00
9/30/2019	39.0	12.00	<1
10/31/2019	66.0	19.00	1.20
11/30/2019	45.0	18.00	1.00
12/31/2019	44.9	15.30	1.14
1/31/2020	30.0	8.30	<1
2/29/2020	28	10	1.50
3/31/2020	34.0	8.70	0.90
4/30/2020	29.0	7.70	0.76
5/31/2020	28.5	19.95	0.87
Sample Size	**32**	**32**	**32.00**
mean	**39.7**	**13.1**	**1.16**
std dev	**13.6**	**6.1**	**0.34**
95 %ile	**67.8**	**26.0**	**1.91**

Table 4:
Reasonable Potential Analysis Data Using Clean Sampling Technique

Parameter	Aluminum	Copper	Lead
	Monthly Ave	Monthly Ave	Monthly Ave
Units	ug/L	ug/L	ug/L

6/30/2020	29.0	7.25	<1.45
7/31/2020	48.0	16.00	1.4
8/31/2020	29.5	16.00	1.4
9/30/2020	48.0	8.60	1.1
10/31/2020	30.0	8.00	<1
11/30/2020	40.0	12.00	1.1
12/31/2020	31.0	6.35	0.8
1/31/2021	24.0	6.40	<.5
2/28/2021	24.0	9.60	0.5
3/31/2021	36.0	10.50	0.6
4/30/2021	37.0	9.00	0.8
5/31/2021	33.0	6.80	0.8
6/30/2021	40.6	11.58	1.3
7/31/2021	64.0	12.00	1.1
8/31/2021	40.0	11.00	0.8
9/30/2021	36.5	9.85	1.0
10/31/2021	34.0	7.6	0.8
11/30/2021	38.0	12.00	0.8
12/31/2021	43.0	16.00	0.8
1/31/2022	35.0	14.00	1.0
2/28/2022	43.5	18.50	1.0
3/31/2022	38.0	15.00	1.0
4/30/2022	96.0	18.00	1.1
5/31/2022	26.0	12.00	0.6
6/30/2022	38.0	14.00	1.0
7/31/2022	38.0	9.40	1.5
8/31/2022	40.0	11.00	1.1
9/30/2022	26.0	6.67	0.9
Sample Size	**28**	**28**	**28**
mean	**38.8**	**11.25**	**1.0**
std dev	**14.0**	**3.58**	**0.3**
95th %ile	**58.4**	**17.3**	**1.4**

Antibacksliding and Antidegradation

Since the previous permit included WQBELs for aluminum, copper and lead, removing the limits would trigger Antibacksliding and Antidegradation reviews.

40 CFR § 122.44(l)(1) sets out that effluent limitations, standards or conditions must be at least as stringent as those in the previous permit unless "material and substantial alterations" and/or "new information" justify a less stringent limit. In Holyoke's case, the changes in sample collection techniques and revision of the chronic criterion for aluminum would be considered "new information" that was unavailable during the development of the previous permit. Thus, removal of the aluminum, copper and lead effluent limitations would be allowed under the exceptions to Antibacksliding.

MassDEP's Antidegradation Implementation Procedures allow for increased discharges (of pollutants) under certain conditions set out in *Section V. Tier 2 – Protection of High Quality Waters* which allow increased discharges of pollutants that are deemed "insignificant." Insignificant discharges are those that result in a new or increased pollutant load that would use less than 10% of the available assimilative capacity of the receiving water for that pollutant. In Holyoke's case, the discharge would use no more than 3 % of the receiving stream's available assimilative capacity for aluminum, no more than 1 % of the available assimilative capacity for copper, and no more than 0.3 % of the available assimilative capacity for lead.

In summary:

- Holyoke's discharge does not have the reasonable potential to violate water quality standards for aluminum, copper and lead.
- Holyoke's discharge meets the exception requirements for antibacksliding.
- The loadings of aluminum, copper and lead in Holyoke's discharge use less than 10 % of the receiving stream's assimilative capacity for the respective pollutants.

The facts clearly show that there is no water quality, technical or regulatory basis for limiting aluminum, copper, and lead and the limits foreach must be removed from the permit.

