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Air Toxics Emissions Inventory Rulemaking Concept Document

MPCA amendments to air quality rules for air toxics emissions inventory reporting, Minn. R. chs. 7002, 7005, 7007, 7008, 7019 Revisor's ID: 04599







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Introduction

This document is part of the development process to amend the air quality rules. It provides an overview of what we, the Minnesota Pollution Control Agency (MPCA), are considering for this rulemaking. We are at the initial stage of the rule process and are sharing concepts for amending the rules. The concepts described in this document are preliminary and may not occur. We will request comments again during a formal public comment period when the rules are proposed.

This document describes elements of rule amendments being considered and the reasons for these changes so that interested persons may provide informal comments on any part of these rule concepts. Though comments are welcome on all aspects of the potential rulemaking, we have highlighted topics where we specifically request stakeholder input. Visit https://www.pca.state.mn.us/get-engaged/airtoxics-reporting.

Purpose of rulemaking

The focus of this rulemaking is to enact the air toxics emissions reporting requirements through rulemaking, as directed by Minn. Stat. § 116.062, promulgated by the Minnesota Legislature during the 2023 legislative session. In this document "air toxics" means air contaminants that are not subject to a state or federal ambient air quality standard and have a toxic effect.

We maintain an inventory of air toxics emissions and rely on it to address two long-term agency goals: preventing or reducing disproportionate negative impacts from pollution and ensuring air quality does not exceed health benchmarks. We currently inventory approximately 500 air toxics (see the Air Toxics List). This list includes pollutants monitored in Minnesota's outdoor air, the 188 Hazardous Air Pollutants (HAPs) defined by the Clean Air Act, and pollutants the Great Lakes Commission identifies as significant contributors to contamination of the Great Lakes.

Rulemaking concept narrative

The concepts described in this document are preliminary and may not occur in the draft rule language that we will write and make available for public comment at a later date.

Ambient air monitoring data shows that the average air quality across Minnesota is generally good, but not for everyone. Some people are exposed to more pollution or multiple kinds of pollution. Some people are more vulnerable to the health impacts of pollution. These groups of people are more likely to be impacted by air pollution and located in population centers.

We are initiating programs to address the disproportionate exposure to air toxics at the impacted neighborhood and community scale. A *community* may encompass an area such as a town, neighborhood, or a few city blocks. A *community* may also be a group of people who are demographically similar in some way (also known as a *population*), such as an age cohort or racial or ethnic group.

The outcome of this work is two-fold: to inform communities about health or environmental impacts from air toxics, and to work with air emission facilities to reduce human health risk from exposure to chemicals. We use the air toxics inventory to assess risk from exposure and guide agency policy, permitting, and enforcement actions

To ensure that this work achieves real reductions in exposures, we seek to make air toxics reporting mandatory.

Our current air toxics inventory relies on voluntary emissions reporting from most permitted air emission sources once every three years. Under a voluntary reporting structure, some facilities consistently submit complete and accurate reports, while others provide incomplete information or none at all. In most cases when a facility does not report, we must estimate air toxics emissions. Because reporting is voluntary, there are few options for us to compel reporting or receive confirmation that our estimates or recalculations are correct. Mandatory reporting may begin to reduce some of our staff time used to follow up on missing or incorrect data.

We are not planning changes to fees, emission limits, or other rules as part of this rulemaking. Pending public comment, we intend to pursue this rulemaking in advance of the 2026 National Emissions Inventory (NEI) air toxics emissions inventory cycle.

The proposed rulemaking seeks to:

• Require mandatory annual air toxics emissions reporting for facilities issued an air quality permit (except Option B registration permits) located in Anoka, Carver, Dakota, Hennepin, Ramsey, Scott or Washington counties, as required by Minn. Stat. 116.062.

