# Effluent Exceedance Violations on the NPDES Noncompliance Report (NNCR)

## Purpose

- Understand when effluent exceedance violations are generated
- Learn about the underlying rules supporting effluent exceedance violations on the quarterly NNCR
- Understand how to find more information

This presentation is an advanced training and assumes you have attended the Quarterly NNCR training. If not, you can view a recorded training on the <u>ECHO</u> <u>Training</u> page.

## Agenda

- 1. Violation generation
- 2. Effluent exceedance violation terminology
- 3. Violation detections (category I versus II)
- 4. Violation resolutions
- 5. Data refresh and quarterly report criteria
- 6. Accessing the quarterly NNCR
- 7. Next steps and questions

## What is an Effluent Exceedance Violation?

- NPDES permittees are required to periodically report their self-monitoring results on discharge monitoring reports (DMRs)
- Effluent exceedance violations are generated when a reported DMR value exceeds the limit value
  - Includes exceedances of base (permit) limits, permit modification limits, stay limits, and enforcement limits
  - Does not include DMRs where the reported value exceeds an alert limit or benchmark threshold

## Effluent Exceedance Violation Code

There is one effluent exceedance violation code:

• E90: DMR, Limited - Numeric Violation

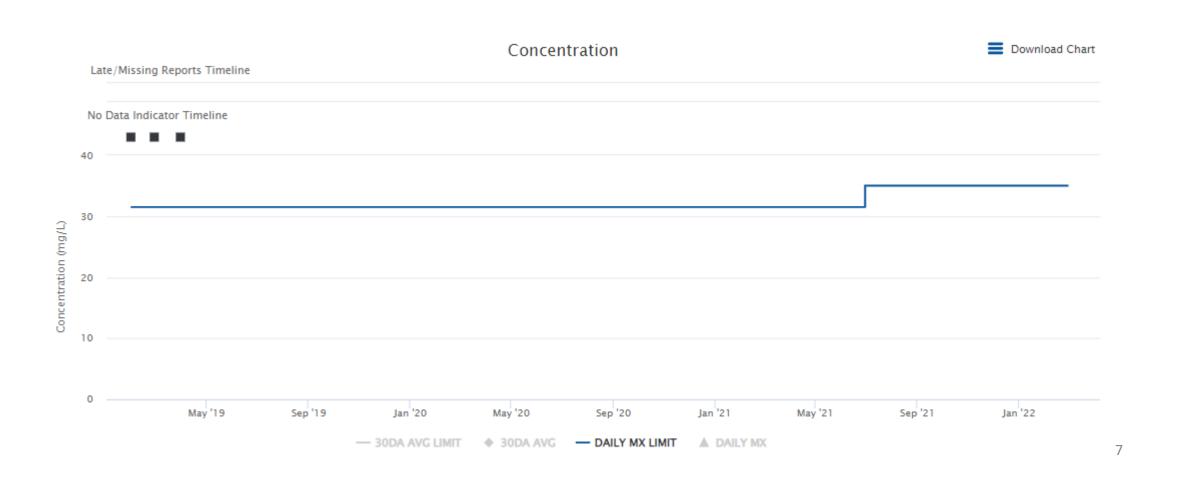
## Effluent Exceedance Violation Generation

Effluent exceedance violations are uniquely identified by the following set of data:

- NPDES ID
- Permitted Feature (outfall)
- Limit Set
- Monitoring Period End Date
- Parameter
- Monitoring Location
- Value Type (concentration or quantity)

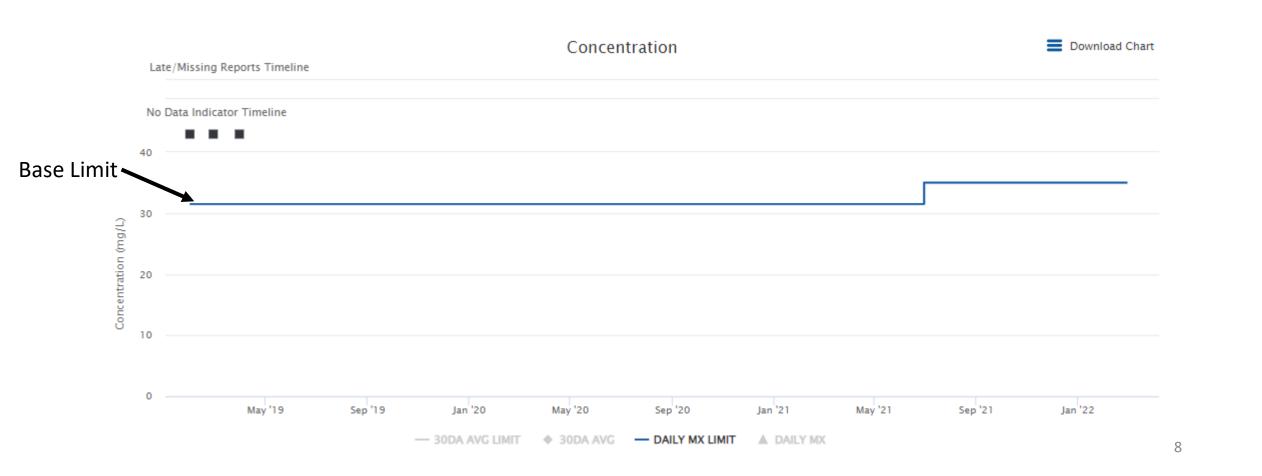
#### Example from ICIS-NPDES: 00620 - Nitrogen, nitrate total [as N], Monitoring Location = 1, Season ID = 0

Limit Type	Start Date	End Date	Months	Units	C3	Statistical Base
Base Limit	11/1/2018	9/30/2023	All	mg/L	31.5	Daily Max
Enforcement Limit	6/1/2021	6/30/2024	All	mg/L	35.0	Daily Max



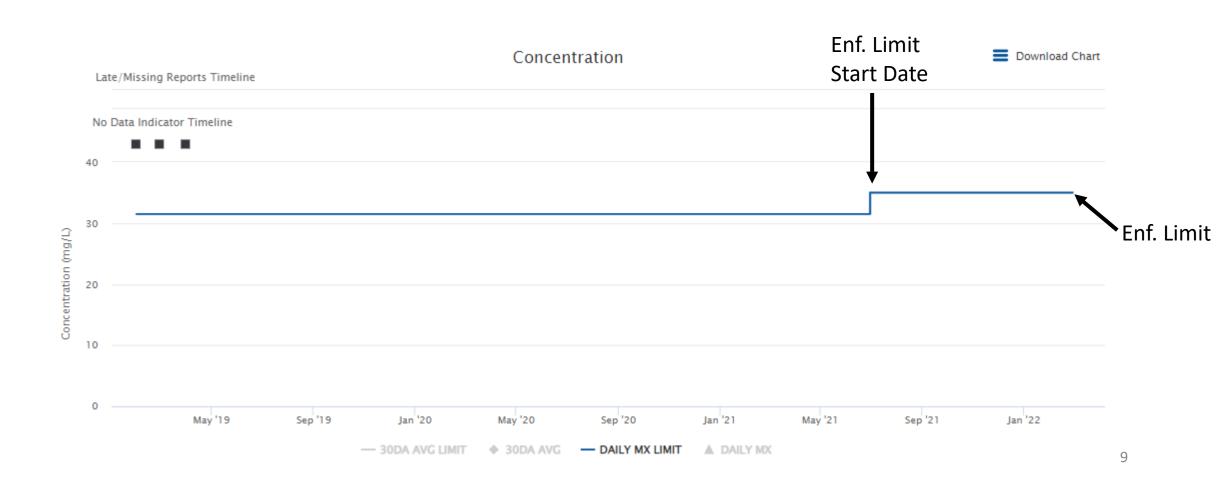
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Enforcement Limit	6/1/2021	6/30/2024	All	mg/L	35.0	Daily Max



