# TNI PT Program Executive Committee Meeting Summary

# December 18, 2023

# 1. Roll call, approval of minutes and overview:

Chair, Stacie Crandall, called the TNI PT Program Executive Committee (PTPEC) meeting to order at 11:04am Eastern on December 18, 2023. Attendance is recorded in Attachment A – there were seven (7) voting members present. Associate members present: Charles Faulk, Craig Huff, Amy DeMarco, and Michella Karapondo. Guests: Keith McCroan (until 11:29pm Eastern) and Bob Shannon.

The November minutes were reviewed. A motion was made by Tim to approve the November 29, 2023 minutes as written with 2 editorial changes: Use "Amy" instead of "she" and "be" instead of "by". The motion was seconded by Rachel and unanimously approved.

# 2. Complaints #48 and #49

Stacie is looking for a brief response and would like to stay away from adding training information. She copied the appropriate section out of SOP 4-101 into the response for both complaints - see Attachment C.

The NELAP AC does not approve the table, but they did reviewed it. PTPEC approves it, then it goes to the NELAP AC and stakeholders and then we set the effective date if there are no comments.

Bob Shannon and Keith McCroan agreed with the response.

A motion was made by Tim to approve the response and send it to the two complainants. The motion was seconded by Susan and unanimously approved.

Ilona will work on getting the response back to complainants.

3. SOP 4-101 - Recommendation, Evaluation, and Calculation of Acceptance Criteria and Applicable Concentration Ranges for Proficiency Tests

Stacie thanked the PTP SOP Subcommittee for all their work on this SOP: Susan, Jack , Reggie Morgan, Jennifer Best, and Prasanth. Eric Smith started the work on this SOP.

The SOP was reviewed by the Committee. Eric made a motion to approve SOP 4-101 and the motion was seconded by Carl.

Since Jack Denby is out on leave, a super majority is 7/10.

A roll call vote was taken: Stacie – For Susan – For Carl – For Eric – For Rachel – For Patrick – For Tim – For

The motion passed and Ilona will forward the SOP to the Policy Committee for review and finalization.

# 4. PFAS limits.

Stacie and Ilona met with Jerry after our last meeting, and he noted that the PTPEC can approve the PFAS DW limits and should not need to wait for the EPA rule to be published. The data generated by the Chemistry FoPT Subcommittee supported limits of 60-140%. EPA is looking at 70-130%.

The EPA Rule will likely be finalized before the implementation date, so if there is an issue the Committee can discuss it and decide what to do.

There was a question about footnotes. The Subcommittee decided not to add any footnotes because the initially recommended footnotes are method driven.

The Subcommittee has two suggestions that they are bringing forward for the PTPEC's consideration as well. These are language recommendations to the PT providers when instructing the laboratories for PFAS PTs. They are not footnotes.

<u>Suggestion #1 language:</u> When analytes consist of a mixture of both linear and branched isomers, laboratories should report the "summed or total" concentration of the linear and branched isomers as a single result.

<u>Suggestion #2 language for design criteria:</u> The starting materials are the metrologically traceable conjugate base salt forms for the analytes, with the Assigned Values stoichiometrically calculated to the corresponding acid forms for each PFAS analyte.

The PTPEC expressed concerns that the suggestions should actually be footnotes in the table and not suggestions.

Suggestion #1 is worded to labs, so if added to the FoPT table it would have to be reworded. The PT should be composed of a mixture of both branched and linear isomers.

Tim commented that if it was originally designed with linear only, and a particular chemical became available after the study, then the supplemental PT would no longer be compliant.

Suggestion #2 is Carl's language as submitted to the PTPEC.

If Suggestion #1 were put in instructions, a new provider would not have the information. A lab footnote is not acceptable to have in the FoPT table.

Suggestion #1 will not be further communicated. Method requirements should not be on the FoPT table. Stacie commented you can't make suggestions. It needs to be a requirement in order to keep consistency between providers. There was general agreement.

Tim has an issue with Suggestion #2. Over 90% of his inventory would not meet that suggestion. As new chemicals are available, is his inventory going to be obsolete?

What is the time frame for PT Providers to switch. The chemical could become available after the opening of a study.

Formulation wouldn't be compliant, but limits wouldn't change.

The PTPEC is looking at the recommendation from the Chemistry FoPT Subcommittee without the language suggestions. Only the table recommendation.

A motion was made by Tim to approve the update to the Drinking Water table to include PFAS limits for 29 analytes as recommended by the Chemistry FoPT Subcommittee and provided with the agenda to this meeting. The motion was seconded by Eric. There was not further motion.

Since Jack Denby is out on leave, a super majority is 7/10.

A roll call vote was taken: Stacie – For Susan – For Carl – For Eric – For Rachel – For Patrick – For Tim – For

The motion passed. Stacie will the FoPT table to the NELAP AC and PT Providers for comment.

5. Forum in Columbus, Ohio

Stacie and Ilona will work on the Accomplishment and Goals slides to present during the opening session of the Forum. They will meet during the first week of January.

Ilona reviewed the Action Table to help prepare these slides.

Stacie, Susan and Ilona will be attending the Forum.

6. Subcommittee Updates

# Chemistry FoPT Subcommittee

Amy reported that the Subcommittee will be working on reviewing limits on the DW FoPT table.

WET FoPT Subcommittee No report.

# PTP SOP Subcommittee

Susan reported there is nothing new. The last minutes will be finalized and then the Subcommittee will be on hold until a new SOP needs to be developed or reviewed.

# 7. New Business

None.

8. Action Items

The action items can be found in Attachment E. Attachment B includes a list of reminders.

# 9. Next Meeting

The next meeting will be the Forum in Columbus, OH (1/22/24 - 3:30-5pm Eastern) and the next teleconference will be on February 28, 2024, at 11:00am Eastern. (Addition: The February meeting was canceled due to lack of quorum. Next meeting will be March 27, 2024.)

The meeting was adjourned at 12:30 pm Eastern.

# Attachment A Participants TNI Proficiency Testing Program Executive Committee

Members	Rep	Affiliation	Contact Information
Stacie Crandall (2025*) (Chair) <b>Present</b>	Lab	HRSD	scrandall@hrsd.com
Ilona Taunton, Program Administrator <b>Present</b>		TNI	tauntoni@msn.com
Susan Jackson (2025*) (Vice-Chair) <b>Present</b>	Lab	South Carolina DHEC	jacksosb@dhec.sc.gov
Carl Kircher (2024) Present – phone	AB	Florida Department of Health	Carl.Kircher@flhealth.gov
Andy Valkenburg (2024)	Other	QASE Inc.	cvalkenbur@aol.com
Tim Miller (2024*) Present.	Other	Phenova	timm@phenova.com
Eric Smith (2024*) for <b>Present.</b>	Other		eric.smith72@comcast.net
Jennifer Best (2025*) Absent	Other	USEPA	karapondo.michella@epa.gov
Jack Denby (2025*) <b>On Leave</b>	Other	HRSD	jdenby@hrsd.com
Rachel Ellis (2025)	AB	New Jersey DEP	Rachel.ellis@dep.nj.gov
Patrick Selig (2024*)	AB	ANAB	pselig@anab.org
Prasanth Ramakrishnan (2024*) Absent	AB	ISA	pramakrishnan@iasonline.org