General topic of interest	Summary	
Make air toxics emissions inventory reporting mandatory for permitted facilities (Minn. R. 7019.3000 and 7019.3020).		
Permitted facilities within Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington Counties would be required to submit an inventory of emitted air toxics.	Switching from voluntary to mandatory reporting within the selected counties will ensure that all permitted facilities are reporting.	
Make mandatory air toxics emissions inventory reporting an annual process.	Requiring annual reporting of air toxics from permitted sources within the selected counties will provide the MPCA the ability to conduct more timely and routine assessments of emission trends and community exposures.	
	Air toxics reporting encompasses a large number of potential pollutants. We currently inventory about 500 chemicals.	
	Minn. Stat. 116.062(c) defines air toxics as	
	(1) Hazardous air pollutants under the Clean Air Act	
	(2) Chemicals reported to the Toxics Release Inventory;	
	(3) Chemicals for which the Minnesota Department of Health has developed health-based values or risk assessment advice;	
Identify the air toxics to be reported (Minn. R. 7019).	(4) Chemicals within the federal Integrated Risk Information System; or	
The rule would define the air toxics to be reported for the inventory	(5) Chemicals already inventoried by the MPCA in its existing triennial air toxics inventory.	
Amend permit and reporting processes to align with mandatory air toxics reporting (Minn R. 7002, 7007.1300 subp. 3 and 4, and Minn. R. 7008).	Minn. Stat. 116.062 exempts Option B permit holders from the annual emissions inventory. Emission sources at facilities that are characterized as "insignificant activities" do not currently report	

General topic of interest	Summary
Clarifications to rule sections may be required to align mandatory reporting requirements with existing rules to exempt Option B permits from this annual inventory, and for insignificant activities and conditionally insignificant activities. Additional changes may be made to the rules for calculating emissions given new reporting requirements.	their annual air toxics emissions depending on their treatment within each permit. These rule changes would clarify which types of insignificant activities would be subject to the new mandatory air toxics reporting rule.

Make air toxics emissions inventory reporting mandatory

We believe that mandatory reporting is necessary to ensure that when we evaluate the sources and amounts of air toxics, all sources are reporting, and not just those that volunteer. While most facilities ensure their reports are accurate and complete, not all do. Mandatory reporting would ensure that all facilities are reporting, and that facilities will continue to report air toxic emissions.

Additionally, while most permittees submit information, some submittals are not accurate. For example, facilities may report emissions that are far higher than the actual emissions due to the use of easier (though less accurate) calculation methods. Because reporting is voluntary, there is no mandate for facilities to correct data or to confirm whether our estimates or recalculations are correct. Under voluntary reporting, continual calls to nonreporting facilities uses staff resources. Mandatory reporting may begin to reduce some of the staff time used to follow up on missing data.

Further, incorrect data skews risk evaluation results, and could potentially lead us to focus on the wrong facilities. Mandatory reporting would allow us to achieve higher participation in reporting by creating an enforcement tool for nonsubmittal.

Not all facilities would be subject to mandatory reporting. The recently enacted Minn. Stat. 116.062 limits the mandatory reporting to facilities located in Anoka, Carver, Dakota, Hennepin, Ramsey, Scott or Washington counties. The issues identified above will continue for the non-metro counties, and the MPCA staff resources will continue to be needed to address them. This rulemaking will thus increase the staff time needed to maintain accurate air emission inventories.

Stakeholder input needed

- Should this rulemaking be the 7-county metro or statewide?
- How can MPCA set up a reporting process that minimizes burdens on permittees and the MPCA while collecting accurate and complete data?
- What tools would be helpful to speed up or improve the accuracy of submittals? For example, would the ability to upload spreadsheets ease emissions reporting effort?
- If possible, please provide an estimate of current reporting requirements: number of hours to prepare reports from existing records, type of data, etc.
- Other information you would like to submit related to requiring mandatory reporting of air toxics from permitted sources.

Make mandatory air toxics emissions inventory reporting an annual process

Many permittees accept limits on volatile organic compounds (VOCs) and/or HAP emissions to avoid being classified as a major HAP source, thus are subject to an enforceable HAPs emissions control standard. Limits are frequently structured as both a monthly and annual limit. Permittees must track and record HAP emissions to demonstrate ongoing compliance with permit limits. While permittees must report criteria pollutant emissions annually to the MPCA, there currently is no requirement for permittees to report related HAPs emissions; instead, permittees submit an annual certification that they are in compliance with the permit requirements, including HAP limits.

