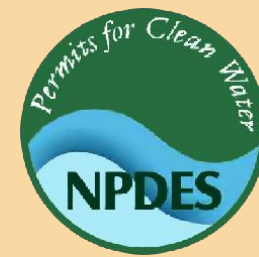


EPA's 2021 Multi-Sector General Permit (MSGP) for Industrial Stormwater Discharges

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US EPA



EPA's Multi-Sector General Permit (MSGP)

Background

- EPA-issued NPDES General Permit covering “stormwater discharges associated with industrial activity”
- Covers 29 different sectors
- Around 2,400 permittees in areas where EPA is the permitting authority
- On January 15, 2021, EPA issued the 2021 MSGP. The 2021 MSGP became effective on March 1, 2021. Following the issuance of the 2021 MSGP, EPA identified several typographical and similar errors in the permit. EPA subsequently finalized a minor modification to the 2021 MSGP that became effective on September 29, 2021.

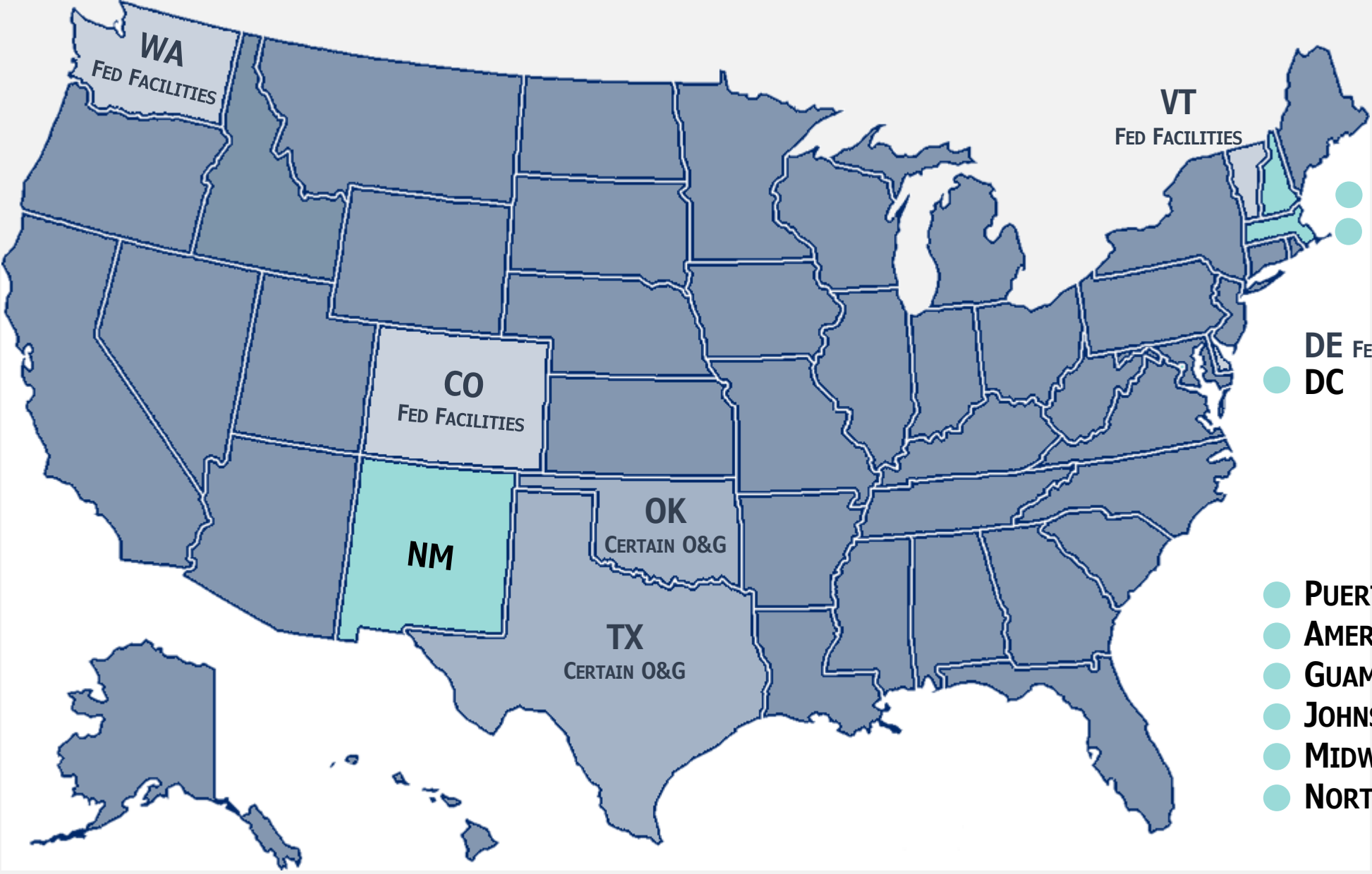


Issued:
1995, 2000,
2008, &
2015

Proposed:
2020

Final:
2021

Where does EPA's MSGP apply?



- NH
- MA
- DE FED FACILITIES
- DC
- PUERTO RICO
- AMERICAN SAMOA
- GUAM
- JOHNSTON ATOLL
- MIDWAY ISLAND & WAKE ISLAND
- NORTHERN MARIANA ISLANDS


Steps to comply with MSGP

Ongoing activity 

PREPARE

Check Eligibility Conditions (Part 1)

Develop/update SWPPP (Part 6)


Install Control Measures to Meet Effluent Limits (Part 2) 

GET COVERED


Submit NOI for Authorization (Part 1)

CHECK-UP


Conduct Inspections and Visual Assessments (Part 3) 


