

**Response to Comments  
Petroleum Cleanup General Permit  
MPDES Permit MTG790000**

On December 2, 2019, the Montana Department of Environmental Quality (DEQ) issued Public Notice MT-19-23, stating DEQ's intent to issue a Montana Pollutant Discharge Elimination System (MPDES) Petroleum Cleanup General Permit for discharges to surface water from petroleum cleanup operations. The public notice required that all substantive comments be received or postmarked by January 2, 2020, to be considered in formulation of the final determination and issuance of the permit.

This Response to Comments document includes a summary of all significant comments on the draft permit and fact sheet received during the public comment period and DEQ's response to those comments. The Response to Comments document is an addendum to, and supersedes, relevant portions of the Fact Sheet.

The table below identifies those individuals who submitted comments.

<b>Persons Submitting Significant Comments on the Fact Sheet and Draft MPDES Petroleum Cleanup General Permit MTG790000</b>	
<b>Number</b>	<b>Commenter</b>
<b>1</b>	Erik Makus & Darcy O'Conner, EPA Region 8

**Response to Comments on the Fact Sheet and Draft MPDES General Permit MTG790000:**

**Commenter 1. Erik Makus, EPA Region 8**

**Comment 1:** The total benzene, toluene, ethylbenzene, and xylenes (BTEX) effluent limit of 100 ug/L may not fully protect Montana's toluene and ethylbenzene water quality standards at the end of pipe. These water quality standards appear to be considerably lower than when this permit was last issued. Because there is no mixing zone, the water quality standards must be met at the end of pipe. Montana's human health standards for three of the four BTEX constituents (benzene, toluene, and ethylbenzene) listed in Table 4 of the fact sheet are lower than the draft permit's effluent limit of 100 ug/L for total BTEX (5 ug/L, 57 ug/L, and 68 ug/L, respectively). The nondegradation criteria for these three pollutants, which are also listed in Table 4, are even lower (0 ug/L, 9 ug/L, and 10 ug/L, respectively). Since the composition of gasoline is highly variable, it is possible that a total BTEX sample could contain benzene, toluene, or ethylbenzene above the water quality standard for that pollutant and have a total BTEX concentration below the 100 ug/L limit. The draft permit contains a nondegradation-based effluent limit for benzene, but does not specify a human health standard or nondegradation-based effluent limit for toluene or ethylbenzene. The fact sheet does not justify the rationale for not including a toluene or ethylbenzene limit. It should be noted the lowest water quality standard for xylenes is 1,500 ug/L, which would be met by meeting the BTEX limit of 100 ug/L.

If no in-stream mixing is allowed and discharges must meet water quality standards at end of pipe, then the EPA suggests implementing three separate effluent limits based on water quality standards (one each for benzene, toluene, and ethylbenzene) in addition to the total BTEX limit,

or add information to the fact sheet justifying why no limit is necessary for toluene or ethylbenzene to protect water quality standards at end of pipe.

**Response:** DEQ acknowledges that the 100 ug/L BTEX limit creates potential for toluene and ethylbenzene water quality standards to be exceeded. Therefore, the final permit will require the parameters of concern to be reported separately with limits set at nondegradation values (as explained in the fact sheet). Please note, the xylene limit will remain at the technology-based limit of 100 ug/L, as it is more stringent than the calculated nondegradation limit for toxic parameters of 1,500 ug/L. The final effluent limits and monitoring requirements are presented in Table 1 and 2 below:

Table 1. Final Effluent Limits		
Parameter	Units	Maximum Daily Limit <sup>(1)</sup>
Benzene	ug/L	0 <sup>(2)</sup>
Toluene	ug/L	9
Ethylbenzene	ug/L	10
Xylenes, Total	ug/L	100
MTBE	ug/L	3
pH	s.u.	6.0 – 9.0
Oil and Grease	mg/L	4

<sup>(1)</sup> The maximum value allowed in any single sample  
<sup>(2)</sup> Reporting non-detect with analysis that meets the RRV (0.6 ug/L) is considered in compliance with the benzene limit

Table 2. Monitoring and Reporting Requirements <sup>(1)</sup>				
Parameter	Units	Sample Type <sup>(2)</sup>	Minimum Frequency <sup>(3)</sup>	RRV <sup>(4)</sup>
Effluent Flow	mgd	Instantaneous	1/Day	--
Benzene	ug/L	Grab	1/Week	0.6
Toluene	ug/L	Grab	1/Week	1.0
Ethylbenzene	ug/L	Grab	1/Week	1.0
Xylenes, Total	ug/L	Grab	1/Week	3.0
MTBE	ug/L	Grab	1/Week	1.0
Oil and Grease <sup>(5)</sup>	yes/no	Visual <sup>(6)</sup>	1/Day	--
	mg/L	Grab	1/Week	1.0
pH	s.u.	Grab	1/Week	0.1

<sup>(1)</sup> All parameters must be reported as daily maximum  
<sup>(2)</sup> See definition section at the end of permit for explanation of terms  
<sup>(3)</sup> **Monitoring is required only for any calendar period where there is discharge**  
<sup>(4)</sup> Required Reporting Value. If reporting non-detect, analysis must achieve these, or lower, RRVs  
<sup>(5)</sup> Use Method 1664A or Method 1664B and specify the SGT-HEM procedure  
<sup>(6)</sup> If visual monitoring indicates the presence of hydrocarbons, by sheen, odor, or other sign, the permittee is required to take corrective action as specified under the Special Conditions of this permit, including analyzing an additional grab sample under 40 CFR 136.