

How To Calculate Significant Noncompliance

23rd Annual New England Pretreatment
Coordinators Workshop

October 28, 2021

Compliance Oversight Principles

- 1. Create standard procedures and establish the measures to grade the success of your program.
- 2. Maintain a complete and accurate inventory of IUs.
- 3. Collect and document all appropriate compliance data.

Compliance Oversight Principles

- 4. Give structure to your field evaluation.
- 5. Screen/analyze incoming data for compliance.

Compliance Oversight Principles

- 6. Evaluate appropriate enforcement response.
- 7. Take enforcement and follow-up on corrective actions.

Significant Non-Compliance (SNC)

- See: 40 CFR 403.8(f)(2)(viii).
- You're federally required to:
 - Identify all instances of SNC.
 - Public Notice all IUs in SNC at least annually.
 - Issue appropriate enforcement/penalty for SNC.
 - Report SNC & actions to the Approval Authority.

1. Discharge Limits

"Chronic violation" SNC =

66% or more of all the measurements taken for the same pollutant parameter during a 6-month period exceed a numeric Pretreatment Standard or Requirement.

Note: "measurements" includes both the SIU self-monitoring and your monitoring.

1. <u>Discharge Limits</u>

"Technical Review Criteria (TRC) violation" SNC =

33% or more of all the measurements taken for the same pollutant parameter during a 6-month period equal or exceed a numeric limitation multiplied by a TRC factor.

1. <u>Discharge Limits</u>

Technical Review Criteria (TRC) Factors:

TRC factor = 1.4 for BOD, TSS, and FOG / O&G

TRC factor = 1.2 for any other parameter except pH

Note: pH limits are excluded from TRC, and are only evaluated for Chronic SNC.

1. <u>Discharge Limits</u>

- Chronic violation SNC (SIUs only)
- TRC violation SNC (SIUs only)
- "Other violation" SNC =

Any IU violates a standard or requirement (daily max, average, instantaneous, or narrative) that you find has caused interference with your operations and consequently a NPDES permit violation.

1. <u>Discharge Limits</u>

EPA prefers you use a "Rolling Period" to evaluate SNC for discharge limits:

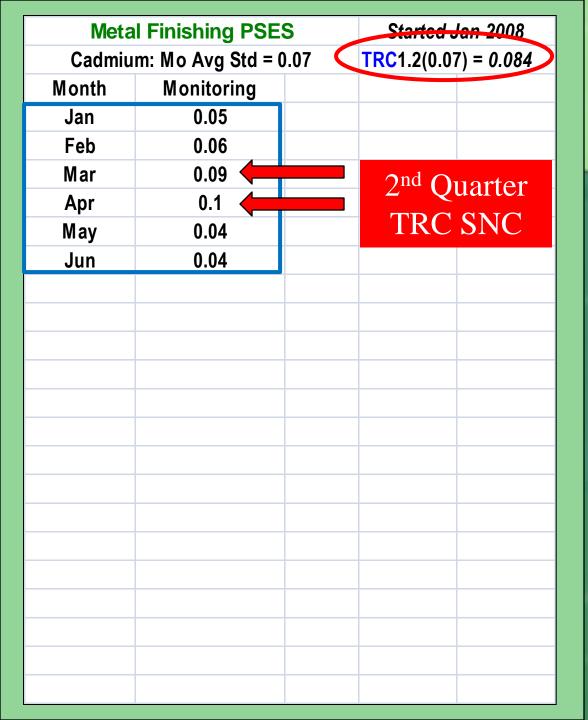
- Evaluate SNC at least quarterly based on data from current and previous quarter.
- Ensures SNC is identified timely
- Ensures SNC is addressed timely

Metal Finishing PSES Started Jan 2008 Cadmium: Mo Avg Std = 0.07 TRC1.2(0.07) = 0.084 Month Monitoring Jan 0.05 Feb 0.06 Mar 0.09 Apr 0.1	
Month Monitoring Jan 0.05 Feb 0.06 Mar 0.09	
Jan 0.05 Feb 0.06 Mar 0.09	
Feb 0.06 Mar 0.09	l l
Mar 0.09	
Apr 0.1	
7	
May 0.04	
Jun 0.04	

Rolling Quarters

It's July 1st...