4.2 Part I.C. Operation and Maintenance of the Treatment and Control Facilities – Adaptation Planning Requirements Are Contradictory, Exceed EPA's Statutory Authority, and Are Overly Burdensome, Arbitrary and Capricious

Contradictory Requirements

In the final permit, EPA replaced the Major Storm and Flood Events Plan requirements for the WPCF and Sewer System with the Adaptation Planning requirements. Yet this revision does not resolve the regulatory conflicts associated with the draft permit language. While EPA erroneously cites the "duty to mitigate" and "proper operation and maintenance" standard conditions set out in 40 CFR § 122.41, as the basis for these requirements, the agency ignores the relief that the "upset" provision of the standard conditions (40 CFR § 122.41 (n) (1)-(4)) provides to NPDES permittees. The definition of upset refers to "an exceptional incident" that results in "unintentional and temporary beyond the reasonable control of the operator. In its response to comments, cites the catastrophic events experienced by the Towns of Ludlow and Johnston Vermont as drivers for the adaptation requirements, however those facilities were clearly subject to the relief provided by the upset provision. EPA's proposed requirements would make null the upset provision that NPDES permittees have relied on since the inception of the program.

EPA's Statutory Authority

In the Response to Comments, pg. 16, C., Legal Authority EPA states, "The Adaptation Plan permit conditions are necessary to further the overarching goal of the CWA "to restore and maintain the

chemical, physical, and biological integrity of the Nation's waters and derive from the same authorities, as all other standard operations requirements. CWA § 101(a), 40 CFR §§ 122.41 (d), (e), and (n)."

While the objective of the Clean Water Act (CWA) is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters," the NPDES permitting program is specifically authorized by the CWA to prevent, reduce, and eliminate pollution in navigable waters through regulation of pollutant discharges from point sources. By placing climate-related adaptation requirements in NPDES permits, EPA is exceeding the limits placed on the authority given to the NPDES permitting program.

The courts have found that "there must be an actual discharge into navigable waters to trigger the CWA's requirements and the EPA's authority[3].". However, the premise of the Adaptation Planning Requirements cannot be reasonably tied to a discharge from an actual point source[4] and thus are not within the scope of the NPDES permit program.

Overly Burdensome, Arbitrary and Capricious Requirements

The Adaptation Planning requirements place a significant hardship on communities like Holyoke that are economically disadvantaged and have limited resources to implement them. Even with the changes made in the final permit, the hours of staff time, and/or consultants necessary to carry out the administrative and technical tasks associated with developing the three components of the Adaptation Plan would be well into the thousands. That is not to mention the significant funding that will be needed to implement the measures identified in the plan. These resources – both in terms of hours and dollars will result in more critical needs such as those needed to mitigate combined sewer overflow (CSO) discharges and other measures to address water quality impairments. In Holyoke's case this includes approximately $ 34 M for CSO abatement (in 2019 dollars) and at least $ 140 M for potential upgrades to the WPCF to meet the Connecticut River Nitrogen TMDL requirements (Attachment 7: Draft CSO Long-Term Control Plan Update Report).

In Holyoke, EPA is requiring a small disadvantaged, environmental justice community to tackle climate change when EPA Region 1 acknowledged the uncertainty associated with climate change when EPA told the U.S. District Court for Massachusetts[5], that the agency cannot "be faulted for refraining from guess[work]" about how to incorporate alleged climate change effects into pollutant limits, nor is it required to address hypothetical effects or to "assign a numerical value to the uncertainty associated with climate change."

Adaptation planning is best done at the community level, Placing the burden solely on an NPDES discharger, despite EPA's attempt to do so, ignores the breadth and depth of meaningful adaptation planning that is occurring at the state and local level in Massachusetts' Municipal Vulnerability Preparedness program, where all municipal infrastructure is being evaluated and resiliency projects are being implemented. EPA's narrow direction for one portion of that sector, clean water utilities, to conduct certain activities is misplaced at best. In these provisions, EPA fails to consider Environmental Justice

[3] Nat'l Pork Producers Council v. EPA, 635 F.3d 738, 751 (5th Cir. 2011)
[4] 3 U.S.C. §§ 1362 (14)
[5] Mem., CLF v. EPA, No. 10–11455–MLW, 2012 WL 1207719 (D. Mass. Sept. 21, 2012), ECF No. 37 at 28

and the significant impacts to the economically disadvantaged and identified minority diversity of the City.

EPA's own acknowledgement of climate change uncertainty is evidence of the Arbitrary and Capricious nature of these requirements. As such

As such, they are unlawful under the Administrative Procedure Act (APA), 5 U.S.C. § 706(2)(A), and do not comport with the regulations upon which EPA Region 1 relies to impose them, which limit operations and maintenance requirements to only "reasonable steps."

Based on the rationale provided above, the Petitioner respectfully requests that the Adaptation Planning Requirements be removed from the permit and instead EPA increase technical support and funding to entire communities as they face multiple challenges such as aging infrastructure, stricter water quality requirements as well as those associated with climate change.