# Attachment B

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	Item	Meeting Reference	Comments
7	Add the Field PT Subcommittee to the limit update SOP during its next update.	3/4/10	In Progress
11	Evaluate how labs are accredited for analytes that co-elute.	5-19-11	See meeting reference for details.
13	Charter needs to be reviewed/updated in November.	Ongoing	
18	Shawn noted that PTPEC should have some specific measurements. This should be passed along to the PTP SOP Subcommittee. Nicole noted that we need to determine which items to measure.	6-29-17	To be added to 2021 goals.
19	Review possible issues surrounding one vendor for Radiochemistry PTs.	3/24/23	

# **Backburner / Reminders – TNI PT Executive Committee**

The TNI Proficiency Testing Program Executive Committee (PTPEC) reviews and updates Fields of Proficiency Testing (FOPTs) using SOP 4-101: "Recommendation, Evaluation, and Calculation of Acceptance Criteria and Applicable Concentration Ranges for Proficiency Tests" which can be found on the TNI website, and includes procedures specific for Radiochemistry in Section 8.0. Please make sure to reference the following information to the Drinking Water FoPT Table:

# 8.0 Additional Procedures for Radiochemistry FoPTs

- 8.1 The dataset evaluation procedures in Sections 6.0 and 7.0 above are based on evaluations of historical PT data, with historically documented laboratory participant means, standard deviations, and biases. Alternatively, PT datasets may be evaluated in terms of data quality objectives for the FoPT analytes in regulatory compliance programs or customer requirements. Such evaluations may ignore any biases between Assigned Value and Participant Means. Standard deviations as fixed limits may also be set by regulation or by programmatic monitoring objectives.
- 8.2 As an example, the following procedure has been used for Radiochemistry FoPTs:

8.2.1 Any bias between PM and AV was not considered in the PT dataset evaluations. Effectively, the coefficient a was set a-priori to 1.0000, and the b coefficient is 0.0000.

8.2.2 For a radioactive analyte, calculate the acceptance limits as  $T \pm 2 \times SD$ , where *T* denotes the assigned value (accepted true value) and *SD* denotes the acceptable standard deviation. The acceptable standard deviation *SD* is a linear function of *T*: SD = c\*T + d, where *c* and *d* are parameters calculated for particular analytes and matrices as described below.

8.2.3 In general, simultaneous determination of *c* and *d* is based on uncertainty requirements at two widely spaced analyte concentrations, denoted here by *L* and *H*, for "low" and "high", respectively. Let  $\sigma_L$  denote the required uncertainty at the low level *L*, and let  $\varphi_H$  denote the required *relative*uncertainty at the high level *H*. The high level *H* may be infinite, in which case  $\varphi_H$  (or  $\varphi_{\infty}$ ) is the theoretical best-case relative uncertainty at the high concentrations where radioactive counting uncertainty is minimized.

8.2.4 The uncertainty requirements must be such that  $\varphi_H \times L < \sigma_L < \varphi_H \times H$ . If these inequalities are not satisfied, the requirements are inconsistent and must be revised.

8.2.5 For radiochemical analytes in drinking water, the low level *L* equals the required detection limit (*DL*) published in 40 CFR 141.25 (c), Tables B and C. The required standard deviation at *L* is  $\sigma_L = DL / 1.96$ , where DL is the detection limit defined in 40 CFR 141.25. The high level *H* is infinite. The required relative standard deviation  $\varphi_H$  is obtained from the acceptance limits for laboratory fortified blanks (LFBs) described in the Section 7.7.3 of Chapter 6 in the EPA *Manual for the Certification of Laboratories Analyzing Drinking Water, Criteria and Procedures, Quality Assurance, Fifth Edition* [EPA 815-R-05-004, January 2005]. The value of  $\varphi_H$  is equal to one-half the LFB relative tolerance (since PT acceptance limits are based on 2\*SD for the Drinking Water

matrix). Table 1 below summarizes these values for several Safe Drinking Water Act (SDWA) test parameters.

Parameter	L	$\sigma_L$	$arphi_{H}$
Gross Alpha	3.0 pCi/L	1.5 pCi/L	10%
Gross Beta	4.0 pCi/L	2.0 pCi/L	10%
Ra-226	1.0 pCi/L	0.51 pCi/L	5%
Ra-228	1.0 pCi/L	0.51 pCi/L	10%
U (mass or activity)	1.0 µg/L	0.51 µg/L	5%
H-3	1,000 pCi/L	510 pCi/L	5%
Sr-90	2.0 pCi/L	1.0 pCi/L	5%
Sr-89	10 pCi/L	5.1 pCi/L	5%
I-131	1.0 pCi/L	0.51 pCi/L	5%
Cs-134	10 pCi/L	5.1 pCi/L	5%
All others	See Sec. 8.2.6,		5%
	below		

Table 1: Parameters for Several SDWA Test Parameters

8.2.6 For other analytes and matrices, *L*, *H*,  $\sigma_L$ , and  $\varphi_H$  may be determined by other means. For example, if there is a required minimum detectable concentration (MDC), let *L* be the MDC and  $\sigma_L = L/3.29$ . If there is a required minimum quantifiable concentration (MQC), let *H* be the MQC and  $\varphi_H = 0.1$ .

8.2.7 If *H* is infinite, set  $c = \varphi_{H}$ . If *H* is finite, calculate instead

$$c = \frac{\varphi_H H - \sigma_L}{H - L}$$

In either case, set  $d = \sigma_L - c \cdot L$ .

8.2.8 Confirm that both *c* and *d* have positive values before using them in the equation in Section 8.2.2."

The current FoPT table was approved by the PTPEC and reviewed by the NELAP Accreditation Council before implementation. The changes to this table have resulted in changes to acceptance limits determination calculations and are achievable within approved methods.

For additional information regarding failure rates of this PT study or for other study specific questions, please work with your PT Provider. In addition, it is recommended you sign up for alerts to changes on FoPT tables on the TNI website to ensure your lab is current regarding changes in acceptance limitcalculations.