Time to Calculate SNC!



Rolling Quarters

2/6 = 33% equal/exceed TRC limit



TRC violation

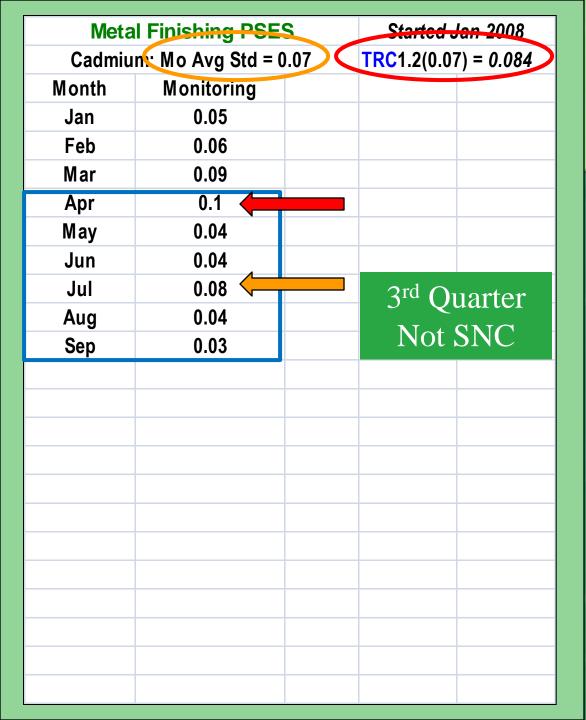
SNC

			1	1
	Metal Finishing PSES		Started 3	lan 2008
Cadmiu	Cadmium: Mo Avg Std = 0.07		TRC1.2(0.07) = 0.084	
Month	Monitoring			
Jan	0.05			
Feb	0.06			
Mar	0.09			
Apr	0.1			
May	0.04			
Jun	0.04			
Jul	0.08			
Aug	0.04			
Sep	0.03			

Rolling Quarters

It's Oct 1st ...

Time to Calculate SNC!



Rolling Quarters

1 violation of standard

1 TRC violation

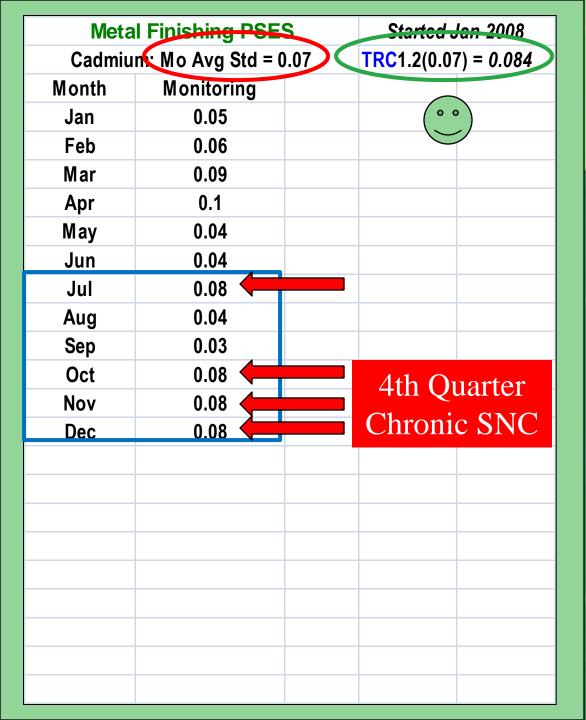


Metal Finishing PSES Started Jan 2008				
Cadmiu	Cadmium: Mo Avg Std = 0.07		TRC1.2(0.07	7) = 0.084
Month	Monitoring			
Jan	0.05			
Feb	0.06			
Mar	0.09			
Apr	0.1			
May	0.04			
Jun	0.04			
Jul	0.08			
Aug	0.04			
Sep	0.03			
Oct	0.08			
Nov	0.08			
Dec	0.08			

Rolling Quarters

It's Jan 2nd...