Conduct Required Monitoring (Parts 4, 8) 

FOLLOW-UP

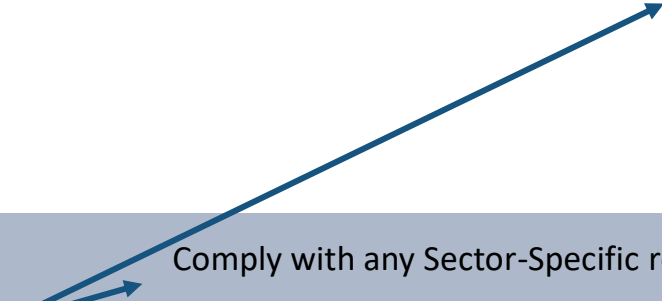
Complete Any Required Corrective Actions and AIM (Part 5) 

Complete Reporting (Part 7) 

Comply with any Sector-Specific requirements (Part 8) 

Comply with any State/Tribal-specific conditions (Part 9) 

- Part 8 sector-specific requirements, where applicable
- Good housekeeping
 - SWPPP requirements
 - Additional inspections
 - Benchmark or indicator monitoring
 - ELGs



Litigation + NRC Study

- After the EPA issued the 2015 MSGP, numerous environmental NGOs challenged the permit, two industry groups intervened, and a Settlement Agreement was signed in 2016 with all parties
- One key term from the Settlement Agreement stipulated that the EPA fund a study conducted by the NRC on potential permit improvements, focused primarily on monitoring requirements, for consideration in the next MSGP
 - National Academies of Sciences' National Research Council (NAS/NRC) Study Report & Webpage:
 - [Report: Improving the EPA Multi-Sector General Permit for Industrial Stormwater Discharges](#)
- When drafting the proposed MSGP, EPA considered the recommendations suggested in the completed NRC Study.
- EPA signed and issued the 2021 Multi-Sector General Permit (MSGP) on January 15, 2021. It became effective March 1, 2021.