# Attachment D - PFAS DW FoPTs



#### TNI PT for Accreditation Fields of Proficiency Testing with PTRLs Drinking Water Effective: TBD

Blue = New Analyte Magenta = Changes Acceptance Criteria<sup>3,4,5,6</sup> Matrix EPA TNI Analyte<sup>2</sup> Conc Range TNI PTRL<sup>7</sup> CAS d Analyte Analyte а b С Code Number Code Microbiology CFU/100 mL CFU/100 mL Total Coliform<sup>8,9,10</sup> **Drinking Water** 0254 2500 NA Nine out of ten correct with no false negatives Not Applicable Fecal Coliform<sup>8,9,10</sup> Drinking Water 0255 2530 NA Nine out of ten correct with no false negatives Not Applicable Drinking Water 2525 NA E.coli<sup>8,</sup> Nine out of ten correct with no false negatives Not Applicable CFU (MPN)/mL CFU (MPN)/mL Drinking Water 0258 2555 NA Heterotrophic Plate Count (MF, PP)<sup>11</sup> 5 to 500 Log transform Mean ± 2 SD 2 Heterotrophic Plate Count (MPN)<sup>12</sup> **Drinking Water** 0258 2555 NA 5 to 500 Log transform Mean ± 2 SD 2 CFU (MPN)/100 mL CFU (MPN)/100 mL E.coli (MF)<sup>1</sup> **Drinking Water** 2525 NA 20 to 200 Log transform Mean ± 2 SD 2 Fecal Coliform (MF) **Drinking Water** 0255 2530 NA 20 to 200 Log transform Mean ± 2 SD 2 Total Coliform (MF)<sup>1</sup> **Drinking Water** 0254 2500 NA 20 to 200 Log transform Mean ± 2 SD 2 2525 NA E.coli (MPN-Multiple Tube) 12 **Drinking Water** 20 to 200 Log transform Mean ± 2 SD 2 E.coli (MPN-Multiple Well) **Drinking Water** 2525 NA 20 to 200 Log transform Mean ± 2 SD 2 Fecal Coliform (MPN-Multiple Tube) **Drinking Water** 0255 2530 NA 20 to 200 Log transform Mean ± 2 SD 2 Fecal Coliform (MPN-Multiple Well) Drinking Water NA Log transform Mean ± 2 SD 0255 2530 20 to 200 2 Drinking Water 0254 2500 NA Total Coliform (MPN-Multiple Tube) 20 to 200 Log transform Mean ± 2 SD 2 Drinking Water 2500 NA Total Coliform (MPN-Multiple Well)<sup>1</sup> 20 to 200 0254 Log transform Mean ± 2 SD 2



					Blue = New Analyte		Magenta = Ch	anges		
Matrix	EPA	TNI		Analyte <sup>2</sup>	Conc Range		Accepta	nce Criteria <sup>3,4,5</sup>	6	TNI PTRL <sup>7</sup>
	Analyte	Analyte	CAS			а	b	С	d	
	Code	Code	Number							
				Trace Metals	µg/L					µg/L
Drinking Water	0235	1000	7429-90-5	Aluminum	130 to 1000	± 20% a	at < 500 ± 15%	$6 \ge 500$ fixed as	ceptance limit	104
Drinking Water	0140	1005	7440-36-0	Antimony	6 to 50		±30% fixe	d acceptance li	mit	4.2
Drinking Water	0001	1010	7440-38-2	Arsenic	5 to 50		±30% fixe	d acceptance li	mit	3.5
Drinking Water	0002	1015	7440-39-3	Barium <sup>1</sup>	500 to 3000		±15% fixe	d acceptance li	mit	420
Drinking Water	0141	1020	7440-41-7	Beryllium <sup>1</sup>	2 to 20		±15% fixe	d acceptance li	mit	1.7
Drinking Water	0226	1025	7440-42-8	Boron	800 to 2000		±15% fixe	d acceptance li	mit	680
Drinking Water	0003	1030	7440-43-9	Cadmium <sup>1</sup>	2 to 50		±20% fixe	d acceptance li	mit	1.6
Drinking Water	0004	1040	7440-47-3	Chromium <sup>1</sup>	10 to 200		±15% fixe	d acceptance li	mit	8.5
Drinking Water		1045	18540-29-9	Chromium (VI)	5 to 50		±20% fixe	d acceptance li	mit	4.0
Drinking Water	0091	1055	7440-50-8	Copper <sup>1</sup>	50 to 2000		±10% fixe	d acceptance li	mit	45
Drinking Water	0284	1070	7439-89-6	Iron	100 to 1800	± 20% a	at < 250 ± 15%	% ≥ 250 fixed a	ceptance limit	80
Drinking Water	0005	1075	7439-92-1	Lead <sup>1</sup>	5 to 100		±30% fixe	d acceptance li	mit	3.5
Drinking Water	0236	1090	7439-96-5	Manganese	40 to 900		±15% fixe	d acceptance li	mit	34
Drinking Water	0006	1095	7439-97-6	Mercury <sup>1,13a</sup>	0.5 to 10		±30% fixe	d acceptance li	mit	0.35
Drinking Water	0237	1100	7439-98-7	Molybdenum	15 to 130		±15% fixe	d acceptance li	mit	13
Drinking Water	0142	1105	7440-02-0	Nickel	10 to 500		±15% fixe	d acceptance li	mit	8.5
Drinking Water	0007	1140	7782-49-2	Selenium <sup>1</sup>	10 to 100		±20% fixe	d acceptance li	mit	8.0
Drinking Water	8000	1150	7440-22-4	Silver	20 to 300		±30% fixe	d acceptance li	mit	14
Drinking Water	0143	1165	7440-28-0	Thallium <sup>1</sup>	2 to 10		±30% fixe	d acceptance li	mit	1.4
Drinking Water	0238	1185	7440-62-2	Vanadium	50 to 1000		±15% fixe	d acceptance li	mit	42
Drinking Water	0239	1190	7440-66-6	Zinc	200 to 2000		±15% fixe	d acceptance li	mit	170
					-					
				Nutrients	mg/L					mg/L
Drinking Water	0009	1810	NA	Nitrate as N'	3 to 10		±10% fixe	d acceptance li	mit	2.7
Drinking Water		1820	NA	Nitrate plus Nitrite as N	3 to 10		±15% fixe	d acceptance li	mit	2.6
Drinking Water	0092	1840	NA	Nitrite as N'	0.4 to 2		±15% fixe	d acceptance li	mit	0.34
Drinking Water	0261	1870	264888-19-9	Orthophosphate as P	0.5 to 5.5		±15% fixe	d acceptance li	mit	0.43



