ACWA comments on the Draft Mercury MDV
Mercury MDV advisory committee
August 15, 2019
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Reference document: *DRAFT Multiple Discharger Variance for Mercury in the Willamette Basin*, September 2019 (DEQ), as presented for the August 1, 2019 meeting of the Mercury MDV advisory committee.

As an advisory committee member, ACWA has the following comments on the draft Mercury MDV, related to the following sections as noted.

Section 3.1.2.

Section 3 presents the variance requirements including that of the Highest Attainable Condition (HAC) – presented under Section 3.1. The MDV identifies a HAC based on "no additional feasible pollutant control technology can be identified." To support that, one of the conclusions DEQ cites under Section 3.1.2 is "Facilities without advanced treatment – MMP implementation will result in effluent concentrations similar to that of advanced treatment with less environmental harm." DEQ references Wisconsin studies that support that finding.

ACWA believes DEQ should make it clear that not all MMPs may result in significant reductions in mercury concentrations. This may be particularly true in Oregon in 2019, as the dental amalgam rule has previously gone into effect and significant reductions in influent and biosolids mercury concentrations were recorded. Starting from that benchmark, it is not clear how much reduction can be achieved via MMP implementation.

During the advisory committee meetings, DEQ staff stated that the MDV would implement the MMP approach with 5-year evaluations for trends in mercury reductions; therefore, if significant mercury reductions are not being achieved, alternative considerations for reductions would be made then. ACWA is concerned that wastewater utilities could be caught off guard if MMP implementation is not as successful in mercury reductions as needed, and may be required to implement additional treatment measures to reduce mercury without having made the proper planning considerations.

ACWA acknowledges that Section 3.1.2 goes on to state "Environmental costs associated with advanced treatment include greater energy consumption, added greenhouse gas emissions, and the need for additional waste disposal." ACWA concurs with the potential net environmental harm of advanced treatment solely for mercury reduction. ACWA further concurs that MMPs can help reduce mercury concentrations in lieu of advanced treatment. However, ACWA is concerned that equating MMP concentration reductions with that of advanced treatment could be misleading. A recent study in California recommends doing away with MMP requirements as ineffective for facilities employing advanced treatment.

ACWA recommends that the Section 3.1.2 statement be revised to read "Facilities without advanced treatment – MMP implementation may result in reductions in effluent concentrations without employing advanced treatment; implementation of advanced treatment solely for mercury reduction may produce net environmental harm."

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Section 3.2.2

Section 3.2.2 addresses "Adoption and Implementation of a Mercury Minimization Plan." DEQ references its outdated 2010 Internal Management Directive: Implementation of Methylmercury Criterion in NPDES Permits (IMD) for a description of implementing MMPs tailored for each facility. The IMD largely references dental offices and hospital facilities for reduction, and a long list of mercury-containing goods that may still be in use in the community, but do not directly impact wastewater, as targets for community-wide collection.
DEQ further notes over two decades of nationwide MMP implementation from which to draw knowledge. DEQ included language in the draft rule highlighting expected types of activities as follows:

340-041-0059 (6)(e)((B)(2)(A) *For municipal facilities, mercury reduction activities should address potential mercury sources from dental offices, medical facilities, schools, and other laboratories, as well as identify potential sources of mercury in the service area.*

For the most part, these MMP measures appear to have been already largely implemented or require considerable outreach investment for little return. ACWA strongly recommends that the DEQ include development of an updated MMP template as part of its MDV strategy.

Additionally, ACWA urges DEQ to further the opportunities for water quality trading for mercury reduction as allowed under a variance. Since the Mercury TMDL identifies nonpoint sources from sediment transport as contributing the majority of mercury input into the Willamette system (modeling indicates that the source categories of surface runoff and sediment erosion together contribute approximately 76 percent of the total mercury load to basin streams), greater environmental benefit is likely attained by supporting conservation and restoration organizations to improve river function and health, especially along forest and agricultural lands.

Section 4.1

Section 4.1 relates to the Application Process for Coverage Under the MDV; part of the process requires submittal of the last 5 years of (assumed quarterly) mercury effluent data, with a minimum of 2 years of data if sampling has been conducted for less than 5 years.

ACWA notes that monitoring for mercury will be new for many permittees and in order for the appropriate lead time for data collection prior to permit renewal, permittees should be given clear and adequate advance notice of their permit renewal timeframe. ACWA requests that DEQ ensure that its permit issuance plan (PIP) process, including a 5-year PIP, is recognized in this regard and raised in importance and emphasis for timely updates.

Section 4.2.4

Section 4.2.4 addresses Annual Progress Report requirements. The section states minimum information should include both MMP activities conducted and any nonpoint source best management practices implemented *under the authority* of the permittee. (emphasis added).

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While ACWA recognizes and supports the use of BMPs to reduce nonpoint sources of mercury, this monitoring requirement appears out of place. Either such actions should be included as part of an NPDES permittee's MMP (or potentially through a water quality trading program), or the BMPs will have been conducted outside of the NPDES permittee under separate authority or objectives of the permitted agency.

ACWA recommends removing nonpoint source BMPs from the reporting requirements.

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