Message

From: Cathy Laughner [cathyl@bkbh.com]
Sent: 4/13/2021 11:08:22 PM
To: Cathy Laughner [cathyl@bkbh.com]
Subject: Garcia 9/8/2020 and Culpo 10/19/2020 communications.

From: Matthew Culpo
Sent: Monday, October 19, 2020 10:37 AM
To: Garcia, Al <garcia.al@epa.gov>; Mark Fitzwater <mfitzwater@helenamt.gov>; Phil Hauck <PHAUCK@helenamt.gov>
Cc: Llamozas, Emilio <Llamozas.Emilio@epa.gov>; Hanson, Robyn <Hanson.Robyn@epa.gov>
Subject: RE: City of Helena draft local limits - EPA's comments

Hi Al,

In consultation with CDM Smith, the City is providing the following responses, below in blue text, to your comments. Please note that since we will be taking two more data points from each service area, the updated Local Limits will be delivered in early 2021 barring any delays with the sample collection schedule identified below.

Please let me know if you have any further comments.

Matt Culpo, P.E.
Civil Engineer
City of Helena
316 North Park Avenue
City-County Building, Room 413
Ph: 406-447-8073
Cell: 406-422-6147
mculpo@helenamt.gov

From: Garcia, Al <garcia.al@epa.gov>
Sent: Tuesday, September 8, 2020 3:34 PM
To: Matthew Culpo <MCULPO@helenamt.gov>; Mark Fitzwater <mfitzwater@helenamt.gov>; Phil Hauck <PHAUCK@helenamt.gov>
Cc: Llamozas, Emilio <Llamozas.Emilio@epa.gov>; Hanson, Robyn <Hanson.Robyn@epa.gov>
Subject: City of Helena draft local limits - EPA's comments

Hello Matt,

The current local limits for the City of Helena (City) were developed in 2002. The EPA provided corrective action items in both the 2009 and 2017 City of Helena Pretreatment audits regarding the need to update local limits. The update to the local limits was required to include current data from the service area, POTW, and SIUs as well as providing a technical calculation of the local limits based on current standards.

- The City's NPDES permit was reissued by the MT DEQ on October 1, 2012 and the City provided a technical memorandum to EPA on June 28, 2013. The City's technical memorandum stated that its local limits need to be updated
- The City initially submitted draft local limits to the EPA in 2016. The EPA provided comments to the City in 2016 to the draft local limits to ensure they were approvable and met the local limits update criteria identified above.

- The City submitted an update to its current local limits on February 12, 2019 as a follow up response to the 2017 Pretreatment audit. The EPA provided comments to the City's 2019 draft local limits submittal on April 15, 2019.
- The City recently submitted a 2020 local limits update based on the EPA's April 15, 2019 comments.

As discussed previously in this email, the EPA's comments are intended to ensure the local limits are based on current data of the service area (domestic/commercial which comprise the uncontrollable loadings, POTW and the SIUs) and current standards in technically-based calculations for the Maximum Allowable Industrial Loadings (MAIL). The EPA also approves the allocation of the MAIL to the permitted significant industrial users (SIUs).

The EPA reviewed the City of Helena's 2020 draft local limits and the EPA's current comments are based on a cross-walk and evaluation of the April 15, 2019 comments to ensure the 2019 comments are resolved and the 2020 draft local limits submitted are approvable. The EPA's comments to the City of Helena's 2020 draft local limits are provided in red font. The 2019 comments that are resolved are identified with a ~~strikethrough~~. Note: there were no new or additional comments outside of the comments identified in 2019.

Section 4 – Identification of Pollutants of Concern

- Table 4-1 indicates that the City gathered sufficient datasets for the local limits inputs. However, the data gathered for both the commercial and domestic sector of the service area are 6 data points collected in 2016. The EPA recommends a minimum of 10 data points for the commercial and domestic dataset because these represent the uncontrollable loadings from the service area. Uncontrollable loadings generated from this dataset and input into the local limits spreadsheet significantly affect the calculations. The City should ensure this dataset is representative and is current of the service area. In addition, a sampling event for the commercial dataset does not have a sampling date; the City needs to evaluate its analytical hard copies and provide the sampling date. (Note: any sampling data without the supporting analytical laboratory copies is not valid for local limits. As discussed in 2019, the EPA does not consider the 2020 draft local limits to be approvable because the data used in the local limits only consist of six data points for the uncontrollable sector (domestic and commercial portions of the service area). In addition, the service area data was gathered in 2016 and may not be current and representative of growth in the service area. The City of Helena needs to ensure the datasets for the uncontrollable loadings (both the domestic and commercial sectors) are a minimum of 10 data points and are representative of current conditions.
  Response: The City acknowledges that the uncontrollable sector data set consisted of six data points from 2016. Given that the nature of the collection system has not changed significantly since 2016, the original six data points are still representative of the current service area. The City will collect four (4) additional data points in 2020. Two samples will be collected in October and two samples will be collected in December. The City will incorporate the 4 additional data points into the local limits calculation spreadsheet and resubmit to EPA.