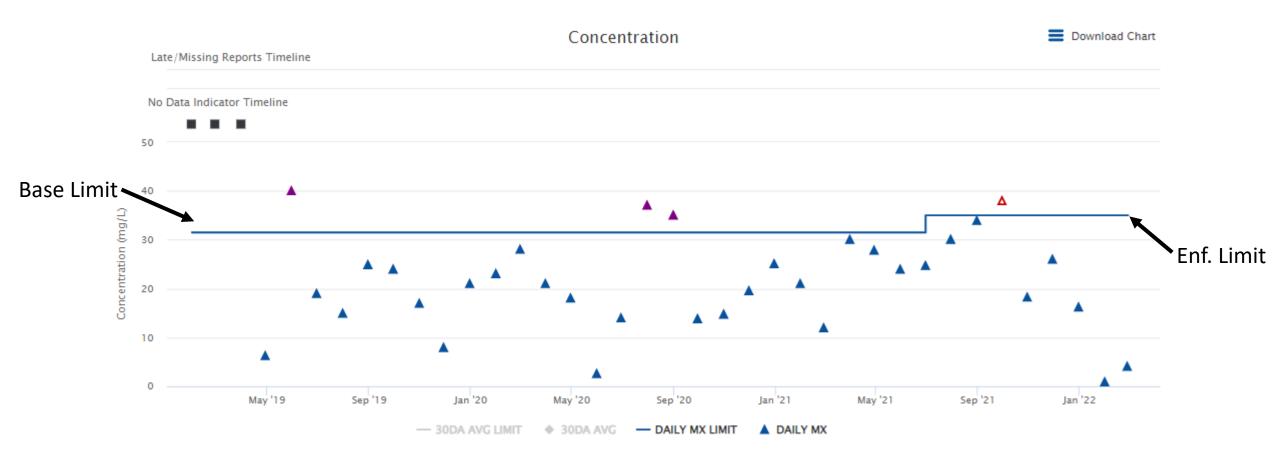
#### Example limit from ICIS-NPDES: 00620 - Nitrogen, nitrate total [as N], Monitoring Location = 1, Season ID = 0

Limit Type	Start Date	End Date	Months	Units	C3	Statistical Base
Base Limit	11/1/2018	9/30/2023	All	mg/L	31.5	Daily Max
Enforcement Limit	6/1/2021	6/30/2024	All	mg/L	35.0	Daily Max



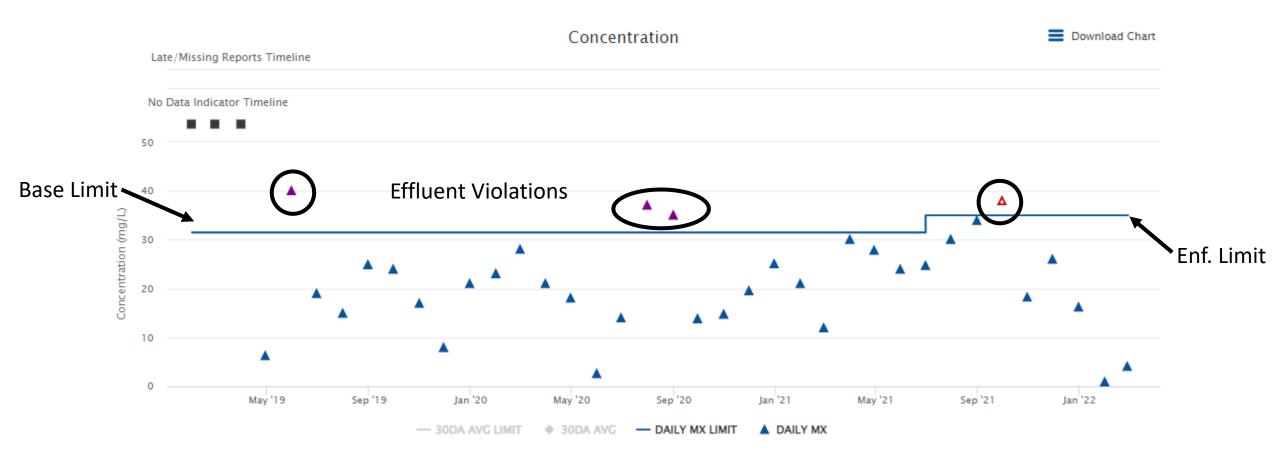
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Base Limit	11/1/2018	9/30/2023	All	mg/L	31.5	Daily Max
Enforcement Limit	6/1/2021	6/30/2024	All	mg/L	35.0	Daily Max



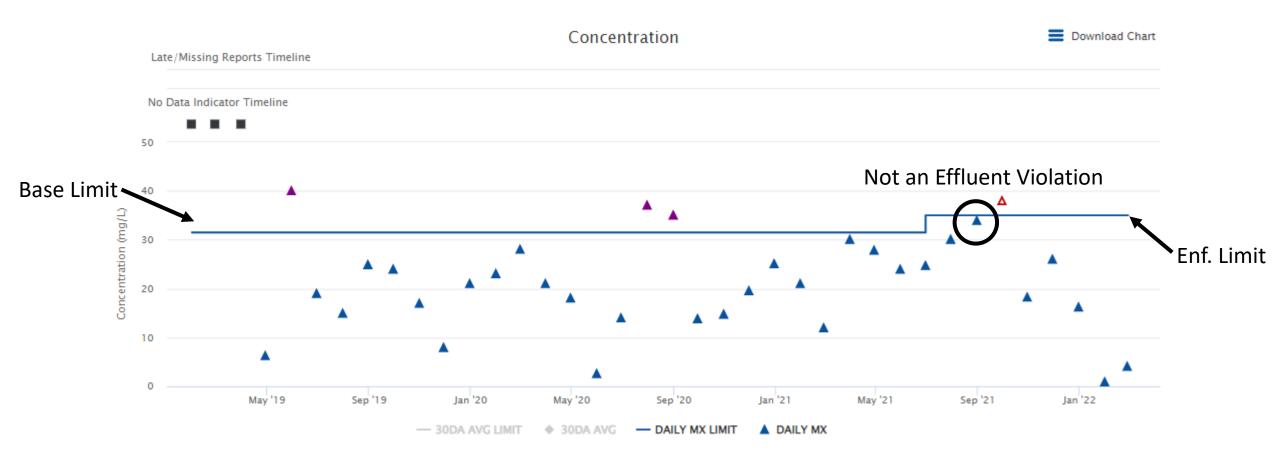
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Enforcement Limit	6/1/2021	6/30/2024	All	mg/L	35.0	Daily Max



Example limit from ICIS-NPDES: 00620 - Nitrogen, nitrate total [as N], Monitoring Location = 1, Season ID = 0

Limit Type	Start Date	End Date	Months	Units	<b>C3</b>	Statistical Base
Base Limit	11/1/2018	9/30/2023	All	mg/L	31.5	Daily Max
Enforcement Limit	6/1/2021	6/30/2024	All	mg/L	35.0	Daily Max



## Percent Exceedance

- The database calculates a percentage the DMR value exceeded the limit, rounded to the nearest whole number
- Effluent exceedance violations can have 0 percent exceedance
  - E.g., Limit value < 1 and DMR value = 1
- There are percent exceedances in the database that are not the true values (e.g., 99,999 and 2,147,483,650) and the NNCR displays "Limit Violation" in place of the numeric value
  - E.g., Limit value = 1 and DMR value > 5

## Pollutant Groups

### Group 1

- Oxygen Demand
- Solids
- Nutrients
- Detergents and Oils
- Minerals
- Metals
  - Aluminum
  - Cobalt
  - Iron
  - Vanadium

#### Group 2

- Metals (all forms)
  - Other metals not specifically listed under Group I
- Inorganic
  - Cyanide
  - Total Residual Chlorine
- Organics
  - All organics are Group 2
     except those specifically
     listed under Group 1

## Statistical Base Types

- 1. Monthly Average
  - Inclusive of statistical base codes that include monthly or 30-day or daily, geometric or arithmetic, and average or mean in the description
- 2. Non-monthly Average
  - All maximum, total, and averages (other than monthly average) statistical base codes
- 3. Minimum

## Technical Review Criteria (TRC)

- Establishes a threshold for effluent exceedance violations that equal or exceed the limit by 20 or 40 percent in any two or more months in a 6-month period at the same permitted feature, monitoring location, parameter, and statistical base type.
  - Group | Pollutant TRC = 1.4
  - Group II Pollutants TRC = 1.2
- Parameters without a pollutant group and/or minimum limits are not evaluated for technical review criteria.
- Instead of using "TRC" in the NNCR, these violations include the description "magnitude."