					Blue = New Analyte		Magenta = CI	nanges		
Matrix	EPA	TNI		Analyte <sup>2</sup>	Conc Range		Accepta	ance Criteria <sup>3,4,5,6</sup>	6	TNI PTRL <sup>7</sup>
	Analyte	Analyte	CAS			а	b	С	d	
	Code	Code	Number							
				Minerals	mg/L					mg/L
Drinking Water	0287	1575	16887-00-6	Chloride	20 to 160		±15% fixe	ed acceptance lin	nit	17
Drinking Water	0010	1730	16984-48-8	Fluoride <sup>1</sup>	1 to 8		±10% fixe	ed acceptance lin	nit	0.90
Drinking Water	0145	2000	14808-79-8	Sulfate	25 to 250		±15% fixe	ed acceptance lin	nit	21
Drinking Water	0286	1125	7440-09-7	Potassium	10 to 40		±15% fixe	ed acceptance lin	nit	8.5
Drinking Water	0029	1155	7440-23-5	Sodium	12 to 50		±15% fixe	ed acceptance lin	nit	11
Drinking Water	0283	1035	7440-70-2	Calcium	30 to 90		±15% fixe	ed acceptance lin	nit	26
Drinking Water	0285	1085	7439-95-4	Magnesium	2 to 20		±15% fixe	ed acceptance lin	nit	1.7
Drinking Water	0025	1550	NA	Calcium hardness as CaCO <sub>3</sub>	75 to 225		±15% fixe	ed acceptance lin	nit	64
Drinking Water		1755	NA	Total hardness as CaCO <sub>3</sub>	83 to 307		±15% fixe	ed acceptance lin	nit	71
				Inorganic Disinfection By Products	ug/l					ug/l
Drinking Water	0102	1505	16641 46 4	Bromoto	μg/L 7 to 50		1200/ five	d accontance lin		μg/L
Drinking Water	0193	1535	10041-40-4	Diolilate	7 t0 50		±30% lixe	ed acceptance lin	liit wit	4.9
Drinking Water	0260	1540	24959-07-9	Biolilide	50 to 300		±15% IIX	ed acceptance lin	nit	42
Drinking Water	0194	1505	1790-93-4 NA	Chlorite <sup>1</sup>	100 to 1000		±30% fixe	ed acceptance lin	nit	42
Drinking water	0195	1595	INA	Chionte	100 10 1000		±30% IIX	eu acceptance in	IIIL	70
				Misc Analytes	ma/L					ma/L
Drinking Water	0027	1505	NA	Alkalinity as CaCO <sub>3</sub>	25 to 200		±10% fixe	ed acceptance lin	nit	22
Drinking Water	0253	1520	1332-21-4	Asbestos <sup>1</sup>	1.5 to 20 MF/L	study mean		0.2971	0.4164	1 MF/L
Drinking Water		1620	NA	Corrosivity (langelier index) <sup>13i</sup>	-4 to +4 SI units	,	± 0.4 SI un	its fixed accepta	nce	Not Applicable
Drinking Water	0146	1635	NA	Cyanide <sup>1,13b</sup>	0.1 to 0.5		±25% fixe	ed acceptance lin	nit	0.075
Drinking Water		1710	NA	Dissolved Organic Carbon (DOC)	1.3 to 13	0.9744	0.0960	0.0402	0.0700	1.1
Drinking Water		1895	7601-90-3	Perchlorate	4 to 20 µg/L		±20% fixe	ed acceptance lin	nit	3.2 ug/L
Drinking Water	0026	1900	NA	pH	5 to 10 units		± 0.2 units f	ixed acceptance	limit	Not Applicable
Drinking Water	0022	1945	NA	Residual free chlorine	0.5 to 3.0	1.0000	0.0004	0.0776	0.0246	0.37
Drinking Water		1990	NA	Silica as SiO <sub>2</sub>	5 to 75		±15% fixe	ed acceptance lin	nit	4.2
Drinking Water	0288	1610	NA	Conductivity	130 to 1300 µmhos/cm		±10% fixe	ed acceptance lin	nit	117 µmhos/cm
Drinking Water		2025	NA	Surfactants - MBAS	0.1 to 1.0	0.9804	0.0054	0.0673	0.0348	0.020
Drinking Water		1940	NA	Total Residual Chlorine	0.5 to 3.0	1.0000	-0.0048	0.0723	0.0065	0.40
Drinking Water	0024	1955	NA	Residue-filterable (TDS)	100 to 1000		±20% fixe	ed acceptance lin	nit	80
Drinking Water	0263	2040	NA	Total Organic Carbon (TOC)	1.3 to 13		±20% fixe	ed acceptance lin	nit	1.0
Drinking Water	0023	2055	NA	Turbidity <sup>1,13c</sup>	0.5 to 8 NTU	0.9755	0.0593	0.0565	0.0661	0.36 NTU
Drinking Water		2060	NA	UV 254	0.05 to 0.7 cm-1	0.9919	0.0043	0.0872	0.0034	0.038 cm-1



					Blue = New Analyte	Ν	/lagenta = C	hanges		
Matrix	EPA	TNI		Analyte <sup>2</sup>	Conc Range		Accept	ance Criteria <sup>3,4</sup>	,5,6	TNI PTRL <sup>7</sup>
	Analyte Code	Analyte	CAS			а	b	С	d	
	0000	oouc	Number	Volatile Organic Compounds (VOCs) <sup>4</sup>	µa/L					µg/L
Drinking Water	0039	4375	71-43-2	Benzene <sup>1</sup>	2 to 20	± 40%	at < 10 ± 20	% ≥ 10 fixed a	cceptance limit	1.2
Drinking Water	0037	4455	56-23-5	Carbon Tetrachloride <sup>1</sup>	2 to 20	± 40%	at < 10 ± 20	% ≥ 10 fixed a	cceptance limit	1.2
Drinking Water	0049	4475	108-90-7	Chlorobenzene <sup>1</sup>	2 to 20	± 40%	at < 10 ± 20	% ≥ 10 fixed a	cceptance limit	1.2
Drinking Water	0054	4610	95-50-1	1,2-Dichlorobenzene (o-Dichlorobenzene) <sup>1</sup>	2 to 20	± 40%	at < 10 ± 20	% ≥ 10 fixed a	cceptance limit	1.2
Drinking Water	0041	4620	106-46-7	1,4-Dichlorobenzene (p-Dichlorobenzene) <sup>1</sup>	2 to 20	± 40%	at < 10 ± 20	% ≥ 10 fixed a	cceptance limit	1.2
Drinking Water	0035	4635	107-06-2	1,2-Dichloroethane (Ethylene dichloride) <sup>1</sup>	2 to 20	± 40%	at < 10 ± 20	% ≥ 10 fixed a	cceptance limit	1.2
Drinking Water	0034	4640	75-35-4	1,1-Dichloroethylene <sup>1</sup>	2 to 20	± 40%	at < 10 ± 20	% ≥ 10 fixed a	cceptance limit	1.2
Drinking Water	0043	4645	156-59-2	cis-1,2-Dichloroethylene <sup>1</sup>	2 to 20	± 40%	at < 10 ± 20	% ≥ 10 fixed a	cceptance limit	1.2
Drinking Water	0042	4700	156-60-5	trans-1,2-Dichloroethylene	2 to 20	± 40%	at < 10 ± 20	% ≥ 10 fixed a	cceptance limit	1.2
Drinking Water	0055	4975	75-09-2	Methylene chloride (Dichloromethane) <sup>1</sup>	2 to 20	± 40%	at < 10 ± 20	% ≥ 10 fixed a	cceptance limit	1.2
Drinking Water	0044	4655	78-87-5	1,2-Dichloropropane <sup>1</sup>	2 to 20	± 40%	at < 10 ± 20	% ≥ 10 fixed a	cceptance limit	1.2
Drinking Water	0048	4765	100-41-4	Ethylbenzene <sup>1</sup>	2 to 20	± 40%	at < 10 ± 20	% ≥ 10 fixed a	cceptance limit	1.2
Drinking Water	0053	5100	100-42-5	Styrene <sup>1</sup>	2 to 20	± 40%	at < 10 ± 20	% ≥ 10 fixed a	cceptance limit	1.2
Drinking Water	0040	5115	127-18-4	Tetrachloroethylene (Perchloroethylene) <sup>1</sup>	2 to 20	± 40%	at < 10 ± 20	% ≥ 10 fixed a	cceptance limit	1.2
Drinking Water	0047	5140	108-88-3	Toluene <sup>1</sup>	2 to 20	± 40%	at < 10 ± 20	% ≥ 10 fixed a	cceptance limit	1.2
Drinking Water	0036	5160	71-55-6	1,1,1-Trichloroethane <sup>1</sup>	2 to 20	± 40%	at < 10 ± 20	% ≥ 10 fixed a	cceptance limit	1.2
Drinking Water	0061	5165	79-00-5	1,1,2-Trichloroethane <sup>1</sup>	2 to 20	± 40%	at < 10 ± 20	% ≥ 10 fixed a	cceptance limit	1.2
Drinking Water	0038	5170	79-01-6	Trichloroethene (Trichloroethylene) <sup>1</sup>	2 to 20	± 40%	at < 10 ± 20	% ≥ 10 fixed a	cceptance limit	1.2
Drinking Water	0076	5155	120-82-1	1,2,4-Trichlorobenzene <sup>1</sup>	2 to 20	± 40%	at < 10 ± 20	% ≥ 10 fixed a	cceptance limit	1.2
Drinking Water	0032	5235	75-01-4	Vinyl chloride (Chloroethene) <sup>1</sup>	2 to 50		±40% fix	ed acceptance	limit	1.2
Drinking Water	0090	5260	1330-20-7	Xylene (total) <sup>1,14</sup>	2 to 50	± 40%	at < 10 ± 20	% ≥ 10 fixed a	cceptance limit	1.2
				1	μg/L					µg/L
Drinking Water	0019	4395	75-27-4	Bromodichloromethane'	5 to 50		±20% fix	ed acceptance	limit	4.0
Drinking Water	0018	4400	75-25-2	Bromoform'	5 to 50		±20% fix	ed acceptance	limit	4.0
Drinking Water	0020	4575	124-48-1	Chlorodibromomethane	5 to 50		±20% fix	ed acceptance	limit	4.0
Drinking Water	0017	4505	67-66-3	Chloroform'	5 to 50		±20% fix	ed acceptance	limit	4.0