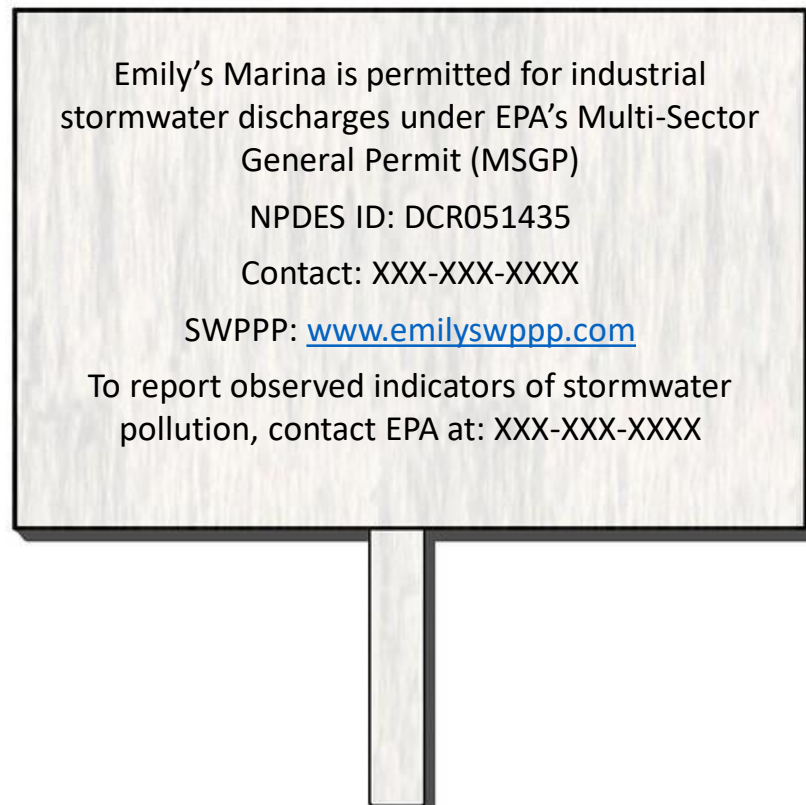
Proposed
permit
changes
that were
NOT
finalized
as
proposed
in the 2021
MSGP

1. Expanding permit eligibility requirement for discharges to a federal CERCLA site beyond EPA Region 10
2. Adding an eligibility criterion regarding coal-tar sealcoat
3. Modifying permit authorization wait time related to a pending enforcement action
4. Providing an inspection-only option in lieu of benchmark monitoring
5. Requiring sector-specific benchmark monitoring for Sectors I, P, and R
6. Universal benchmarks for all sectors
7. Modifying the method for determining natural background pollutant contributions from the 2015 MSGP
8. Requiring the use of sector-specific stormwater control measures from Appendix Q

Changes to the MSGP

2015 MSGP	2021 MSGP
No equivalent requirement	<u>Part 2.1.1.8</u> Facilities must consider implementing enhanced stormwater control measures such as structural improvements and enhanced/resilient pollution prevention measures to minimize impacts from stormwater discharges from major storm events such as hurricanes, storm surge, extreme/heavy precipitation, and flood events. Examples: elevate materials, temporarily reduce outdoor storage, delay deliveries.
No equivalent requirement in MSGP (but is in CGP and other NPDES permits)	<u>Part 1.3.5</u> Facilities must post a sign of permit coverage at a safe, publicly accessible location in close proximity to the facility, including facility contact information, how to obtain the SWPPP, and how to contact EPA (an exception is where other laws or local ordinances prohibit such signage)

Example sign of permit coverage



Changes to the MSGP

2015 MSGP	2021 MSGP
<p>Benchmark monitoring applied to 55% of MSGP facilities. The other 45% did not have any benchmark monitoring requirements.</p>	<p><u>Part 4.2.1.1 and Part 8</u> Facilities without benchmarks must conduct “report-only” indicator monitoring for pH, TSS, and COD on a quarterly basis throughout the permit term.</p>
<p>No equivalent requirement.</p>	<p><u>Part 4.2.1.1 and Part 8</u> Certain facilities must conduct “report-only” indicator monitoring for PAHs bi-annually (2/year) in 1st and 4th year of permit coverage.</p>