#### Technical Review Criteria (TRC)

NPDES ID: DC1234567, Permitted Feature: 001, Monitoring Location: Effluent Gross, Parameter: Group 1 Pollutant (40%)

		6-month Review Period					
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code				
Quantity 1  Monthly  Average	Violation		Violation				
Quantity 2 Non-monthly Average							
Concentration 1  Monthly Average							
Concentration 2 Non-monthly Average							
Concentration 3 Minimum							

Monthly Averages

## Chronic Criteria

- Establishes a threshold for effluent exceedance violations that exceed the limit by any amount in any four or more months during a 6-month period at the same permitted feature, monitoring location, parameter, and statistical base type.
- Parameters without a pollutant group and/or minimum limits are not evaluated for chronic criteria.

#### Chronic Criteria

NPDES ID: DC1234567, Permitted Feature: 001, Monitoring Location: Effluent Gross, Parameter: Group 1 Pollutant (40%)

		6-month Review Period						
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6		
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code					
Quantity 1  Monthly  Average	Violation		Violation		Violation			
Quantity 2 Non-monthly Average								
Concentration 1  Monthly  Average				Violation				
Concentration 2 Non-monthly Average								
Concentration 3 Minimum								

The count of months does not distinguish between quantity or concentration limits

# Category I versus II

## Violation Category

40 CFR §123.45 requires every violation to be designated as a Category I or II violation. The regulation includes specific criteria for Category I violations. All violations that do not meet Category I criteria must be designated Category II.

For effluent exceedance violations, there are four criteria for Category I:

- Any exceedance of an enforcement limit
- TRC exceedances of monthly average limits for group I and II pollutants
- Chronic exceedances of monthly average limits for group I and II pollutants
- Any violation or group of violations, which in the discretion of the State Director or EPA, are considered to be of concern

## Violation Detection

## Effluent exceedances violations have 9 possible violation detections:

<b>Detection Code</b>	<b>Detection Description</b>	Violation Category
E1A	Effluent – Magnitude Monthly Average	1
E1B	Effluent – Chronic Monthly Average	1
E2C	Effluent – Monthly Average	2
E2D	Effluent – Magnitude Non-monthly Average	2
E2E	Effluent – Chronic Non-monthly Average	2
E2F	Effluent – Non-monthly Average	2
E2G	Effluent – Minimum	2
E1H	Effluent – Enforcement	1
M1	Category I - Manual	1

# Category I Examples

## NNCR Interpretation

For effluent exceedance violations, there are four criteria for Category I:

- Any exceedance of an enforcement limit
- TRC exceedances of monthly average limits for group I and II pollutants
- Chronic exceedances of monthly average limits for group I and II pollutants
- Any violation or group of violations, which in the discretion of the Director or EPA, are considered to be of concern

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

#### (E1H) Effluent – Enforcement: Example 1

#### NPDES ID: DC1234567, Permitted Feature: 001, Monitoring Location: Effluent Gross, Parameter: Group 0 Pollutant

		6-month Review Period						
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6		
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code							
<b>Quantity 1</b> Monthly Average	No Violation							
Quantity 2 Non-monthly Average	No Violation							
Concentration 1 Monthly Average	No Violation							
Concentration 2 Non-monthly Average	No Violation	No Violation	No Violation	No Violation	Effluent Violation (8%)	No Violation		
Concentration 3 Minimum	No Violation	No Violation	Effluent Violation (65%)	No Violation	No Violation	No Violation		

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

#### (E1H) Effluent – Enforcement: Example 1

#### NPDES ID: DC1234567, Permitted Feature: 001, Monitoring Location: Effluent Gross, Parameter: Group 0 Pollutant

		6-month Review Period					
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code				
<b>Quantity 1</b> Monthly Average							
Quantity 2 Non-monthly Average							
Concentration 1 Monthly Average							
Concentration 2 Non-monthly Average	No Violation	No Violation	No Violation	No Violation	Effluent Violation (8%)	No Violation	
Concentration 3 Minimum	No Violation	No Violation	Effluent Violation (65%)	No Violation	No Violation	No Violation	

## NNCR Interpretation

For effluent exceedance violations, there are four criteria for Category I:

- Any exceedance of an enforcement limit
- TRC exceedances of monthly average limits for group I and II pollutants
- Chronic exceedances of monthly average limits for group I and II pollutants
- Any violation or group of violations, which in the discretion of the Director or EPA, are considered to be of concern

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

#### (E1A) Effluent – Magnitude Monthly Average: Example 1

#### NPDES ID: DC1234567, Permitted Feature: 001, Monitoring Location: Effluent Gross, Parameter: Group I Pollutant (40%)

	6-month Review Period					
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code					
<b>Quantity 1</b> Monthly Average	Effluent Violation (55%)	Effluent Violation (65%)	No Violation	No Violation	Effluent Violation (43%)	No Violation
Quantity 2 Non-monthly Average	No Violation					
Concentration 1  Monthly  Average	Effluent Violation (10%)	Effluent Violation (42%)	No Violation	Effluent Violation (1%)	No Violation	Effluent Violation (50%)
Concentration 2 Non-monthly Average	No Violation					
Concentration 3 Minimum	No Violation					

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

#### (E1A) Effluent – Magnitude Monthly Average: Example 1

NPDES ID: DC1234567, Permitted Feature: 001, Monitoring Location: Effluent Gross, Parameter: Group I Pollutant (40%)

	6-month Review Period					
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code
Quantity 1	Effluent Violation (55%)	Effluent Violation (65%)	No Violation	No Violation	Effluent Violation (43%)	No Violation
Monthly Average	E1A	E1A			E1A	
Quantity 2 Non-monthly Average						
Concentration 1	Effluent Violation (10%)	Effluent Violation (42%)	No Violation	Effluent Violation (1%)	No Violation	Effluent Violation (50%)
Monthly Average	E1B	E1A		E1B		E1A
Concentration 2 Non-monthly Average						
Concentration 3 Minimum						

## NNCR Interpretation

For effluent exceedance violations, there are four criteria for Category I:

- Any exceedance of an enforcement limit
- TRC exceedances of monthly average limits for group I and II pollutants
- Chronic exceedances of monthly average limits for group I and II pollutants
- Any violation or group of violations, which in the discretion of the Director or EPA, are considered to be of concern

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

#### (E1B) Effluent – Chronic Monthly Average: Example 1

#### NPDES ID: DC1234567, Permitted Feature: 001, Monitoring Location: Effluent Gross, Parameter: Group I Pollutant (40%)