Time to Calculate SNC!



Rolling Quarters

4/6 = 67% ≥ 66% equal/exceed limit



			04 4 1 1	
	I Finishing PSE		Started J	
Cadmiu	m: Mo Avg Std = 0	0.07	TRC1.2(0.07	') = 0.084
Month	Monitoring			
Jan	0.05			
Feb	0.06			
Mar	0.09		2 nd Qu	12rter
Apr	0.1			N N
May	0.04		TRC	SNC /
Jun	0.04			
Jul	0.08		3 rd Qı	ıarter
Aug	0.04		_	
Sep	0.03		Not S	SNC
Oct	0.08		4th Qu	ıarter
Nov	0.08			\
Dec	0.08		Chronic	c SNC

Rolling Quarters

SNC During

Last

12

Months?



Metal Finishing PSES Started Jan 2008				
Cadmiu	Cadmium: Mo Avg Std = 0.07		TRC1.2(0.07) = 0.084	
Month	Monitoring			
Jan	0.05			
Feb	0.06			
Mar	0.09			
Apr	0.1			
May	0.04			
Jun	0.04			
Jul	80.0			
Aug	0.04			
Sep	0.03			
Oct	0.08			
Nov	0.08			
Dec	0.08			
Jan	0.02			
Feb	0.02			
Mar	0.02			

Rolling Quarters

It's Apr 1st ...

Time to Calculate SNC!

Meta	l Finishing PSE	Started Jan 2008
Cadmiu	m: Mo Avg Std = 0	$1.07 \qquad \text{TRC} 1.2(0.07) = 0.084$
Month	Monitoring	
Jan	0.05	
Feb	0.06	
Mar	0.09	
Apr	0.1	
May	0.04	
Jun	0.04	
Jul	0.08	
Aug	0.04	
Sep	0.03	
Oct	0.08	
Nov	0.08	
Dec	0.08	
Jan	0.02	1st Quarter
Feb	0.02	
Mar	0.02	Not SNC

Rolling Quarters

$$3/6 = 50\%$$

$$\leq 66\%$$



Not SNC

Meta	l Finishing PSE	S	Started .	Jan 2008
Cadmiu	Cadmium: Mo Avg Std = 0.07		TRC1.2(0.0	7) = 0.084
Month	Monitoring			
Jan	0.05			
Feb	0.06			
Mar	0.09			
Apr	0.1			
May	0.04			
Jun	0.04			
Jul	0.08			
Aug	0.04			
Sep	0.03			
Oct	0.08			
Nov	0.08			
Dec	0.08			
Jan	0.02			
Feb	0.02			
Mar	0.02			
Apr	0.12		1	
May	0.11			
Jun	0.02			

Rolling Quarters

It's July 1st...

Time to Calculate SNC!

Meta	Metal Finishing PSES Started Jan 2008				
Cadmiu	m: Mo Avg Std =	0.07	TRC1.2(0.07)	= 0.084	
Month	Monitoring				
Jan	0.05				
Feb	0.06				
Mar	0.09				
Apr	0.1				
May	0.04				
Jun	0.04				
Jul	0.08				
Aug	0.04				
Sep	0.03				
Oct	0.08				
Nov	0.08				
Dec	0.08				
Jan	0.02				
Feb	0.02				
Mar	0.02				
Apr	0.12		and O	oset ose	
May	0.11		2 nd Qu		
Jun	0.02		TRC	SNC	

Rolling Quarters

2/6 = 33% equal/exceed TRC limit



Metal Finishing PSES Started Jan 2008				
Cadmiu	Cadmium: Mo Avg Std = 0.07		TRC1.2(0.07)	= 0.084
Month	Monitoring			
Jan	0.05			
Feb	0.06			
Mar	0.09			
Apr	0.1			
May	0.04			
Jun	0.04			
Jul	80.0			
Aug	0.04			
Sep	0.03			
Oct	0.08			
Nov	0.08			
Dec	0.08			
Jan	0.02			
Feb	0.02			
Mar	0.02			
Apr	0.12		•	
May	0.11			
Jun	0.02			
Jul	0.09			
Aug	0.03			
Sep	0.03			

Rolling Quarters

It's Oct 1st ...

