

Update on the new MPCA practice for evaluating ambient impacts of emission changes

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Overview of the new process

Summary of applications

Upcoming form changes

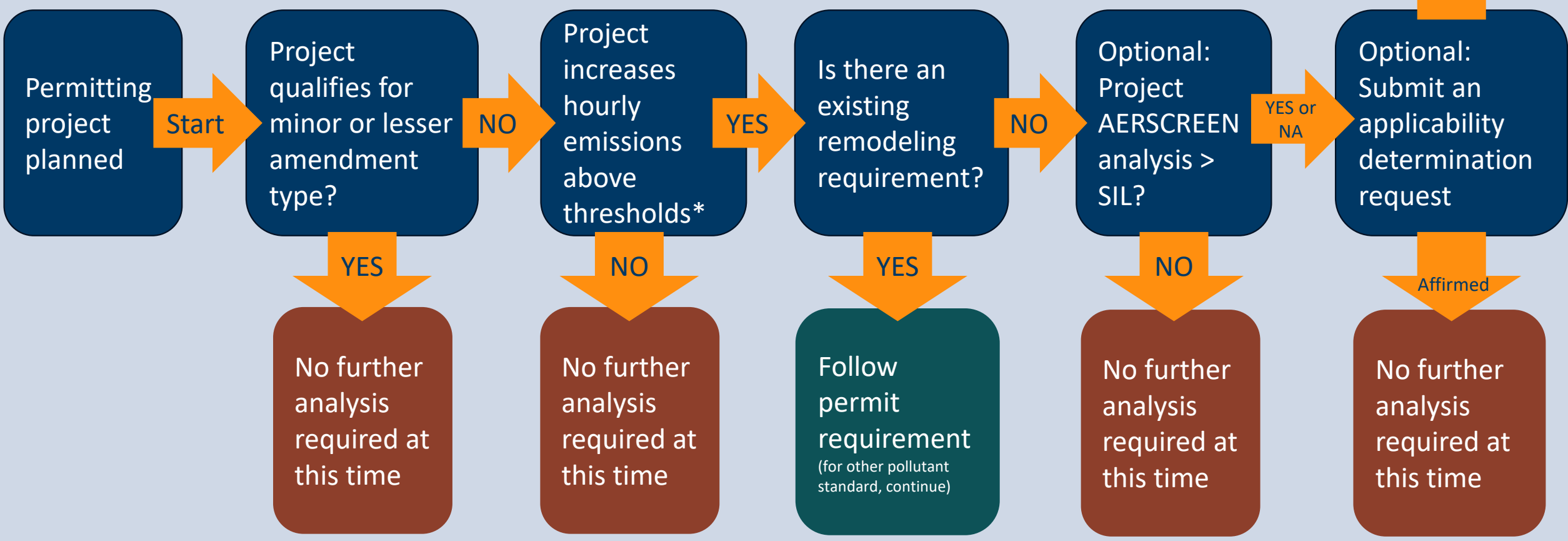
Updating permit requirements

Questions & Comments

Overview of the process

Overview of the new process

Demonstrate NAAQS/MAAQs compliance
Choose method:
• PSILA/CIA
• EBD (if appropriate)
• Monitor



Summary of applications

Applications received

Individual permit applications received 3/6 to 10/13 (moderate, major, 1st time TFP)		
Category	2025	Previous 3 year average
Total	29	21
With CH-19	7	
Required CH-20	3	
Required Ch-20 & NAAQS demonstration	3	
NAAQS demonstration required ONLY by CH-20	0	

*Does not include resubmittal applications

Upcoming form changes

Updated CH-19, CH-20, and CD-01 forms

- CH-19
 - Lb/day emission threshold for particulates (was lb/hr)
- Ch-20
 - Accounts for industrial ambient air monitors
- CD-01
 - Includes compliance plan sections when proposing limits to avoid CH-19 thresholds

Other CH-19 updates

- MPCA plans to update emergency engine section
 - Emergency engine exclusion from threshold calculation will likely rely on:
 - NOx hourly PTE, distance to property boundary, release height
 - Permitted best management practices (BMPs)

Maximum emission rate (lb/hr) at set distance and release height								
Distance to ambient boundary (m)	Release Height (2m)	Release Height (3m)	Release Height (4m)	Release Height (5m)	Release Height (8m)	Release Height (11m)	Release Height (14m)	Release Height (18m)
5	1 lb/hr	4	6	7	8	9	10	11
10	2	4	6	7	8	9	10	11
15	2	4	6	7	8	9	10	11
20	2	4	6	7	8	9	10	11
25	2	4	6	7	8	9	10	11
30	2	4	6	7	8	9	10	12
35	2	4	6	7	8	9	10	12
40	2	4	6	7	8	9	10	12
45	2	4	6	7	8	9	10	12
50	2	4	6	7	8	9	10	12
55	2	4	6	7	8	9	10	12
60	2	4	6	7	8	9	11	12
65	2	5	6	7	8	10	11	12
70	3	5	6	7	9	10	11	12
75	3	5	6	8	9	10	11	12
80	3	5	7	8	9	10	11	12