					Blue = New Analyte	N	lagenta = Cl	nanges		
Matrix	EPA	TNI		Analyte <sup>2</sup>	Conc Range		Accepta	ance Criteria <sup>3,4,5</sup>	,6	TNI PTRL <sup>7</sup>
	Analvte	Analvte	CAS	· · · · · · · · · · · · · · · · · · ·		а	b	C	d	
	Code	Code	Number							
				Volatile Organic Compounds (VOCs) <sup>4</sup> cont'	ug/L					ua/L
Drinking Water	0067	4385	108-86-1	Bromobenzene	2 to 20	± 40% a	at < 10 ± 209	$\% \ge 10$ fixed acc	ceptance limit	1.2
Drinking Water	0089	4390	74-97-5	Bromochloromethane	2 to 20	± 40% ;	at < 10 ± 209	$\% \ge 10$ fixed acc	ceptance limit	1.2
Drinking Water	0069	4950	74-83-9	Methyl bromide (Bromomethane)	5 to 50		±40% fixe	ed acceptance li	mit	3.0
Drinking Water	0079	4435	104-51-8	n-Butylbenzene	2 to 20	± 40% a	at < 10 ± 209	$\% \ge 10$ fixed acc	ceptance limit	1.2
Drinking Water	0086	4440	135-98-8	sec-Butylbenzene	2 to 20	± 40% a	at < 10 ± 209	% ≥ 10 fixed acc	ceptance limit	1.2
Drinking Water	0085	4445	98-06-6	tert-Butylbenzene	2 to 20	± 40% a	at < 10 ± 209	% ≥ 10 fixed acc	ceptance limit	1.2
Drinking Water	0070	4485	75-00-3	Chloroethane (Ethyl chloride)	5 to 50		±40% fixe	ed acceptance li	mit	3.0
Drinking Water	0068	4960	74-87-3	Methyl chloride (Chloromethane)	5 to 50		±40% fixe	ed acceptance li	mit	3.0
Drinking Water	0071	4535	95-49-8	2-Chlorotoluene	2 to 20	± 40% a	at < 10 ± 209	% ≥ 10 fixed acc	ceptance limit	1.2
Drinking Water	0072	4540	106-43-4	4-Chlorotoluene	2 to 20	± 40% a	at < 10 ± 209	% ≥ 10 fixed acc	ceptance limit	1.2
Drinking Water	0057	4595	74-95-3	Dibromomethane (Methylene bromide)	2 to 20	± 40% a	at < 10 ± 209	% ≥ 10 fixed acc	ceptance limit	1.2
Drinking Water	0066	4615	541-73-1	1,3-Dichlorobenzene (m-Dichlorobenzene)	2 to 20	± 40% a	at < 10 ± 209	% ≥ 10 fixed acc	ceptance limit	1.2
Drinking Water	0088	4625	75-71-8	Dichlorodifluoromethane (Freon-12)	5 to 50		±40% fixe	ed acceptance li	mit	3.0
Drinking Water	0056	4630	75-34-3	1,1-Dichloroethane	2 to 20	± 40% a	at < 10 ± 209	$\% \ge 10$ fixed acc	ceptance limit	1.2
Drinking Water	0059	4660	142-28-9	1,3-Dichloropropane	2 to 20	± 40% a	at < 10 ± 209	$\% \ge 10$ fixed acc	ceptance limit	1.2
Drinking Water	0060	4665	594-20-7	2,2-Dichloropropane	2 to 20	± 40% a	at < 10 ± 209	$\% \ge 10$ fixed acc	ceptance limit	1.2
Drinking Water	0058	4670	563-58-6	1,1-Dichloropropene	2 to 20	± 40% ;	at < 10 ± 209	% ≥ 10 fixed acc	ceptance limit	1.2
Drinking Water	0152	4680	10061-01-5	cis-1,3-Dichloropropene	2 to 20	± 40% a	at < 10 ± 209	% ≥ 10 fixed acc	ceptance limit	1.2
Drinking Water	0153	4685	10061-02-6	trans-1,3-Dichloropropylene	2 to 20	± 40% ;	at < 10 ± 209	% ≥ 10 fixed acc	ceptance limit	1.2
Drinking Water	0081	4835	87-68-3	Hexachlorobutadiene	5 to 50	± 40% a	at < 10 ± 209	$\% \ge 10$ fixed acc	ceptance limit	3.0
Drinking Water	0084	4900	98-82-8	Isopropylbenzene	2 to 20	± 40% a	at < 10 ± 209	$\% \ge 10$ fixed acc	ceptance limit	1.2
Drinking Water	0083	4910	99-87-6	4-Isopropyltoluene (p-Cymene)	2 to 20	± 40% a	at < 10 ± 209	% ≥ 10 fixed acc	ceptance limit	1.2
Drinking Water		5000	1634-04-4	Methyl tert-butyl ether (MTBE)	5 to 50	± 40% a	at < 10 ± 209	% ≥ 10 fixed acc	ceptance limit	3.0
Drinking Water		5005	91-20-3	Naphthalene	5 to 50	± 40% a	at < 10 ± 309	$\% \ge 10$ fixed acc	ceptance limit	1.2
Drinking Water	0078	5090	103-65-1	n-Propylbenzene	2 to 20	± 40% a	at < 10 ± 209	% ≥ 10 fixed aco	ceptance limit	1.2
Drinking Water	0063	5105	630-20-6	1,1,1,2-Tetrachloroethane	2 to 20	± 40% a	at < 10 ± 209	% ≥ 10 fixed aco	ceptance limit	1.2
Drinking Water	0065	5110	79-34-5	1,1,2,2-Tetrachloroethane	2 to 20	± 40% a	at < 10 ± 209	$\% \ge 10$ fixed acc	ceptance limit	1.2
Drinking Water	0077	5150	87-61-6	1,2,3-Trichlorobenzene	5 to 50	± 40% a	at < 10 ± 209	$\% \ge 10$ fixed acc	ceptance limit	3.0
Drinking Water	0087	5175	75-69-4	Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	5 to 50		±40% fixe	ed acceptance li	mit	3.0
Drinking Water	0064	5180	96-18-4	1,2,3-Trichloropropane	2 to 20	± 40% a	at < 10 ± 209	$\% \ge 10$ fixed acc	ceptance limit	1.2
Drinking Water	0075	5210	95-63-6	1,2,4-Trimethylbenzene	2 to 20	± 40% a	at < 10 ± 209	$\% \ge 10$ fixed acc	ceptance limit	1.2
Drinking Water	0082	5215	108-67-8	1,3,5-Trimethylbenzene	2 to 20	± 40% a	at < 10 ± 209	$\% \ge 10$ fixed acc	ceptance limit	1.2
				Low Lovel Velatile Organic Compounds	ug/l					
Drinking Water	0045	4570	06 12 9	1.2 Dibromo 3 chloropropano (DPCD) <sup>1</sup>	μg/L		+100/ 5	d accontance li	mit	μ <u>γ</u> /L
Dinking water	0045	4570	90-12-8	1,2-Distortio-3-ciliolopiopatie (DBCF)	0.1 10 2		±40% fixe	acceptance II		0.00
Drinking Water	0046	4585	106-93-4	1,2-Dibromoethane (EDB, Ethylene dibromide)	0.05 to 2		±40% fixe	acceptance li	mit	0.03
Drinking Water		5180	96-18-4	1,2,3- i richioropropane	0.2 to 2.0		±40% fixe	ed acceptance li	mit	0.12