Time to Calculate SNC!

Meta	Metal Finishing PSES Started Jan 2008				
Cadmiu	m: Mo Avg Std =	0.07	TRC1.2(0.07) = 0.084	4	
Month	Monitoring				
Jan	0.05				
Feb	0.06				
Mar	0.09				
Apr	0.1				
May	0.04				
Jun	0.04				
Jul	0.08				
Aug	0.04				
Sep	0.03				
Oct	0.08				
Nov	0.08				
Dec	0.08				
Jan	0.02				
Feb	0.02				
Mar	0.02				
Apr	0.12		2rd Overton		
May	0.11		3 rd Quarter		
Jun	0.02		TRC SNC		
Jul	0.09				
Aug	0.03				
Sep	0.03				

Rolling Quarters

3/6 = 50% equal/exceed TRC limit



So I've evaluated the data in the SIU monitoring reports for Chronic and TRC.

No SNC this quarter, I'm done!

NOPE... NOT DONE!

There are FIVE other things to consider for SNC....40 CFR 403.8(f)(2)(viii)(D)

1. Any IU discharge which has endangered human health, welfare, or the environment and/or resulted in a cease-discharge order.

- There are FIVE other things to consider for SNC....40 CFR 403.8(f)(2)(viii)(E)
- 2. SIU that is 90 days past due for meeting a compliance deadline you established.
 - Construction start/stop deadlines
 - Final compliance dates in a permit
 - Final compliance dates in an order

- There are FIVE other things to consider for SNC....40 CFR 403.8(f)(2)(viii)(F)
- 3. SIU that is 45 days past due any report you require [in some States 30 days].

 Examples...
 - Baseline Monitoring Reports
 - Compliance reports
 - Self-monitoring reports
 - CIU 90-day compliance reports

- There are FIVE other things to consider for SNC....40 CFR 403.8(f)(2)(viii)(G)
- 4. SIU that failed to accurately report to you non-compliance of any kind.

Examples...

- Unreported slug discharge
- Errant SIU reports which later show violations
- Unreported violation of narrative permit condition

- There are FIVE other things to consider for SNC....40 CFR 403.8(f)(2)(viii)(H)
- 5. Any IU whom you determine has a violation which adversely effects your ability to operate or implement your pretreatment program.

Examples...

- Reports that are late
- Repetitive violations
- Violations of best management practices in permit/SUO

Publishing SNC

- Must publish IUs in SNC at least once annually.
- Must publish in newspaper(s) of general circulation that provides meaningful public notice within the jurisdiction served by the POTW.

Publishing SNC

Some Public Notices are better than others...

- Identify the parameters/requirements violated
- Identify the duration of the violation
- Identify the enforcement action you've taken
- Identify if the IU is on a compliance schedule
- Identify if the IU has returned to compliance

CHROME BUMPERS, INC 123 Main Street, Madison, USA 80881

Facility is in Significant Noncompliance with City of Madison wastewater pretreatment standards and requirements.

Violations: Exceeded cyanide and total chromium 4-day average limits based on four samples from 1/5/09 to 2/4/09, and exceeded the daily max lead limit on 1/24/09.

Actions: After two Notice of Violation letters, Chrome Bumpers has not returned to compliance. City of Madison has assessed \$20,000 penalty order for chronic violation of standards and potential damage to health, stream aquatic life, and inhibition of the POTW.

Schedule: No agreement has yet been reached with Chrome Bumpers as to when consistent compliance will be obtained.

Questions & Hopefully..... Some Answers

Email: connors.sarah@epa.gov