- 4.3.6 – Although the monthly BOD and TSS values exceed 70% of the POTW's design capacity, the City is not designating these as pollutants of concern because the effluent values do not exceed 7% of the NPDES permit limit and the City states that its SIUs do not contribute these pollutants. The POTW's removal efficiency allows the City to consistently meet the permit limits, however, the City should determine if the 70% exceedance of the POTW's BOD and TSS design capacity is due to non-domestic users or if the BOD and TSS contributions are from the domestic sector. The EPA recommends the City evaluate their IU inventory to determine if any IUs that are currently not permitted contribute BOD and TSS. The City should also sample their domestic sectors to quantify the BOD and TSS loadings. The City of Helena did not provide adequate justification in the 2020 draft local limits to determine if the BOD and TSS are pollutants of concern from the domestic portion of the service area or non-domestic industrial users.
  Response: The City has evaluated their IU inventory and determined that all Industrial Users have been identified and are currently permitted. (Past and present IU inventory evaluations have not resulted in any new IUs being permitted.) Both permitted IUs have been evaluated and do not contributed significant BOD or TSS. Therefore, BOD and TSS loadings are contributed by the uncontrollable domestic and commercial sectors.

The City of Helena reiterates that the WWTP's removal efficiency for BOD and TSS consistently results in effluent significantly below the WWTP's effluent limits for both BOD and TSS.

Section 6 – Local Limits Development Summary

- The City of Helena used a hardness value of 104 mg/L $CaCO_3$ although recent data and statistical evaluation provided evidence of using 134 mg/L $CaCO_3$. The EPA recommends the City use the statistically valid hardness data of 134 mg/L $CaCO_3$ to calculate local limits. The City of Helena did not correct this hardness value or provide documentation on why the 104 mg/L $CaCO_3$ used in the calculations is statistically valid.
  Response: The final local limits will be transmitted when the newly collected uncontrollable sector data is incorporated including use of a hardness value of134 mg/L $CaCO_3$.

- ~~Sections 6.4.12 and 6.4.13 -- The City has a typo for the safety/expansion factor. The factor used in the Table 12 and 13 is 15% instead of 10%.~~ The City provided an update in the 2020 draft local limits submittal included varying safety factors in Table 6-3 Daily Max Safety/Expansion Factor for each individual pollutant on concern. Table 6-3 resolves the 2019 comments from the EPA.

Section 7 – Local Limits Spreadsheet

- The draft local limits are significantly higher than historical limits. The City should ensure the datasets are representative and current of the service area, as discussed previously for the uncontrollable domestic and commercial loading. ~~The City should also evaluate the Literature selection of the POTW removal efficiency.~~ These factors significantly affect local limits calculations. ~~There are also options to evaluate in the current local limits calculations or additional factors to consider applying in the calculations to develop limits similar to historical local limits. All options discussed below require the City to provide justification for the technical calculations to ensure this is approvable by the EPA and to provide to the public during the EPA's public notice~~:
  - ~~As we discussed, the City should also evaluate the use of the safety factor. The EPA recommends a minimum of 10% and the City used 15%. However, the City is not limited by 15% and does not have to apply the same safety factor for each pollutant of concern. The City can determine how large a safety factor to use for each pollutant of concern.~~ The City provided an update in the 2020 draft local limits submittal included varying safety factors in Table 6-3 Daily Max Safety/Expansion Factor for each individual pollutant on concern. Table 6-3 resolves the 2019 comments from the EPA.
  - ~~In addition, the City may elect to apply a reserve or growth factor to the calculated MAIL. The EPA approves the datasets (to ensure they are representative and current of the service area), the use of POTW standards (to ensure they are current), the technical evaluation (based on a mass balance), the calculated MAIL and the allocation of the MAIL into concentration-based or mass limits. If the City applies a reserve or growth factor after the calculation of the MAIL, then it can release the reserved mass without requiring EPA approval. For example, the City may elect to reserve 75% of the calculated total Cr MAIL and only allocate 25% to the SIUs.~~ The City of Helena elected to reserve mass loadings for lead, copper, and nickel to the hauled waste sector. This mass loadings reserved to the hauled waste sector helps resolve the EPA's 2019 comments regarding local limits for these pollutants.
  - The City has developed daily and monthly local limits but may elect to develop protective limits that are based on the most stringent acute and chronic criteria and therefore, can use these limit for short-term or long-term compliance. Typically, these limits are used as daily average. The EPA continues to recommend the City develop daily-only local limits for ease of implementation in SIU permits.
    Response: After evaluating the two procedures, the City prefers to proceed with implementing both average monthly (chronic) and maximum daily (acute) local limits.

The EPA is available to discuss the specific items required in this email to ensure the City's draft local limits are approvable. Please contact me if you have any questions in this matter.

Thank you,

Al Garcia

Pretreatment Coordinator
USEPA Region 8; 8WD-CWW
1595 Wynkoop
Denver, CO 80202

garcia.al@epa.gov
303.312.6382