Demonstration purposes only (not for actual use)

Updating permit requirements (remodeling)

Remodeling requirement updates

- Many permits are getting remodeling language removed
 - Public notice likely required
 - If CH-19/CH-20 make requirement redundant
 - If an analysis has occurred whereby remodeling requirements are not deemed necessary
- Factors considered in analysis (incomplete list)
 - How close to standard is a nearby monitor
 - How close to standard was previous total facility model
 - How close to PTE in past model are actuals in EI (usually more helpful for long term standards) or CEMS data

Proactive steps

- Submit a major amendment – submit justification
- During reissuance – submit justification

Questions?

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How to stay involved

- Sign up for AirMail (through Gov Delivery)
- Monitor the forms page of the MPCA website
 - The new modeling forms are available
 - The forms page highlights the effective date
- Share questions and feedback with MPCA (aq.permit.forms.mPCA@state.mn.us)

Project emission rate thresholds

Pollutant	Maximum controlled and/or limited PTE
NO _x	9.13 lb/hr
SO ₂	9.13 lb/hr
PM ₁₀	82.1 lb/day
PM _{2.5}	54.7 lb/day
Lead	0.11 lb/hr

(FROM 2024 COE)

Moving Forward: expected impacts to projects

These are the applications received each fiscal year that could have triggered an air quality assessment based on their amendment type.

Activity Type	FY 2023	FY 2024	FY 2025
Total number of Part 70, State, Major, and Moderate applications	40	27	16
Projects that exceeded one or more thresholds		13	3
Permits that exceeded threshold, but EBD/re-modeling language present		2	0

CD-01 snippet

26) Permit Action Emissions Screening

26a) If required to complete Form CH-19, did you propose limits on the item or group identified in question 3a or 3b (of this form) so that the proposed project was under the thresholds in Part C of Form CH-19?

No.

Yes. Below, list the limit(s) you proposed, providing the proposed compliance demonstration.

Proposed limit	Proposed compliance demonstration

CH-19 snippet



520 Lafayette Road North
St. Paul, MN 55155-4194

CH-19

Permit Action Emissions Screening

Air Quality Permit Program

Doc Type: Permit Application

Instructions on Page 3.

1a) AQ Facility ID number: 1b) AQ File number:

2) Facility name:

Complete this form to calculate the hourly emission increases from your proposed project to determine if further evaluation of air quality impacts of the project is required.

Part A. Determination of increases

See instructions for calculating emissions. Make copies if more than four emission units are affected by the proposed change. Attach your calculations.

Emission Source: <input type="text"/>	After Change		Before Change		Net Change	
	lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day
PM ₁₀	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
PM _{2.5}	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
NO _x	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
SO ₂	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Lead	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

CH-19 snippet cont...

Part C. Determination of applicability of process to evaluate project ambient air quality impacts

(See instructions for calculating increases. Attach any additional calculations.)

Total project emission changes by pollutant

PM ₁₀ Source	Net increase (lb/day)
Total Project Net Change	<input type="text"/>

PM _{2.5} Source	Net increase (lb/day)
Total Project Net Change	<input type="text"/>

NO _x Source	Net increase (lb/hr)
Total Project Net Change	<input type="text"/>

SO ₂ Source	Net increase (lb/hr)
Total Project Net Change	<input type="text"/>

Lead Source	Net increase (lb/hr)
Total Project Net Change	<input type="text"/>

Table 1: Pollutant thresholds

Pollutant	Threshold
PM ₁₀	82.1 lb/day
PM _{2.5}	54.7 lb/day
NO _x	9.13 lb/hr
SO ₂	9.13 lb/hr
Lead	0.11 lb/hr

CH-20 snippet



520 Lafayette Road North
St. Paul, MN 55155-4194

CH-20

Evaluation of Ambient Air Quality Impacts

Air Quality Permit Program

Doc Type: Permit Application



- 1a) AQ Facility ID number: _____ 1b) Agency Interest ID number: _____
- 2) Facility name: _____

Answer the questions on this form to determine how potential ambient air quality impacts will be addressed for your project. The pollutants that will be evaluated are PM₁₀, PM_{2.5}, SO₂, NO₂, and Lead. Answer each question sequentially. See below for form instructions.

3. Which pollutants are currently being monitored by an MPCA-approved monitor at your facility? Check all boxes that apply.

- | | |
|--|--|
| <input type="checkbox"/> PM ₁₀ | <input type="checkbox"/> NO ₂ |
| <input type="checkbox"/> PM _{2.5} | <input type="checkbox"/> Lead |
| <input type="checkbox"/> SO ₂ | <input type="checkbox"/> None |