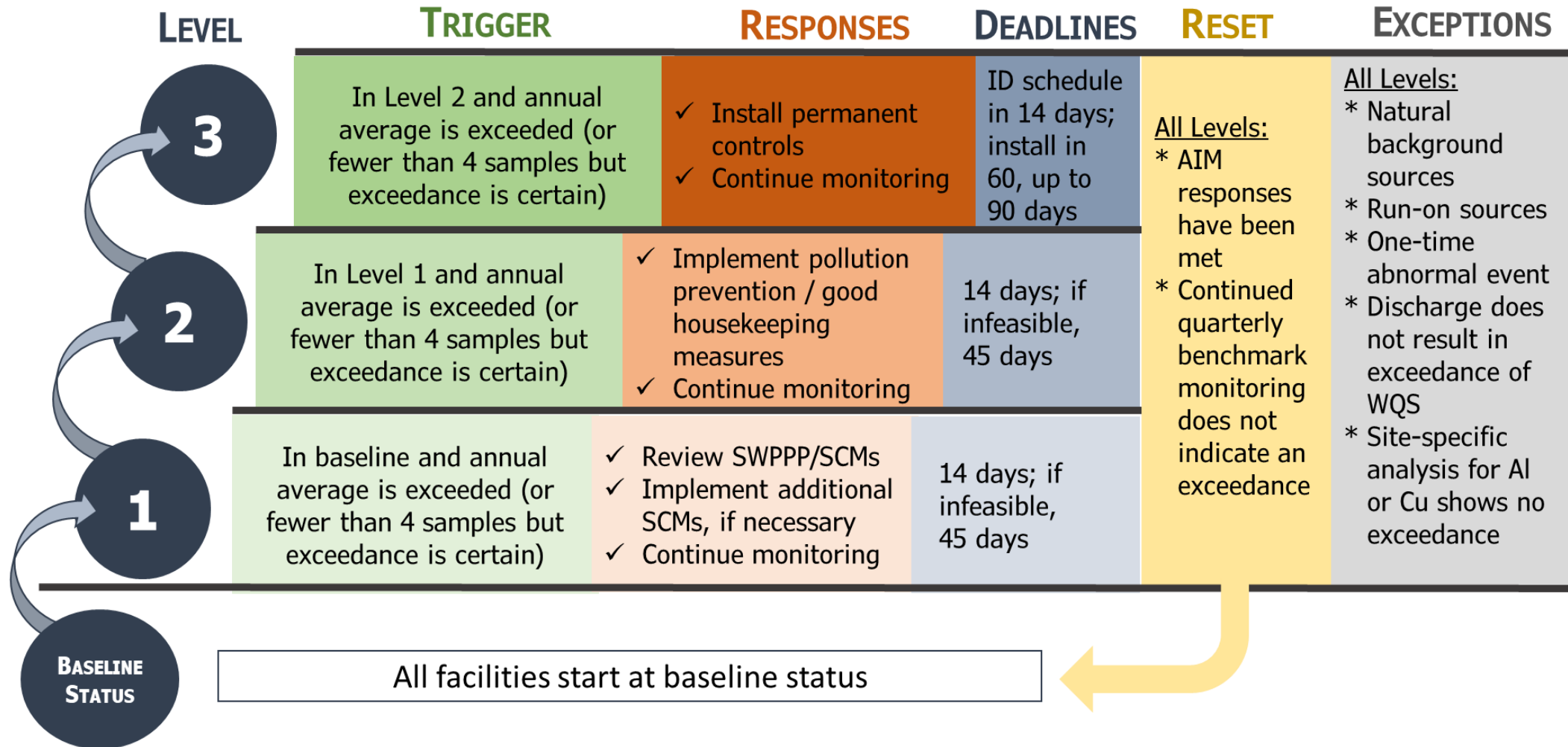
Changes to the MSGP

2015 MSGP	2021 MSGP
<p>Existing benchmarks for Selenium, Arsenic, Aluminum, Cadmium, Magnesium, Iron, and Copper are based on outdated WQ criteria and/or toxicity data.</p>	<ul style="list-style-type: none">• Revised aluminum, copper (freshwater), selenium (freshwater), and cadmium benchmarks based on new final EPA WQ criteria.• Removed iron and magnesium benchmark due to lack of documented toxicity.• Allowing facilities to conduct site-specific risk analysis for aluminum and copper benchmark exceedances.
<p>Benchmark monitoring was required quarterly for first four quarters. If annual average was below benchmark threshold, facilities could discontinue for remainder of coverage.</p>	<p><u>Part 2.2.2</u> Benchmark monitoring required quarterly for first four quarters. If annual average is below benchmark threshold, facilities can discontinue until 4th year of coverage when quarterly monitoring is required again. Monitoring must continue if exceedance occurs (AIM is triggered).</p>