	6-month Review Period						
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code				
<b>Quantity 1</b> Monthly Average	Effluent Violation (5%)	No Violation	No Violation	Effluent Violation (12%)	No Violation	No Violation	
Quantity 2 Non-monthly Average	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	
Concentration 1  Monthly  Average	No Violation	Effluent Violation (32%)	No Violation	No Violation	Effluent Violation (11%)	No Violation	
Concentration 2 Non-monthly Average	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	
Concentration 3 Minimum	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

#### (E1B) Effluent – Chronic Monthly Average: Example 1

#### NPDES ID: DC1234567, Permitted Feature: 001, Monitoring Location: Effluent Gross, Parameter: Group I Pollutant (40%)

	6-month Review Period					
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code			
Quantity 1	Effluent Violation (5%)	No Violation	No Violation	Effluent Violation (12%)	No Violation	No Violation
Monthly Average	E1B			E1B		
Quantity 2 Non-monthly Average						
Concentration 1  Monthly  Average	No Violation	Effluent Violation (32%) E1B	No Violation	No Violation	Effluent Violation (11%) E1B	No Violation
Concentration 2 Non-monthly Average						
Concentration 3 Minimum						

## NNCR Interpretation

For effluent exceedance violations, there are four criteria for Category I:

- Any exceedance of an enforcement limit
- TRC exceedances of monthly average limits for group I and II pollutants
- Chronic exceedances of monthly average limits for group I and II pollutants
- Any violation or group of violations, which in the discretion of the Director or EPA, are considered to be of concern

## Manual Detection

#### Category I – Manual

- Violation Category = 1
- Detection Date = Manually entered by the regulatory authority

## Category II Examples

## NNCR Interpretation

Effluent exceedance violations that **do not** meet Category I criteria:

- Effluent violations of monthly average limits that do not meet TRC or chronic criteria
- Effluent violations of non-monthly averages
- Effluent violations of minimum limits

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

## (E2C) Effluent – Monthly Average: Example 1

		6-month Review Period						
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6		
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code					
<b>Quantity 1</b> Monthly Average	Effluent Violation (50%)	Effluent Violation (0%)	No Violation	No Violation	No Violation	No Violation		
Quantity 2 Non-monthly Average	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation		
Concentration 1  Monthly  Average	Effluent Violation (45%)	Effluent Violation (12%)	No Violation	No Violation	Effluent Violation (2%)	No Violation		
Concentration 2 Non-monthly Average	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation		
Concentration 3 Minimum	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation		

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

## (E2C) Effluent – Monthly Average: Example 1

		6-month Review Period						
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6		
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code							
<b>Quantity 1</b> Monthly Average	Effluent Violation (50%)	Effluent Violation (0%)	No Violation	No Violation	No Violation	No Violation		
Quantity 2 Non-monthly Average								
Concentration 1  Monthly  Average	Effluent Violation (45%)	Effluent Violation (12%)	No Violation	No Violation	Effluent Violation (2%)	No Violation		
Concentration 2 Non-monthly Average								
Concentration 3 Minimum								

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

## (E2C) Effluent – Monthly Average: Example 1

	6-month Review Period						
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code						
<b>Quantity 1</b> Monthly Average	Effluent Violation (50%)	Effluent Violation (0%)  E2C	No Violation	No Violation	No Violation	No Violation	
Quantity 2 Non-monthly Average							
Concentration 1  Monthly  Average	Effluent Violation (45%)	Effluent Violation (12%) E2C	No Violation	No Violation	Effluent Violation (2%)	No Violation	
Concentration 2 Non-monthly Average							
Concentration 3 Minimum							

# NNCR Interpretation

Effluent exceedance violations that **do not** meet Category I criteria:

- Effluent violations of monthly average limits that do not meet TRC or chronic criteria
- Effluent violations of non-monthly averages
- Effluent violations of minimum limits

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

### (E2D) Effluent – Magnitude Non-Monthly Average: Example 1

		6-month Review Period					
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code					
<b>Quantity 1</b> Monthly Average	Effluent Violation (6%)	No Violation	Effluent Violation (16%)	No Violation	No Violation	No Violation	
Quantity 2 Non-monthly Average	Effluent Violation (4%)	No Violation	Effluent Violation (50%)	Effluent Violation (2%)	No Violation	No Violation	
Concentration 1  Monthly  Average	No Violation	No Violation	No Violation	No Violation	No Violation	Effluent Violation (1%)	
Concentration 2 Non-monthly Average	Effluent Violation (2%)	No Violation	Effluent Violation (20%) E2F	Effluent Violation (1%)	No Violation	Effluent Violation (44%)	
Concentration 3 Minimum	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

### (E2D) Effluent – Magnitude Non-Monthly Average: Example 1

		6-month Review Period						
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6		
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code							
<b>Quantity 1</b> Monthly Average	Effluent Violation (6%)	No Violation	Effluent Violation (16%)	No Violation	No Violation	No Violation		
Quantity 2 Non-monthly Average	Effluent Violation (4%)	No Violation	Effluent Violation (50%)	Effluent Violation (2%)	No Violation	No Violation		
Concentration 1 Monthly Average	No Violation	Effluent Violation (1%)						
Concentration 2 Non-monthly Average	Effluent Violation (2%)	No Violation	Effluent Violation (20%) E2F	Effluent Violation (1%)	No Violation	Effluent Violation (44%)		
Concentration 3 Minimum								

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

### (E2D) Effluent – Magnitude Non-Monthly Average: Example 1

		6-month Review Period						
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6		
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code							
<b>Quantity 1</b> Monthly Average	Effluent Violation (6%)	No Violation	Effluent Violation (16%)	No Violation	No Violation	No Violation		
Quantity 2 Non-monthly Average	Effluent Violation (4%)	No Violation	Effluent Violation (50%)	Effluent Violation (2%)	No Violation	No Violation		
Concentration 1 Monthly Average	No Violation	Effluent Violation (1%)						
Concentration 2 Non-monthly Average	Effluent Violation (2%)	No Violation	Effluent Violation (20%) E2F	Effluent Violation (1%)	No Violation	Effluent Violation (44%) <b>E2D</b>		
Concentration 3 Minimum								

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

### (E2E) Effluent – Chronic Non-Monthly Average: Example 1

		6-month Review Period						
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6		
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code					
Quantity 1	Effluent Violation (6%)	Effluent Violation (1%)	No Violation	No Violation	No Violation	Effluent Violation (20%)		
Monthly Average	E1B	E1B				E1B		
Quantity 2 Non-monthly Average	Effluent Violation (14%)	Effluent Violation (2%)	No Violation	Effluent Violation (2%)	No Violation	Effluent Violation (25%)		
Concentration 1  Monthly  Average	No Violation	No Violation	No Violation	Effluent Violation (8%) E1B	No Violation	No Violation		
Concentration 2 Non-monthly Average	No Violation	Effluent Violation (8%)	No Violation	Effluent Violation (8%)	No Violation	No Violation		
Concentration 3 Minimum	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation		

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

### (E2E) Effluent – Chronic Non-Monthly Average: Example 1

	6-month Review Period						
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code						
Quantity 1	Effluent Violation (6%)	Effluent Violation (1%)	No Violation	No Violation	No Violation	Effluent Violation (20%)	
Monthly Average	E1B	E1B				E1B	
Quantity 2 Non-monthly Average	Effluent Violation (14%)	Effluent Violation (2%)	No Violation	Effluent Violation (2%)	No Violation	Effluent Violation (25%)	
Concentration 1  Monthly  Average	No Violation	No Violation	No Violation	Effluent Violation (8%) E1B	No Violation	No Violation	
Concentration 2 Non-monthly Average	No Violation	Effluent Violation (8%)	No Violation	Effluent Violation (8%)	No Violation	No Violation	
Concentration 3 Minimum							