					Blue = New Analyte		Magenta = C	nanges		
Matrix	FPA	TNI		Analyte <sup>2</sup>	Conc Range		Accent	ance Criteria <sup>3,4,5,6</sup>		TNI PTRI <sup>7</sup>
Mathx	Analyte	Analyte	CAS	, mayte	conortango	а	h	C.	d	
	Code	Code	Number			u.	~	C C	ŭ	
				Pesticides	µg/L					µg/L
Drinking Water	0093	7005	15972-60-8	Alachlor <sup>1</sup>	2 to 20		±45% fixe	ed acceptance lim	it	1.1
Drinking Water	0256	7025	309-00-2	Aldrin	0.2 to 2.5	0.8618	-0.0012	0.2025	0.0054	0.08
Drinking Water	0094	7065	1912-24-9	Atrazine <sup>1</sup>	2 to 20		±45% fixe	ed acceptance lim	it	1.1
Drinking Water		7160	23184-66-9	Butachlor	2 to 20		±45% fixe	ed acceptance lim	it	1.1
Drinking Water	0097	7250	12789-03-6	Chlordane (tech.) <sup>1</sup>	2 to 20		±45% fixe	ed acceptance lim	it	1.1
Drinking Water	0258	7470	60-57-1	Dieldrin	0.5 to 2.5		±45% fixe	ed acceptance lim	it	0.28
Drinking Water	0011	7540	72-20-8	Endrin <sup>1</sup>	0.2 to 2.5		±30% fixe	ed acceptance lim	it	0.14
Drinking Water	0095	7685	76-44-8	Heptachlor <sup>1</sup>	0.2 to 2.5		±45% fixe	ed acceptance lim	it	0.11
Drinking Water	0096	7690	1024-57-3	Heptachlor epoxide <sup>1</sup>	0.2 to 2.5		±45% fixe	ed acceptance lim	it	0.11
Drinking Water	0172	6275	118-74-1	Hexachlorobenzene <sup>1</sup>	0.5 to 5	0.8727	0.0048	0.1795	0.0195	0.22
Drinking Water	0112	6285	77-47-4	Hexachlorocyclopentadiene <sup>1</sup>	2 to 20	0.8508	0.0882	0.2716	0.1073	0.49
Drinking Water	0012	7120	58-89-9	gamma-BHC (Lindane, gamma-HexachlorocyclohexanE) <sup>1</sup>	0.2 to 2.5		±45% fixe	ed acceptance lim	it	0.11
Drinking Water	0013	7810	72-43-5	Methoxychlor <sup>1</sup>	2 to 20		±45% fixe	ed acceptance lim	it	1.1
Drinking Water		7835	51218-45-2	Metolachlor	2 to 20		±45% fixe	ed acceptance lim	iit	1.1
Drinking Water		7845	21087-64-9	Metribuzin	2 to 20		±50% fixe	ed acceptance lim	it	1.0
Drinking Water	0259	8045	1918-16-7	Propachlor (Ramrod)	1 to 10		±45% fixe	ed acceptance lim	it	0.55
Drinking Water	0113	8125	122-34-9	Simazine	2 to 20		±45% fixe	ed acceptance lim	nit	1.1
Drinking Water	0014	8250	8001-35-2	Toxaphene (Chlorinated Camphene) <sup>1</sup>	2 to 20		±45% fixe	ed acceptance lim	it	1.1
Drinking Water	0244	8295	1582-09-8	Trifluralin (Treflan)	1 to 10		±45% fixe	ed acceptance lim	nit	0.55
<b>B</b> :				Carbamates & Vydate	µg/L		0.50/ 5		••	µg/L
Drinking Water	0098	7010	116-06-3	Aldicarb (Temik)	15 to 100		±25% fixe	ed acceptance lim	iit	11
Drinking Water	0099	7015	1646-88-4	Aldicarb Sulfone	15 to 100		±25% fixe	ed acceptance lim	lit	11
Drinking Water	0100	7020	1040-87-3	Aldicard Sulfoxide	15 to 80		±25% fixe	ed acceptance lim	III .:+	11
Drinking Water	0404	7195	63-25-2	Calbalyi (Sevili)	15 10 100		±25% IIX	ed acceptance lim	<u>iit</u>	11
Drinking Water	0101	7205	1563-66-2		15 to 150		±45% fixe	ed acceptance lim	III .:+	8.3
Drinking Water	0245	7905	16752 77 5	S-myuloxycalbolufan	15 to 80		±20% fixe	eu acceptance lim	iit	12
Drinking Water	0240	7040	00102-11-0		15 to 100		±20% lixe			12
Drinking Water	0114	7940	23135-22-0	Oxamyi	15 to 100		±25% fixe	ed acceptance lim	lit	11