Changes to the MSGP

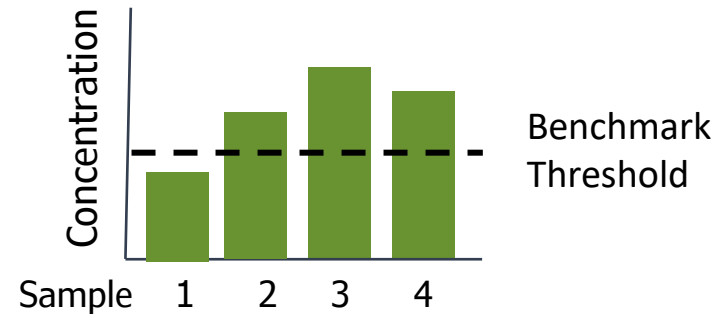
2015 MSGP	2021 MSGP
<p>Operators discharging to impaired waters must monitor once/year for all pollutants causing impairments and can discontinue monitoring if not detected or not expected in the discharge</p>	<p><u>Part 4.2.5.1</u> Facilities discharging to impaired waters w/o a TMDL must monitor once/1st year of coverage for all pollutants causing impairment, then once/4th year for only those associated with industrial activity and/or are benchmarks. If not detected, can discontinue for remainder of permit coverage. Monitoring must continue if detected.</p>
<p>If a benchmark is exceeded (i.e., the annual average of your quarterly results was greater than the benchmark), operators must review the control measures to see if modifications are necessary and continue monitoring until no exceedance.</p>	<p>Additional Implementation Measures (AIM)- Incremental and increasingly stringent responses to benchmark exceedances. Level 1: While in baseline status, a triggering event (exceedance) occurs, then must <u>review SWPPP/ control measures</u>, implement additional measures (if necessary), and continue monitoring until no exceedance. Level 2: While in Level 1, a triggering event (exceedance) occurs, then <u>must implement additional pollution prevention/good housekeeping measures</u> and continue monitoring until no exceedance. Level 3: While in Level 2, a triggering event (exceedance) occurs, then <u>must install permanent structural source and treatment controls</u> and continue monitoring until no exceedance.</p>