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

### (E2E) Effluent – Chronic Non-Monthly Average: Example 1

		6-month Review Period						
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6		
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code							
Quantity 1	Effluent Violation (6%)	Effluent Violation (1%)	No Violation	No Violation	No Violation	Effluent Violation (20%)		
Monthly Average	E1B	E1B				E1B		
Quantity 2	Effluent Violation (14%)	Effluent Violation (2%)	No Violation	Effluent Violation (2%)	No Violation	Effluent Violation (25%)		
Non-monthly Average	E2E	E2E		E2E		E2E		
Concentration 1	No Violation	No Violation	No Violation	Effluent Violation (8%)	No Violation	No Violation		
Monthly Average				E1B				
Concentration 2	No Violation	Effluent Violation (8%)	No Violation	Effluent Violation (8%)	No Violation	No Violation		
Non-monthly Average		E2E		E2E				
Concentration 3 Minimum								

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

### (E2F) Effluent – Non-Monthly Average: Example 1

		6-month Review Period						
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6		
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code					
<b>Quantity 1</b> Monthly Average	Effluent Violation (50%)	No Violation	Effluent Violation (10%)	No Violation	No Violation	No Violation		
Quantity 2 Non-monthly Average	Effluent Violation (22%) E2F	Effluent Violation (2%) E2F	Effluent Violation (20%) E2F	Effluent Violation (1%)	Effluent Violation (1%)	Effluent Violation (2%)		
Concentration 1  Monthly  Average	No Violation	No Violation	No Violation	No Violation	No Violation	Effluent Violation (1%)		
Concentration 2 Non-monthly Average	Effluent Violation (25%)	Effluent Violation (2%) E2F	Effluent Violation (20%) E2F	Effluent Violation (1%)	Effluent Violation (6%)	Effluent Violation (10%)		
Concentration 3 Minimum	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation		

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

### (E2F) Effluent – Non-Monthly Average: Example 1

		6-month Review Period						
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6		
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code							
Quantity 1	Effluent Violation (50%)	No Violation	Effluent Violation (10%)	No Violation	No Violation	No Violation		
Monthly Average	E2C		E2C					
Quantity 2	Effluent Violation (22%)	Effluent Violation (2%)	Effluent Violation (20%)	Effluent Violation (1%)	Effluent Violation (1%)	Effluent Violation (2%)		
Non-monthly Average	E2F	E2F	E2F	E2F	E2F	E2F		
Concentration 1 Monthly Average	No Violation	Effluent Violation (1%)						
Concentration 2	Effluent Violation (25%)	Effluent Violation (2%)	Effluent Violation (20%)	Effluent Violation (1%)	Effluent Violation (6%)	Effluent Violation (10%)		
Non-monthly Average	E2F	E2F	E2F	E2F	E2F	E2F		
Concentration 3 Minimum								

# NNCR Interpretation

Effluent exceedance violations that **do not** meet Category I criteria:

- Effluent violations of monthly average limits that do not meet TRC or chronic criteria
- Effluent violations of non-monthly averages
- Effluent violations of minimum limits

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

## (E2G) Effluent – Minimum: Example 1

	6-month Review Period						
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code				
<b>Quantity 1</b> Monthly Average	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	
Quantity 2 Non-monthly Average	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	
Concentration 1 Monthly Average	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	
Concentration 2 Non-monthly Average	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	
Concentration 3 Minimum	Effluent Violation (80%)	No Violation	Effluent Violation (22%)	Effluent Violation (5%)	Effluent Violation (5%)	Effluent Violation (10%)	

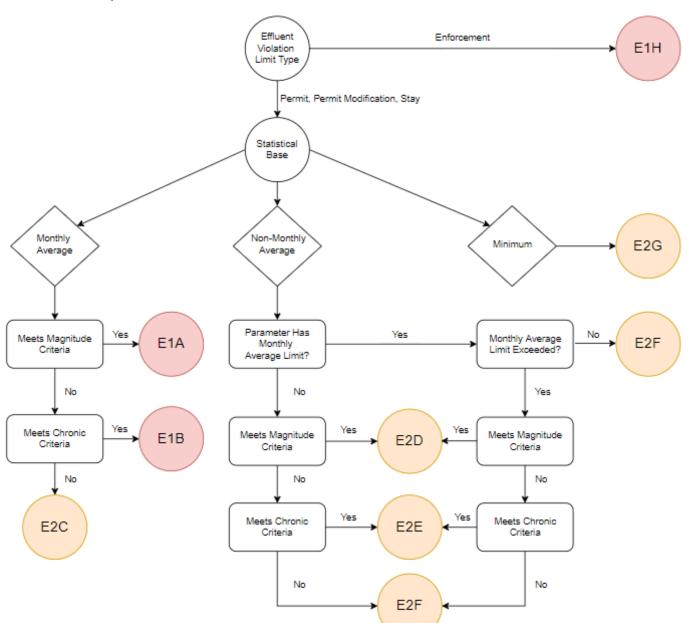
Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

## (E2G) Effluent – Minimum: Example 1

			6-month R	eview Period		
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit)  Detection Code  Resolution Code	Violation (% Over Limit) Detection Code Resolution Code			
<b>Quantity 1</b> Monthly Average						
Quantity 2 Non-monthly Average						
Concentration 1  Monthly  Average						
Concentration 2 Non-monthly Average						
Concentration 3 Minimum	Effluent Violation (80%)	No Violation	Effluent Violation (22%)	Effluent Violation (5%)	Effluent Violation (5%)	Effluent Violation (10%)

### **Effluent Exceedance Limit Detection Flow Chart**

For each effluent exceedance limit violation for a NPDES ID, permitted feature, monitoring location, and parameter, follow the steps below to determine the violation's detection code and order the violations are evaluated:



Detection Code	Detection Description	Violation Category
E1A	Effluent – Magnitude Monthly Average	1
E1B	Effluent – Chronic Monthly Average	1
E2C	Effluent – Monthly Average	2
E2D	Effluent – Magnitude Non-monthly Average	2
E2E	Effluent – Chronic Non-monthly Average	2
E2F	Effluent – Non-monthly Average	2
E2G	Effluent – Minimum	2
E1H	Effluent – Enforcement	1

# Violation Resolution

# Violation Resolution Hierarchy

- Each violation can only have 1 violation status
- There is a hierarchy of violation statuses:
  - 1. Resolved
  - 2. Resolved Pending
  - 3. Unresolved

The *first* resolution that applies to the highest status in the hierarchy is the resolution description and date associated with the violation.

# Violation Resolution Hierarchy

## Effluent exceedance violations have 6 possible violation resolutions:

Resolution Code	Resolution Description	Violation Status
RP1	Formal Enforcement with Compliance Schedule	Resolved Pending
RP2	Resolved Pending - Manual	Resolved Pending
R2	Effluent - 3 Months Clean	Resolved
R3	Closure of Formal Enforcement	Resolved
R5	Resolved – Manual	Resolved
R6	Permit Terminated	Resolved

## Manual Resolutions

### **Resolved Pending - Manual**

- Violation Status = Resolved Pending
- Resolution Date = Manually entered by the regulatory authority

## Resolved - Manual

- Violation Status = Resolved
- Resolution Date = Manually entered by the regulatory authority

# Effluent - 3 Months Clean

- Violation Status = Resolved
- Resolution Date = 6-month window end date when the 3 months clean criteria first applies
- Applies when DMR data for the permitted feature, parameter, monitoring location, and statistical base type have not had any violations, effluent or DMR reporting, in the last three months of the 6-month review period and numeric DMR data or NODI B or Q was reported.
  - Caveat: if data is reported late and does not contain effluent exceedances, 3 months clean criteria can still apply
- This resolves violations from within and before the 6-month review period.