					Blue = New Analyte		Magenta = C	hanges		
Matrix	EPA	TNI		Analyte <sup>2</sup>	Conc Range		Accept	ance Criteria <sup>3,4,5,6</sup>	3	TNI PTRL <sup>7</sup>
	Analyte	Analyte	CAS		C C	а	b	С	d	
	Code	Code	Number							
				Chlorinated Acid Herbicides <sup>13d</sup>	μg/L					µg/L
Drinking Water	0262	8505	50594-66-6	Acifluorfen	10 to 100		±50% fixe	ed acceptance lin	nit	5.0
Drinking Water	0015	8545	94-75-7	2,4-D <sup>1,13e</sup>	10 to 100		±50% fixe	ed acceptance lir	nit	5.0
Drinking Water		8560	94-82-6	2-6         2,4-DB         20 to 120         ±50% fixed acceptance limit					nit	10
Drinking Water	0115	8555	75-99-0	Dalapon <sup>1</sup> 10 to 100 ±50% fixed acceptance limit						5.0
Drinking Water	0247	8595	1918-00-9	Dicamba         20 to 100         ±50% fixed acceptance limit						10
Drinking Water	0116	8620	88-85-7	Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP) <sup>1</sup> 7 to 70         0.8480         0.8414         0.2628         0.0044						3.1
Drinking Water	0102	6605	87-86-5	Pentachlorophenol <sup>1</sup> 1 to 25 ±50% fixed acceptance limit						
Drinking Water	0117	8645	1918-02-1	Picloram <sup>1</sup>	10 to 100		±50% fixe	ed acceptance lin	nit	5.0
Drinking Water	0016	8650	93-72-1	Silvex (2,4,5-TP) <sup>1</sup>	10 to 100		±50% fixe	ed acceptance lir	nit	5.0
Drinking Water		8655	93-76-5	2,4,5-T	10 to 100		±50% fixe	ed acceptance lir	nit	5.0
				Other Herbicides	μg/L					µg/L
Drinking Water	0137	9390	85-00-7	Diquat <sup>1,13f</sup>	8 to 40		±50% fixe	ed acceptance lir	nit	4.0
Drinking Water	0138	7525	145-73-3	Endothall <sup>1,139</sup>	80 to 500		±50% fixe	ed acceptance lir	nit	40
Drinking Water	0139	9411	1071-83-6	Glyphosate <sup>1</sup>	375 to 800		±20% fixe	ed acceptance lir	nit	300
				Haloacetic acids	µg/L					µg/L
Drinking Water	0250	9315	5589-96-8	Bromochloroacetic Acid	5 to 50		±40% fixe	ed acceptance lin	nit	3.0
Drinking Water	0157	9357	631-64-1	Dibromoacetic Acid	5 to 50		±40% fixe	ed acceptance lir	nit	3.0
Drinking Water	0158	9360	79-43-6	Dichloroacetic Acid	5 to 50		±40% fixe	ed acceptance lir	nit	3.0
Drinking Water	0160	9312	79-08-3	Bromoacetic acid	5 to 50		±40% fixe	ed acceptance lir	nit	3.0
Drinking Water	0161	9336	79-11-8	Chloroacetic acid	10 to 50		±40% fixe	ed acceptance lir	nit	6.0
Drinking Water	0162	9642	76-03-9	Trichloroacetic acid (TCAA) <sup>1</sup>	5 to 50		±40% fixe	ed acceptance lin	nit	3.0
				Adipate/Phthalate	µg/L					µg/L
Drinking Water	0134	6062	70147-21-6	bis(2-Ethylhexyl)adipate	8 to 50	0.9817	-0.4239	0.1250	1.4658	2.5
Drinking Water	0136	6065	117-81-7	Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP) <sup>1</sup>	5 to 50	0.9216	1.3142	0.2049	0.7388	2.4
				PCBs in Water <sup>2</sup>	μg/L					μg/L
Drinking Water	0118	9105	2051-24-3	Decachlorobiphenyl (BZ-209) <sup>1,13n</sup>	0.5 to 5	.5 to 5 ±100% fixed acceptance limit				0.05
Drinking Water		8872	NA	PCB Aroclor Identification		Correct identification of Aroclor examined				



					Blue = New Analyte		Magenta = C	hanges		
Matrix	EDΔ	TNI		Analute <sup>2</sup>	Conc Range		Accent	ance Criteria <sup>3,4,5</sup>	,6	TNI PTPI <sup>7</sup>
Matrix	Analyte	Analyte	CAS	Analyte	Conc Range	2	h		Ь	
	Code	Code	Number			a	b	C	ŭ	
	Out	Out	Number	РАН	µg/L					µg/L
Drinking Water	0122	5580	50-32-8	Benzo(a)pyrene <sup>1</sup>	0.2 to 2.5	0 8471	-0.0040	0 1854	0.0547	0.02
<u></u>	0.22	0000	00 02 0		0.2 to 2.0	0.0111	010010	0.1001	0.001	0.02
				Dioxin	pg/L					pg/L
Drinking Water	0252	9618	1746-01-6	2.3.7.8-Tetrachlorodibenzo- p-dioxin (2.3.7.8-TCDD) <sup>1</sup>	20 to 100	0.8642	1,4865	0.1392	1,1445	11
g										
				PFAS	ng/L					ng/L
Drinking Water	2813	9490	763051-92-9	0 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-CI-PF3OUdS)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2822	6948	39108-34-4	1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2821	6946	757124-72-4	1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2820	6947	27619-97-2	1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2815	6951	919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (DONA)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2814	6952	756426-58-1	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-CI-PF3ONS)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2816	9460	13252-13-6	Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2817	4846	2991-50-6	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2818	4847	2355-31-9	N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2827	6956	151772-58-6	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2826	6957	113507-82-7	7 Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2823	6965	377-73-1	Perfluoro-3-methoxypropanoic acid (PFMPA)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2825	6966	863090-89-5	5 Perfluoro-4-methoxybutanoic acid (PFMBA)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2801	6918	375-73-5	Perfluorobutane sulfonic acid (PFBS)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2819	6915	375-22-4	Perfluorobutanoic acid (PFBA)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2807	6905	335-76-2	Perfluorodecanoic acid (PFDA)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2808	6903	307-55-1	Perfluorododecanoic acid (PFDOA)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2829	9470	375-92-8	Perfluoroheptane sulfonic acid (PFHpS)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2802	6908	375-85-9	Perfluoroheptanoic acid (PFHpA)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2803	6927	355-46-4	Perfluorohexane sulfonic acid (PFHxS)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2809	6913	307-24-4	Perfluorohexanoic acid (PFHxA)	10 to 200		±40% fix	ed acceptance li	mit	6
Drinking Water	2804	6906	375-95-1	Perfluorononanoic acid (PFNA)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2805	6931	1763-23-1	Perfluorooctane sulfonic acid (PFOS)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2806	6912	335-67-1	Perfluorooctanoic acid (PFOA)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2828	6934	2706-91-4	Perfluoropentane sulfonic acid (PFPeS)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2824	6914	2706-90-3	Perfluoropentanoic acid (PFPeA)	10 to 200		±40% fix	ed acceptance li	mit	6
Drinking Water	2810	6902	376-06-7	Perfluorotetradecanoic acid (PFTDA)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2811	9563	72629-94-8	Perfluorotridecanoic acid (PFTrDA)	10 to 200		±40% fixe	ed acceptance li	mit	6
Drinking Water	2812	6904	2058-94-8	Perfluoroundecanoic acid (PFUnDA)	10 to 200		±40% fixe	ed acceptance li	mit	6