Additional Implementation Measures (AIM) for benchmark exceedances

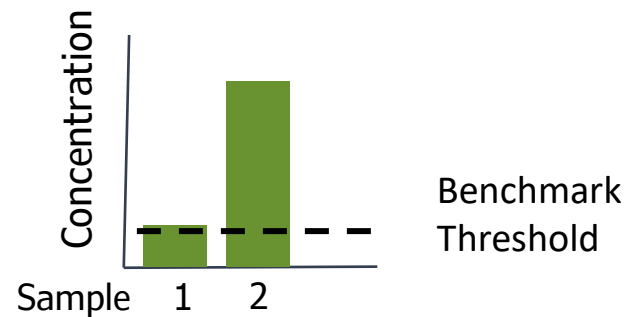


AIM Triggers

4 quarter average over the benchmark



<4 samples collected but sum to date is over 4x the benchmark

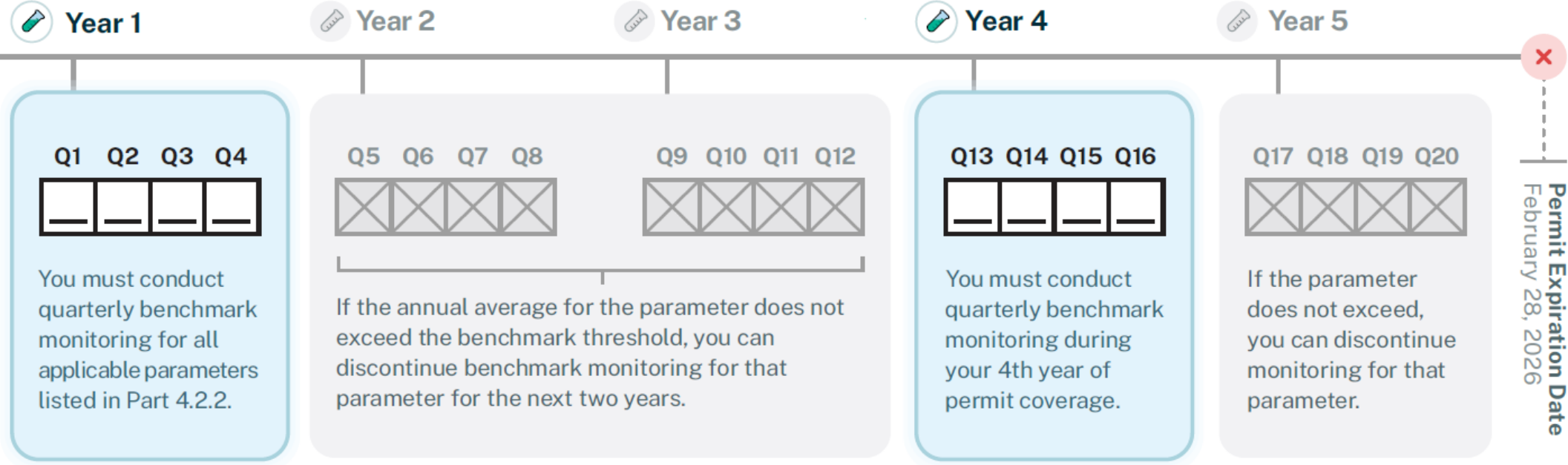


- AIM applies per parameter, per discharge point
- Triggers do NOT change from AIM Level to Level
- AIM Levels are sequential and cannot be skipped
 - i.e., you must be in Level 1 to go to Level 2, and you must be in Level 2 to go to Level 3
- All exceptions are available at all AIM Levels

Baseline Monitoring Schedule

Part 4.2.2.3

All applicable benchmark parameters will follow this schedule unless an AIM triggering event occurs.



You must conduct quarterly benchmark monitoring for all applicable parameters listed in Part 4.2.2.

If the annual average for the parameter does not exceed the benchmark threshold, you can discontinue benchmark monitoring for that parameter for the next two years.

You must conduct quarterly benchmark monitoring during your 4th year of permit coverage.

If the parameter does not exceed, you can discontinue monitoring for that parameter.

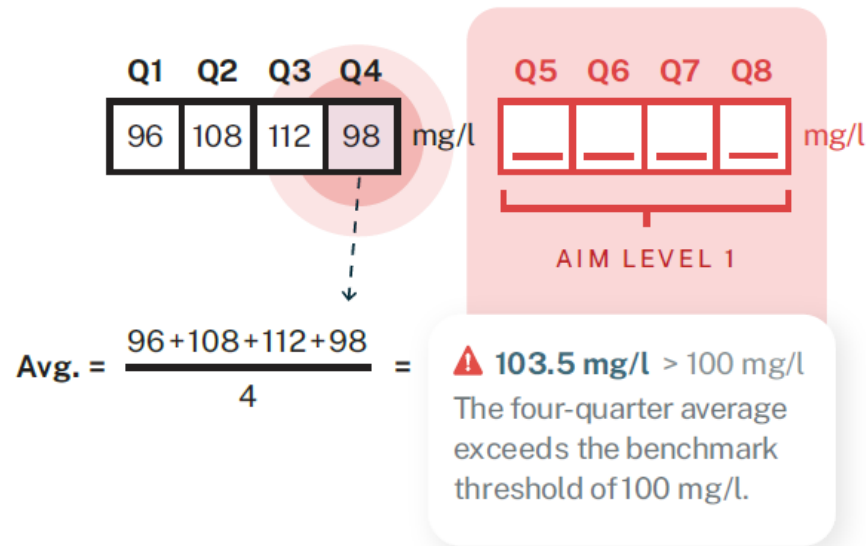
Permit Expiration Date
February 28, 2026

AIM Triggering Event Examples

In these examples, we're triggering AIM for at **Total Suspended Solids (TSS)** by exceeding the benchmark threshold of **100 mg/l** during the first year of permit coverage.