Code	Description
R2	Effluent – 3 Months Clean

	6-month Review Period							
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6		
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code					
Quantity 1	Effluent Violation (50%)	Effluent Violation (3%)	Effluent Violation (10%)	No Violation	No Violation	No Violation		
Monthly	E1A	E2C	E2C					
Average	R2	R2	R2					
Quantity 2 Non-monthly Average								
Concentration 1	Effluent Violation (4%)	No Violation	Effluent Violation (40%)	No Violation	No Violation	No Violation		
Monthly	E2C		E1A					
Average	R2		R2					
Concentration 2 Non-monthly Average								
Concentration 3 Minimum								

Code	Description
R2	Effluent – 3 Months Clean

	6-month Review Period							
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6		
<b>DMR Value Type</b> Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code					
Quantity 1	Effluent Violation (50%)	Effluent Violation (3%)	Effluent Violation (10%)	No Violation	NODI B	No Violation		
Monthly	E1A	E2C	E2C					
Average	R2	R2	R2					
Quantity 2 Non-monthly Average								
Concentration 1	No Violation	No Violation	Effluent Violation (40%)	No Violation	No Violation	No Violation		
Monthly			E1A					
Average			R2					
Concentration 2				Effluent Violation (10%)		NODI E		
Non-monthly Average				E2F				
Concentration 3 Minimum								

Code	Description
R2	Effluent – 3 Months Clean

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9
<b>DMR Value Type</b> Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code
Quantity 1	Effluent Violation (64%)	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation
Monthly	E1A								
Average	R2								
Quantity 2 Non-monthly Average									
Concentration 1	No Violation	No Violation	No Violation	Effluent Violation (40%)	No Violation	Effluent Violation (12%)	No Violation	No Violation	No Violation
Monthly				E1A		E1A			
Average				R2		R2			
Concentration 2  Non-monthly  Average									
Concentration 3 Minimum									

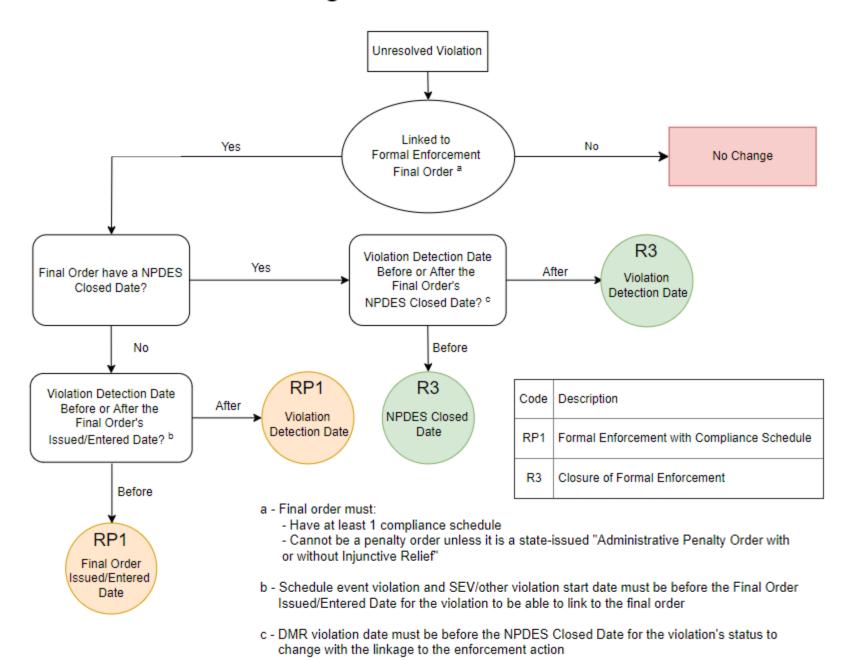
# Formal Enforcement w/Comp. Schedule

- Violation Status = Resolved Pending
- Resolution Date
  - If the violation detection date is <u>before</u> the final order's issued/entered date, the resolution date = issued/entered date
  - If the violation detection date is <u>after</u> the final order's issued/entered date, the resolution date is set to the violation's detection date
- Applies when an effluent exceedance violation is linked to a
  - Formal enforcement action non-penalty final order or a state-issued Administrative Penalty Order with or without Injunctive Relief and a compliance schedule, and
  - The final order does not have a NPDES Closed Date

# Closure of Formal Enforcement

- Violation Status = Resolved
- Resolution Date
  - If the violation detection date is <u>before</u> the final order's NPDES Closed Date, the resolution date = NPDES closed date
  - If the violation detection date is <u>after</u> the final order's NPDES Closed Date, the resolution date is set to the violation's detection date
- Applies when an effluent exceedance violation is linked to a
  - Formal enforcement action non-penalty final order or a state-issued Administrative Penalty Order with or without Injunctive Relief and a compliance schedule, and
  - The final order has a NPDES Closed Date

### Resolved Pending and Resolved Status Flow Chart



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# Permit Terminated

- Violation Status = Resolved
- Resolution Date = Permit Termination Date
- Violations resolved by a permit termination overrule manual resolutions, even if the manual resolution date is after the permit termination date.

Note: violations with this status can still be included in enforcement actions

# Data Refresh

# Data Refresh

- Each weekend, the effluent violations are evaluated in 6-month windows with monitoring period end dates from July 2020 to present, shifting the 6-month window forward one month at a time.
- Once a violation meets Category 1 criteria, it will not "downgrade" to a Category 2 in a subsequent 6-month window.
- Effluent violations within 6-month windows can fluctuate between a resolved and unresolved status with new data in subsequent 6-month windows.

Code Description  E1A Effluent – Magnitude Monthly Average  E1B Effluent – Chronic Monthly Average  E2C Effluent – Monthly Average  E2D Effluent – Magnitude Non-monthly Average  E2E Effluent – Chronic Non-monthly Average  E2F Effluent – Non-monthly Average  E2F Effluent – Minimum  E1H Effluent – Enforcement  M1 Category I – Manual		
E1B Effluent – Chronic Monthly Average  E2C Effluent – Monthly Average  E2D Effluent – Magnitude Non-monthly Average  E2E Effluent – Chronic Non-monthly Average  E2F Effluent – Non-monthly Average  E2G Effluent – Minimum  E1H Effluent – Enforcement	Code	Description
E2C Effluent – Monthly Average  E2D Effluent – Magnitude Non-monthly Average  E2E Effluent – Chronic Non-monthly Average  E2F Effluent – Non-monthly Average  E2G Effluent – Minimum  E1H Effluent – Enforcement	E1A	Effluent – Magnitude Monthly Average
E2D Effluent – Magnitude Non-monthly Average  E2E Effluent – Chronic Non-monthly Average  E2F Effluent – Non-monthly Average  E2G Effluent – Minimum  E1H Effluent – Enforcement	E1B	Effluent – Chronic Monthly Average
E2E Effluent – Chronic Non-monthly Average  E2F Effluent – Non-monthly Average  E2G Effluent – Minimum  E1H Effluent – Enforcement	E2C	Effluent – Monthly Average
E2F Effluent – Non-monthly Average  E2G Effluent – Minimum  E1H Effluent – Enforcement	E2D	Effluent – Magnitude Non-monthly Average
E2G Effluent – Minimum  E1H Effluent – Enforcement	E2E	Effluent – Chronic Non-monthly Average
E1H Effluent – Enforcement	E2F	Effluent – Non-monthly Average
	E2G	Effluent – Minimum
M1 Category I – Manual	E1H	Effluent – Enforcement
	M1	Category I – Manual