4.3 EPA is inappropriately requiring the use of Methods 1633 and 1621 for Clean Water Act purposes prior to promulgation as rule.

Part 1.E Industrial Users and Pretreatment Program, Section 6

In its comments on the draft permit, the Petitioner requested that the last sentence in Paragraph 6 be replaced with, "All monitoring results are for informational purposes and data collection only. Once there is an approved PFAS test method that is finalized through the 'Rule Making Process' then monitoring results after the approval date will be used by the EPA in the next permit reissuance to ensure the discharge continues to protect designated uses."

In its response, EPA acknowledged that the full method has not been finalized but stated that since there will not be any further changes to the wastewater portion of the method that would impact usefulness of the results, then using Method 1633 may be used to characterize the influent, effluent and sludge waste streams in the next permit reissuance. However, the sampling requirements would be imposed in this permit and are clearly for Clean Water Act Purposes.

In EPA's January issuance of the method, the agency specifically noted, "EPA issuing this method does not require its use for Clean Water Act compliance monitoring at the Federal level; that will only occur after it has been proposed and promulgated through rulemaking (e.g., added to 40 CFR Part 136)."

If rulemaking is imminent, then granting the Petitioner's request should not result in a significant impact on the amount of PFAS data used to characterize influent, effluent and sludge.

Part 1. A. PFAS and Adsorbable Organic Fluorine Monitoring of Influent and Effluent

While the Petitioner did not comment on influent and effluent monitoring of PFAS, the same concern as described in its comment on Part 1.E Industrial Users and Pretreatment Program, Section 6 – that EPA does not have the regulatory authority to require PFAS testing as applies to the influent and effluent

monitoring and as such the Petitioner notes that Method 1633[6] should not be used for CWA purposes despite EPA's guidance to permit writers to do so.

Additionally, the Massachusetts Water Resources Authority (MWRA) provided comments on draft NPDES permit No. MA0101630 (Attachment 8) including a comment regarding Adsorbable Organic Fluorine Monitoring. MWRA expressed concern "that monitoring of Adsorbable Organic Fluorine (AOF) is untested and the data may be impossible to interpret" and noted that Method 1621[7] is not ready for use in NPDES monitoring. The Petitioner agrees with MWRA's comment and is raising the issue in this petition for review.

The Petitioner respectfully requests that EPA add the following sentence to the last paragraph of Part 1.E Industrial Users and Pretreatment Program, Section 6: All monitoring results are for informational purposes and data collection only. Once there is an approved PFAS test method that is finalized through the 'Rule Making Process' then monitoring results after the approval date will be used by the EPA in the next permit reissuance to ensure the discharge continues to protect designated uses.

The Petitioner also requests that EPA modify Part 1.A to only require the influent and effluent monitoring PFAS and Adsorbable Organic Fluorine upon promulgation of Methods 1633 and 1621, respectively.

5. Stay of Contested and Non-Severable Conditions

In accordance with EPA regulations, the effect of the limits and conditions contested herein must be stayed along with any uncontested conditions that are not severable form those contested. See 40 CFR §§ 124.16(a) and 124.60(b).

[6] Method 1633 Analysis of Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous, Solid, Biosolids, and Tissue Samples by LC-MS/MS, EPA 821-R-24-001, January 2024

[7] Draft Method 1621Screening Method for the Determination of Adsorbable Organic Fluorine (AOF) in Aqueous Matrices by Combustion Ion Chromatography (CIC), EPA 821-D-22-002, April 2022

8. Conclusion and Relief Sought

For the foregoing reasons, the City of Holyoke, Massachusetts respectfully seeks for review by the EAP, the appeal terms and provisions of the final NPDES Permit. After such review the City of Holyoke requests:

A. the opportunity to present oral arguments in this proceeding and a briefing schedule for this appeal to assist the EAB in resolving the issues in dispute;

B. a remand to EPA Region 1 with an order to issue an amended NPDES permit that conforms to the EAB's findings on the terms and conditions appealed by the City of Holyoke; and

C. any such other relief that may be appropriate under these circumstances.

Lisa Ball, City Solicitor
City Hall Annex
Room 204
20 Korean Veterans Plaza
Holyoke, MA 01040
(413) 322-5580
balll@holyoke.org

Counsel for the Petitioner
City of Holyoke

STATEMENT OF COMPLIANCE WITH WORD LIMITATIONS

I hereby certify that this petition for review, including all relevant portions contains less than 14,000 words.

Matthew Zelin, PE

Dated: February 28, 2024