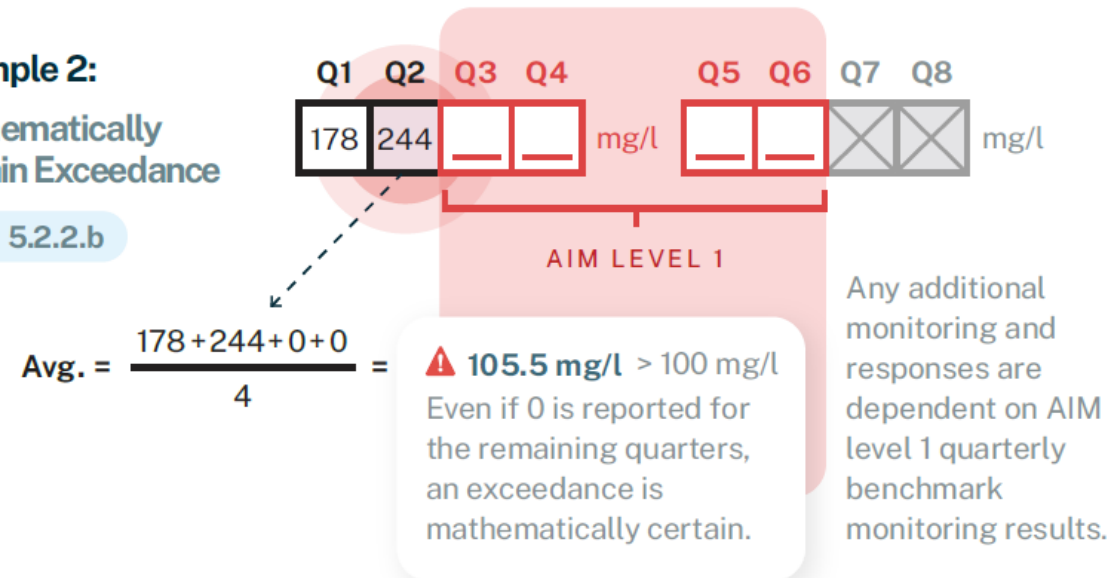
Example 1: Four-Quarter Annual Average Exceedance

Part 5.2.2.a



Example 2: Mathematically Certain Exceedance

Part 5.2.2.b



Example 1

Parameter remains at baseline for the full permit cycle.

Benchmark Threshold: **100** mg/l

Reported Values:

Q1	Q2	Q3	Q4	Q5 Q6 Q7 Q8				Q9 Q10 Q11 Q12				Q13	Q14	Q15	Q16	Q17 Q18 Q19 Q20			
104	100	102	90	X X X X				X X X X				96	100	84	108	X X X X			

Status: **BASELINE**

Projected Annual Avg:

26 51 76.5 **99** mg/l

This row calculates annual average using the formula:

$$\frac{Q_1 + Q_2 + Q_3 + Q_4}{4}$$

✓ 99 mg/l
The annual average is less than the benchmark. Baseline status is maintained.

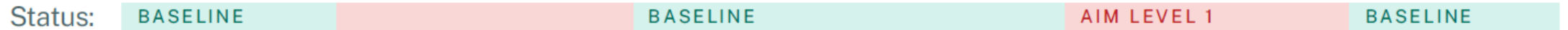
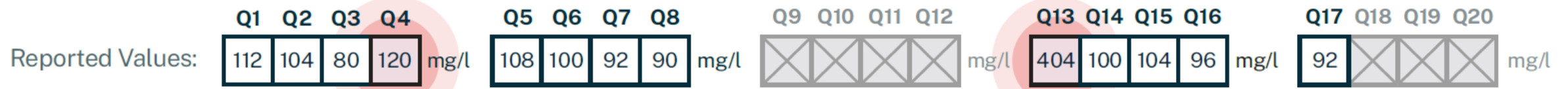
24 49 70 **97** mg/l

✓ 97 mg/l
The annual average is less than the benchmark. Baseline status is maintained.

Example 2

AIM Level is triggered during monitoring in years one and four and returns to baseline following a return to compliance.

Benchmark Threshold: **100** mg/l



! 104 mg/l
AIM level 1 is triggered, resulting in an additional four quarters of benchmark monitoring.

✓ 90 mg/l
The annual average is less than the benchmark. Parameter returns to baseline status.