Code	Description
R2	Effluent – 3 Months Clean

## Moving 6-month Windows

		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9
	<b>DMR Value Type</b> Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code
	<b>Quantity 1</b> Monthly Average	Effluent Violation (64%) E1A	No Violation							
	<b>Quantity 2</b> Non-monthly Average									
	Concentration 1 Monthly Average	No Violation	No Violation	No Violation	Effluent Violation (40%) E1A	No Violation	No Violation			
	Concentration 2 Non-monthly Average									
	Concentration 3 Minimum									

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

Code	Description
R2	Effluent – 3 Months Clean

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code
Quantity 1  Monthly  Average	Effluent Violation (64%) E1A R2	No Violation							
Quantity 2 Non-monthly Average									
Concentration 1  Monthly  Average	No Violation	No Violation	No Violation	Effluent Violation (40%) E1A R2	No Violation	No Violation	No Violation		
Concentration 2  Non-monthly  Average									
Concentration 3 Minimum									

Code Description  E1A Effluent – Magnitude Monthly Average  E1B Effluent – Chronic Monthly Average  E2C Effluent – Monthly Average  E2D Effluent – Magnitude Non-monthly Average  E2E Effluent – Chronic Non-monthly Average  E2F Effluent – Non-monthly Average  E2G Effluent – Minimum  E1H Effluent – Enforcement  M1 Category I – Manual		
E1B Effluent – Chronic Monthly Average  E2C Effluent – Monthly Average  E2D Effluent – Magnitude Non-monthly Average  E2E Effluent – Chronic Non-monthly Average  E2F Effluent – Non-monthly Average  E2G Effluent – Minimum  E1H Effluent – Enforcement	Code	Description
E2C Effluent – Monthly Average  E2D Effluent – Magnitude Non-monthly Average  E2E Effluent – Chronic Non-monthly Average  E2F Effluent – Non-monthly Average  E2G Effluent – Minimum  E1H Effluent – Enforcement	E1A	Effluent – Magnitude Monthly Average
E2D Effluent – Magnitude Non-monthly Average  E2E Effluent – Chronic Non-monthly Average  E2F Effluent – Non-monthly Average  E2G Effluent – Minimum  E1H Effluent – Enforcement	E1B	Effluent – Chronic Monthly Average
E2E Effluent – Chronic Non-monthly Average  E2F Effluent – Non-monthly Average  E2G Effluent – Minimum  E1H Effluent – Enforcement	E2C	Effluent – Monthly Average
E2F Effluent – Non-monthly Average  E2G Effluent – Minimum  E1H Effluent – Enforcement	E2D	Effluent – Magnitude Non-monthly Average
E2G Effluent – Minimum  E1H Effluent – Enforcement	E2E	Effluent – Chronic Non-monthly Average
E1H Effluent – Enforcement	E2F	Effluent – Non-monthly Average
	E2G	Effluent – Minimum
M1 Category I – Manual	E1H	Effluent – Enforcement
	M1	Category I – Manual

# Code Description R2 Effluent – 3 Months Clean

## (R2) Effluent – 3 Months Clean: Example 7

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code
Quantity 1  Monthly  Average	Effluent Violation (64%) E1A	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	
	R2								
<b>Quantity 2</b> Non-monthly Average									
Concentration 1  Monthly  Average	No Violation	No Violation	No Violation	Effluent Violation (40%) E1A	No Violation	No Violation	No Violation	Effluent Violation (5%) E2C	
Concentration 2  Non-monthly  Average									
Concentration 3 Minimum									

Code	Description				
E1A	Effluent – Magnitude Monthly Average				
E1B	Effluent – Chronic Monthly Average				
E2C Effluent – Monthly Average					
E2D	Effluent – Magnitude Non-monthly Average				
E2E	Effluent – Chronic Non-monthly Average				
E2F	Effluent – Non-monthly Average				
E2G	Effluent – Minimum				
E1H	Effluent – Enforcement				
M1	Category I – Manual				

Code	Description
R2	Effluent – 3 Months Clean

		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9
ı	DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit Detection Code Resolution Code
	Quantity 1	Effluent Violation (64%)	No Violation							
	Monthly Average	E1A								
	Average	R2								
N	<b>Quantity 2</b> Ion-monthly Average									
	Concentration 1 Monthly Average	No Violation	No Violation	No Violation	Effluent Violation (40%) E1A	No Violation	No Violation	No Violation	Effluent Violation (5%) E2C	Effluent Violation (15%) E2C
	Concentration 2 Non-monthly Average									
	Concentration 3 Minimum									

# Effluent Violations by Quarter

Effluent exceedance violations will be included if it meets any of the following criteria:

- Violation end date is within the quarter (new violation)
- Violation has an unresolved status and the violation end date before the end of the quarter (ongoing violation)
- Violation has a resolved pending status and the violation end date is before the end of the quarter (resolved pending)
- Violation has a resolved status and a resolution date during the quarter (resolved)

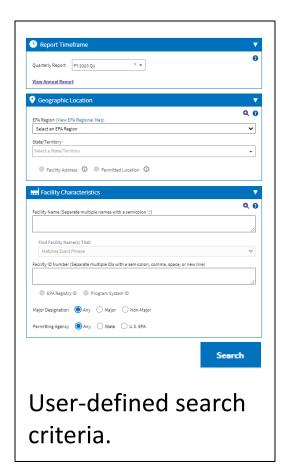
# Accessing the NNCR

# Accessing the NNCR

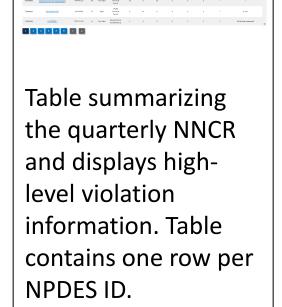
- The Quarterly NNCR is available on ECHO (echo.epa.gov) within the blue "Search Options" tab (bottom left corner)
  - Quarterly NNCR Search
  - NNCR Help Documentation
- NNCR Trainings
- NNCR Guide

# Quarterly NNCR Search Flow

1 Search Form



2 Summary Results



3
Detailed Report



Permit-level violation report that displays all violations for permits linked to a facility (FRS ID).

# Demonstration

# Next Steps

 If you have questions about the NNCR or have suggested recommendations for the workgroup to consider, please reach out to the <u>ECHO Help Desk</u>.



# Appendix

# Examples from REF\_PARAMETER

Parameter Code	neter Code Parameter Description			
50050	Flow, in conduit or thru treatment plant	-		
00095	Specific conductance	-		
00400	рН	-		
01045	Iron, total [as Fe]	1		
00610	Nitrogen, ammonia total [as N]	1		
00545	Solids, settleable	1		
01055	Manganese, total [as Mn]	2		
50060	Chlorine, total residual	2		
01042	Copper, total [as Cu]	2		

**Pollutant Groups** 

# Examples from REF\_STATISTICAL\_BASE

Statistical Base Code	Statistical Base Description	Monthly Average Flag
MK	Monthly Average	Α
DB	Daily Average	Α
3D	30 Day Geometric	Α
DD	Daily Maximum	N
WA	Weekly Average	N
MP	Monthly Total	N
MO	Monthly Minimum	-
ME	Minimum	-
DC	Daily Minimum	-

A = Monthly Average

N = Non-monthly Average

- = Minimum

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

## (E1A) Effluent – Magnitude Monthly Average: Example 2

	6-month Review Period						
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code				
Quantity 1 Monthly Average	Effluent Violation (50%)	No Violation	Effluent Violation (10%)	No Violation	No Violation	No Violation	
Quantity 2 Non-monthly Average	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	
Concentration 1  Monthly  Average	Effluent Violation (4%)	No Violation	Effluent Violation (40%) E1A	No Violation	Effluent Violation (2%)	No Violation	
Concentration 2 Non-monthly Average	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	
Concentration 3 Minimum	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

