



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.

Identifying SNC

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.

Identifying SNC

1. Discharge Limits

- “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.

Identifying SNC

1. Discharge Limits

■ 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.

Identifying SNC

1. Discharge Limits

- 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.

Identifying SNC

1. Discharge Limits

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		
May	0.04		
Jun	0.04		

Identifying SNC: Rolling Quarters

It's July 1st...

**Time to
Calculate
SNC !**

Metal Finishing PSES

Cadmium: Mo Avg Std = 0.07

~~Started Jan 2008~~

$$\text{TRC} 1.2(0.07) = 0.084$$

Month	Monitoring	
Jan	0.05	
Feb	0.06	
Mar	0.09	←
Apr	0.1	←
May	0.04	
Jun	0.04	

2nd Quarter TRC SNC

Identifying SNC: Rolling Quarters



2/6 = 33%
equal/exceed
TRC limit
↓
TRC
violation
SNC

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		
May	0.04		
Jun	0.04		
Jul	0.08		
Aug	0.04		
Sep	0.03		

Identifying SNC:

Rolling Quarters

It's Oct 1st ...





Time to
Calculate
SNC !

Metal Finishing PSES		Started Jan 2008	
Cadmium: Mo Avg Std = 0.07		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		

3rd Quarter
Not SNC

Identifying SNC: Rolling Quarters



Metal Finishing PSES		<i>Started Jan 2008</i>	
Cadmium: Mo Avg Std = 0.07		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		

Identifying SNC: Rolling Quarters

It's Jan 2nd ...








**Time to
Calculate
SNC !**

Metal Finishing PSES

Started Jan 2008

Cadmium: Mo Avg Std = 0.07

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	

4th Quarter
Chronic SNC

Identifying SNC: Rolling Quarters

$4/6 = 67\%$
 $\geq 66\%$
equal/exceed
limit
↓
Chronic
SNC

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	
May	0.04	
Jun	0.04	
Jul	0.08	
Aug	0.04	
Sep	0.03	
Oct	0.08	
Nov	0.08	
Dec	0.08	

2nd Quarter
TRC SNC

3rd Quarter
Not SNC


4th Quarter
Chronic SNC

Identifying




SNC:

Rolling Quarters

**SNC During
Last
12
Months?**




Publish

Metal Finishing PSES		<i>Started Jan 2008</i>	
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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		

Identifying SNC: Rolling Quarters

It's Apr 1st ...

**Time to
Calculate
SNC !**

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	
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	



1st Quarter
Not SNC



Identifying SNC: Rolling Quarters

$3/6 = 50\%$

$\leq 66\%$

↓

Not SNC

Metal Finishing PSES		<i>Started Jan 2008</i>	
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Month	Monitoring		
Jan	0.05		
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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		
May	0.11		
Jun	0.02		


Identifying SNC: Rolling Quarters




It's July 1st...

**Time to
Calculate
SNC !**

Metal Finishing PSES		<i>Started Jan 2008</i>	
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Month	Monitoring		
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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	←←	2nd Quarter TRC SNC
May	0.11		
Jun	0.02		

Identifying SNC: Rolling Quarters

2/6 = 33%
**equal/exceed
TRC limit**

**TRC
violation**
SNC

Metal Finishing PSES		<i>Started Jan 2008</i>	
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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		

Identifying SNC: Rolling Quarters

It's Oct 1st ...

**Time to
Calculate
SNC !**

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Sep	0.03		
Oct	0.08		
Nov	0.08		
Dec	0.08		
Jan	0.02		
Feb	0.02		
Mar	0.02		
Apr	0.12	←	3rd Quarter TRC SNC
May	0.11	←	
Jun	0.02		
Jul	0.09	←	
Aug	0.03		
Sep	0.03		

Identifying SNC: Rolling Quarters

3/6 = 50%
equal/exceed
TRC limit



**TRC
violation
SNC**

Identifying SNC

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 !

Identifying SNC

- 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.

Identifying SNC

- 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

Identifying SNC

- 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

Identifying SNC

- 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

Identifying SNC

- 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

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