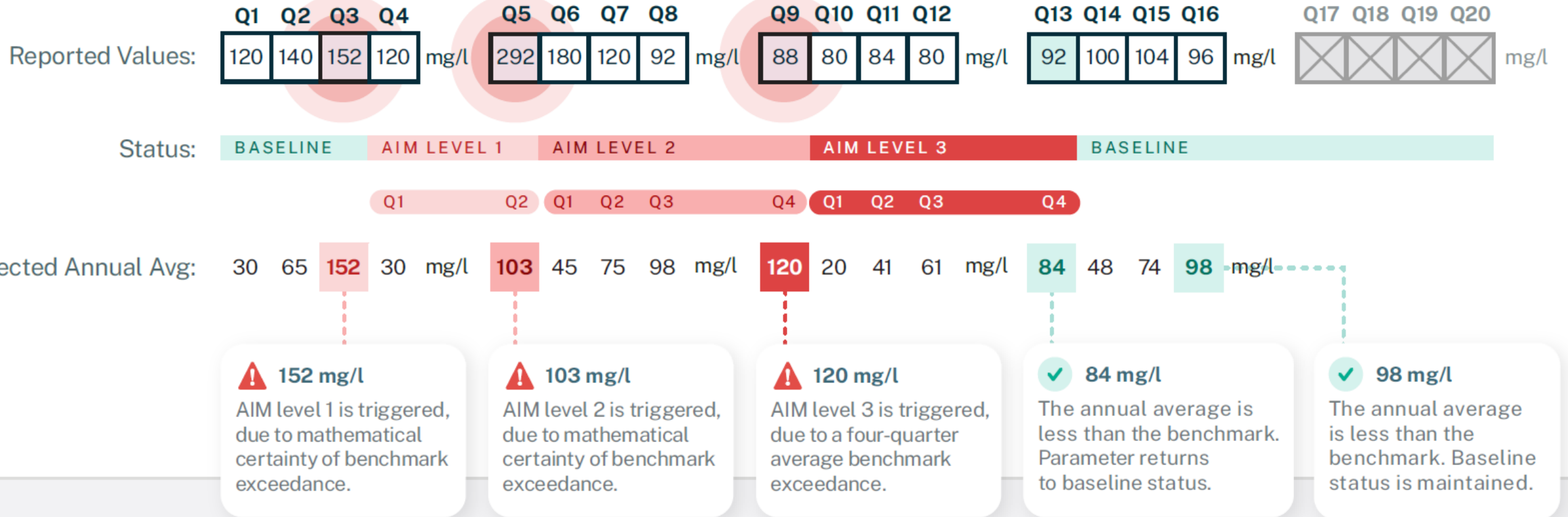
! 101 mg/l
AIM level 1 is triggered, resulting in an additional four quarters of benchmark monitoring.

✓ 98 mg/l
The annual average is less than the benchmark. Parameter returns to baseline status.

Example 3

AIM Level 3 triggered, returning to baseline in Year 4 following a return to compliance.

Benchmark Threshold: **100** mg/l



i In this scenario, Q13 counts both as Q4 of AIM Level 3 and Q1 of year 4 baseline monitoring.

Updates and Resources

Updates:

- On January 25, 2022, EPA published a [Federal Register Notice](#) to seek public input for 60 days (comment period closes March 28, 2022) on the 29 NPDES [Industrial Stormwater Fact Sheet Series](#) currently posted online. EPA is particularly focused on updating common activities, pollutant sources, and associated pollutants at facilities in each sector; and SCMs or best management practices (BMPs), including source control and good housekeeping/pollution prevention measures for potential pollutant sources at facilities in each sector. Comments may be submitted to [Docket ID No. EPA-HQ-OW-2022-0097](#)

Resources:

- [Public Informational Webinar from February 19, 2021](#) was recorded and posted.
- [Guidance, Templates and Tools](#)
 - SWPPP Template and SWPPP Guide
 - Monitoring and Sampling Guide
 - Documentation Templates (records for monitoring, inspection, maintenance, visual evaluation and corrective action activities)
 - New! Spreadsheet to help identify if exceedance of benchmark occurs
- [NPDES eReporting Tool \(NeT\) Training and Supporting Material](#)

If you have a question that isn't answered during this session, you can contact EPA at MSGP@epa.gov

How can I find out about the final permit?

Docket

<https://www.regulations.gov/docket?D=EPA-HQ-OW-2019-0372>

www.regulations.gov

Docket ID # EPA-HQ-OW-2019-0372

**EPA's
industrial
SW
webpage**

<https://www.epa.gov/npdes/stormwater-discharges-industrial-activities>

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