## (E1B) Effluent – Chronic Monthly Average: Example 2

	6-month Review Period					
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code					
Quantity 1	Effluent Violation (50%)	Effluent Violation (3%)	Effluent Violation (10%)	Effluent Violation (1%)	No Violation	No Violation
Monthly Average	E1A	E1B	E1B	E1B		
Quantity 2 Non-monthly Average	No Violation					
Concentration 1	Effluent Violation (4%)	No Violation	Effluent Violation (40%)	Effluent Violation (1%)	Effluent Violation (2%)	No Violation
Monthly Average	E1B		E1A	E1B	E1B	
Concentration 2 Non-monthly Average	No Violation					
Concentration 3 Minimum	No Violation					

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

# (E2C) Effluent – Monthly Average: Example 2

	6-month Review Period						
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code				
<b>Quantity 1</b> Monthly Average	No Violation	No Violation	No Violation	No Violation	Effluent Violation (300%)	No Violation	
Quantity 2 Non-monthly Average	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	
Concentration 1  Monthly  Average	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	
Concentration 2 Non-monthly Average	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	
Concentration 3 Minimum	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

# (E2C) Effluent – Monthly Average: Example 3

			6-month Review Period					
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	
DMR Value Limit Typ		Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code				
<b>Quantity</b> Monthly Average	У	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	
Quantity Non-mont Average	hly	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	
Concentrati Monthly Average	У	Effluent Violation (10%)	Effluent Violation (160%)	Effluent Violation (80%)	Effluent Violation (25%) E2C	Effluent Violation (25%)	No Violation	
Concentrati Non-mont Average	hly	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	
<b>Concentrati</b> Minimur		No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

## (E2D) Effluent – Magnitude Non-Monthly Average: Example 2

	6-month Review Period					
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code			
<b>Quantity 1</b> Monthly Average	Effluent Violation (6%)	Effluent Violation (1%)	No Violation	No Violation	No Violation	Effluent Violation (35%)
Quantity 2 Non-monthly Average	Effluent Violation (4%)	Effluent Violation (2%)	No Violation	Effluent Violation (2%)	No Violation	Effluent Violation (46%) E2D
Concentration 1  Monthly  Average	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation
Concentration 2 Non-monthly Average	Effluent Violation (61%)	No Violation	Effluent Violation (8%)	No Violation	No Violation	Effluent Violation (10%)
Concentration 3 Minimum	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

## (E2E) Effluent – Chronic Non-Monthly Average: Example 2

	6-month Review Period						
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code						
Quantity 1	Effluent Violation (50%)	Effluent Violation (8%)	Effluent Violation (10%)	No Violation	No Violation	No Violation	
Monthly Average	E2C	E2C	E2C				
Quantity 2	Effluent Violation (22%)	Effluent Violation (2%)	Effluent Violation (20%)	Effluent Violation (1%)	Effluent Violation (1%)	Effluent Violation (2%)	
Non-monthly Average	E2E	E2E	E2E	E2F	E2F	E2E	
Concentration 1  Monthly  Average	No Violation	Effluent Violation (1%)					
Concentration 2	Effluent Violation (25%)	Effluent Violation (2%)	Effluent Violation (20%)	Effluent Violation (1%)	Effluent Violation (6%)	Effluent Violation (10%)	
Non-monthly Average	E2E	E2E	E2E	E2F	E2F	E2E	
Concentration 3 Minimum	No Violation						

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

When a parameter has both a monthly average and non-monthly average limit, the violations are only detected for non-monthly TRC and chronic if the monthly average was also violated to some degree during the same monitoring period.

### (E2F) Effluent – Non-Monthly Average: Example 2

		6-month Review Period					
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code						
<b>Quantity 1</b> Monthly Average	Effluent Violation (39%)	No Violation					
Quantity 2 Non-monthly Average	No Violation	No Violation	No Violation	Effluent Violation (1%)	Effluent Violation (1%)	No Violation	
Concentration 1 Monthly Average	No Violation	No Violation	No Violation	No Violation	Effluent Violation (2%)	No Violation	
Concentration 2 Non-monthly Average	No Violation	No Violation	No Violation	No Violation	Effluent Violation (25%) E2F	Effluent Violation (2%)	
Concentration 3 Minimum	No Violation						

Code	Description
E1A	Effluent – Magnitude Monthly Average
E1B	Effluent – Chronic Monthly Average
E2C	Effluent – Monthly Average
E2D	Effluent – Magnitude Non-monthly Average
E2E	Effluent – Chronic Non-monthly Average
E2F	Effluent – Non-monthly Average
E2G	Effluent – Minimum
E1H	Effluent – Enforcement
M1	Category I – Manual

# (E1H) Effluent – Enforcement: Example 2

	6-month Review Period					
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code					
<b>Quantity 1</b> Monthly Average	Effluent Violation (5%)	No Violation	No Violation	Effluent Violation (24%) E1H	No Violation	No Violation
Quantity 2 Non-monthly Average	No Violation					
Concentration 1  Monthly  Average	No Violation	Effluent Violation (8%)	No Violation	No Violation	No Violation	No Violation
Concentration 2 Non-monthly Average	No Violation					
Concentration 3 Minimum	No Violation					

Code	Description
R2	Effluent – 3 Months Clean

		6-month Review Period					
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	
<b>DMR Value Type</b> Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	
Quantity 1	Effluent Violation (50%)	Effluent Violation (3%)	Effluent Violation (10%)	No Violation	No Violation	No Violation	
Monthly	E1A	E2C	E2C				
Average							
Quantity 2 Non-monthly Average	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	
Concentration 1  Monthly  Average	No Violation	No Violation	Effluent Violation (40%) E1A	No Violation	NODI C	No Violation	
Concentration 2 Non-monthly Average	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	
Concentration 3 Minimum	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	

Code	Description
R2	Effluent – 3 Months Clean

		6-month Review Period					
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code						
Quantity 1	Effluent Violation (50%)	Effluent Violation (3%)	Effluent Violation (10%)	No Violation	Overdue DMR (D90)	No Violation	
Monthly	E1A	E2C	E2C				
Average							
Quantity 2 Non-monthly Average	No Violation						
Concentration 1  Monthly  Average	No Violation	No Violation	Effluent Violation (40%) E1A	No Violation	No Violation	No Violation	
Concentration 2 Non-monthly Average	No Violation						
Concentration 3 Minimum	No Violation						

Сс	ode	Description
F	₹2	Effluent – 3 Months Clean

		6-month Review Period					
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	
<b>DMR Value Type</b> Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code				
Quantity 1	Effluent Violation (50%)	Effluent Violation (3%)	Effluent Violation (10%)	No Violation	No Violation	No Violation	
Monthly	E1A	E1B	E1B				
Average							
Quantity 2 Non-monthly Average	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	
Concentration 1  Monthly  Average	No Violation	No Violation	Effluent Violation (40%) E1A	No Violation	Effluent Violation (1%)	No Violation	
Concentration 2 Non-monthly Average	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	
Concentration 3 Minimum	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	

Code	Description
R2	Effluent – 3 Months Clean

	6-month Review Period						
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	
DMR Value Type Limit Type	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code	Violation (% Over Limit) Detection Code Resolution Code				
Quantity 1 Monthly Average	Effluent Violation (50%)	Effluent Violation (40%)	No Violation				
	E1A	E1A		No monitoring requirements for months 4-6			
Quantity 2 Non-monthly Average	No Violation	No Violation	No Violation				
Concentration 1  Monthly  Average	No Violation	No Violation	No Violation				
Concentration 2 Non-monthly Average	No Violation	No Violation	No Violation				
Concentration 3 Minimum	No Violation	No Violation	No Violation				