In addition to mandatory reporting, the proposed rule would increase the frequency of reporting from triennial to annual for facilities in Anoka, Carver, Dakota, Hennepin, Ramsey, Scott or Washington counties. We currently prepare a statewide air toxics inventory every three years to align with EPA's National Emissions Inventory, and we request that permitted facilities report air toxic emissions for the year being inventoried. Increasing the frequency of reporting will mean that permittees would simultaneously submit inventories of both criteria pollutants as well as air toxics.

Annual reporting of toxics to the MPCA would allow for more timely assessment of emissions and emission trends, tracking changes to facility operations, or flagging permit violations. The MPCA believes that routine assessment of air toxic emissions is necessary to address potential threats to human health before communities are exposed for extended periods.

Again, this requirement does not apply to sources that are not within the seven metropolitan counties. The MPCA will continue to assess toxic emissions from all facilities; however, the results for facilities outside the seven metropolitan counties will continue to reflect existing data shortcomings already outlined in this document.

Stakeholder input needed:

- What are the anticipated additional burdens of annual reporting on permittees, especially if HAPs are already being tracked annually, and toxic release inventory (TRI) pollutants are tracked and reported annually?
- What tools would be helpful to speed up or improve annual reporting to the MPCA?
- Other information you would like to submit related to requiring annual reporting of air toxics from permitted sources.

Identify air toxics to be reported

We will propose an initial list of air toxics to be included in required emissions inventory. This list will be developed and refined based on public input, EPA standards, and our data needs.

Stakeholder input needed:

- Which air toxics should be included in mandatory emissions inventories?
- What criteria should be evaluated to include an air contaminant in the inventory?
- How should MPCA solicit feedback on additions or modifications to the list of air toxics to report?
- Is there interest in particular air toxic pollutants?
- Other information you would like to submit regarding identification of the list of air toxics.

Amend permitting and emissions inventory reporting processes in rules to align with mandatory air toxics reporting

As part of the transition to mandatory air toxics reporting, we may need to revise emissions inventory definitions or the procedures for calculating actual emissions for the emission inventory if improved clarity is necessary. We would propose these changes to align other rule sections with proposed air toxics reporting requirements.

Additionally, we seek input in evaluating emission sources or activities that are classified as "conditionally insignificant" or "insignificant activities" and their role in emitting toxic chemicals. Small amounts of air toxics can have significant health or environmental impacts, and current criteria pollutant thresholds used to provide exemptions from quantification within permits for insignificant activities may not be appropriate for reporting air toxics.

Recognizing that adding new pollutants to the air toxics inventory could require additional tracking and reporting at permitted facilities, we are evaluating the value of and options for "stepped" implementation. This means that in each year, progressively more facilities are reporting, or more pollutants are being reported.

Stakeholder input needed:

- How should the MPCA evaluate the role of insignificant activities in total toxics emissions at a
 facility given that activities defined as "insignificant" are currently based on their criteria
 pollutant emissions?
- Would providing reporting thresholds be useful? If so, what characteristics should be considered in setting reporting thresholds?
- Facilities are the experts concerning the operation of their own emission processes. How can the MPCA ensure accurate and complete data collection through the emissions inventory process for all reporting sources?
- What are the expected costs and benefits of annual reporting versus three-year cycle reporting?
- Since this rule is seeking actual emissions of air toxics, should the rules for calculating air toxics emissions be the same for calculating criteria pollutants? What methods can MPCA incorporate to accurately calculate air toxic pollutants? For example, the current emission inventory rules do not allow sources to apply air pollution control efficiencies if the pollution control device is not identified in permit. Current air toxic inventory procedures follow the same rules as for criteria pollutants.
- If the implementation of the inventory was in a step-wise fashion, which facilities or pollutants should be reporting first? How would additional facilities or pollutants be added to the reporting process? On what timeframe?
- Other information you would like to submit.