1) All analytes regulated under the US EPA's Safe Drinking Water Act must be spiked at non-zero assigned values, except when not required for evaluation in a supplemental PT study and when specified in the footnotes below.

2) One sample in every study, containing one Aroclor, selected at random from among the Aroclors listed (1016, 1221, 1232, 1242, 1248, 1254 or 1260) for the analysis of PCBs as decachlorobiphenyl.

3) The acceptance criteria found in 40 CFR Part 141 are incorporated herein by reference. Acceptance criteria for FoPTs not included in 40 CFR Part 141 are presented in this table.



					Blue = New Analyte		Magenta = Ch	anges		
Matrix	EPA	TNI		Analyte <sup>2</sup>	Conc Range		Accepta	nce Criteria <sup>3,</sup>	1,4,5,6	TNI PTRL <sup>7</sup>
	Analyte Code	Analyte Code	CAS Number			а	b	С	d	
Acceptance limits	are set at th	ne Mean ± 2 SI	D.							
Where the a, b, c	and d factor	rs are presente	d, Mean = a*T + b; SE	) = c*T + d where T is the assigned value.						
Where only the c	and d factor	s are presente	d, Mean = Robust Stu	dy Mean; SD = $c^*X$ + d where X is the Robust Study Mean.						
Where no factors	are present	ed (Study Mea	n ±3SD), Mean = Robr	ust Study Mean, SD = Robust Study Standard Deviation.						
Robust Study Mea	an and Stan	dard Deviation	are generated using s	tatistical analysis of study data set. (ie. Bi-weight, Grubbs, D	ixon, etc.)					
Quantitative Micro	obiology acc	eptance criteria	a (e.g., HPC) are base	d on the robust participant Mean and SD determined from ea	ach respective PT study, after outlie	r removal.				
4) If the lower acc at 10% of the assi	eptance lim igned value,	it generated us , with the excep	ing the criteria contain otion of Microbiology a	ed in this table is less than (<) 10% of the assigned value, th nalytes.	e lower acceptance limits are set					
5) If the lower acc at 90% of the assi	eptance lim igned value,	it generated us , with the excep	ing the criteria contain otion of Microbiology a	ed in this table is greater than (>) 90% of the assigned value nalytes.	, the lower acceptance limits are se	et				
6) If the upper acc at 110% of the as	ceptance lim signed value	it generated us e, with the exce	sing the criteria contair eption of Microbiology	ned in this table is less than (<) 110% of the assigned value, analytes.	the upper acceptance limits are set					
7) TNI Proficiency sample, if the ana	/ Testing Re	porting Limit (F d into the profi	YRL) is a statistically ciency test sample.	derived value that represents the lowest acceptable concent	ration for an analyte in a proficiency	test				
TNI PTRLs are als must verify that the	so used by I le PT sample	PT Providers to e does not con	ו set the assigned valu tain the analyte at a כמ	e for unspiked analytes. For all analytes with an assigned van oncentration greater than or equal to one-half (1/2) of the PTI	alue equal to <ptrl, provid<br="" pt="" the="">RL.</ptrl,>	er				
Refer to the "TNI	V1M1 2016	Standard Upda	ate Guidance on Profic	ciency Testing Reporting Limit (PTRL)", GUID-3-114-Rev0, C	October 15, 2018 for further informat	tion.				



the discretion of the PT study Provider.

### TNI PT for Accreditation Fields of Proficiency Testing with PTRLs Drinking Water Effective: TBD

Blue = New Analyte Magenta = Changes Acceptance Criteria<sup>3,4,5,6</sup> EPA TNI PTRL Matrix TNI Analyte<sup>2</sup> Conc Range CAS Analyte Analyte а b С d Number Code Code 8) The ten-sample set which is provided to the participant laboratories shall contain bacteria that produces the following results when analyzed: Positive results for total coliforms, fecal coliforms and E.coli, Positive results for total coliforms and negative results for fecal coliforms and E.coli. Negative results for total coliforms, fecal coliforms and E.coli, These limits are for Presence-Absence only. 9) The ten-sample set shall be assigned lot numbers and randomly composed of samples as follows: Two to four samples containing an aerogenic strain of Escherichia which will ensure positive results for total coliforms, fecal coliforms and E.coli.when analyzed by any of the USEPA approved methods. Two to four samples containing an aerogenic strain of Enterobacter species and/or other microorganism which will ensure positive results for total coliforms and negative result for fecal coliforms and E.coli. when analyzed by any of the USEPA approved methods. One to two samples containing Pseudomonas species and/or other microorganism which will ensure negative results for total coliforms, fecal coliforms and E.coli. when analyzed by any of the USEPA approved methods. One to two samples which do not contain any microorganism which ensure negative results for total coliforms, fecal coliforms and E.coli. when analyzed by any of the USEPA approved methods. 10) Laboratories analyzing qualitative sample sets for more than one method in a particular study shall obtain a unique ten-sample set for each method reported as specified in Footnote 9. 11) These limits are for quantitative methods using membrane filtration (MF) or pour-plate (PP) techniques. 12) These limits are for quantitative methods using most probable number (MPN) techniques. 13) The following recommended sample designs, which were used in past USEPA studies, should be used as model designs because other designs may not give equivalent statistics. PT study providers may vary their sample designs from those shown. The specifics within each sample are within



EPA

Matrix

### TNI PT for Accreditation Fields of Proficiency Testing with PTRLs Drinking Water Effective: TBD

Analyte<sup>2</sup>

Blue = New Analyte

Magenta = Changes

b

а

Acceptance Criteria<sup>3,4,5,6</sup>

С

d

TNI PTRL<sup>7</sup>

Analyte Analyte CAS Code Code Number

TNI

a) Design criteria for Mercury – 1:1 (mole:mole as Hg) Mercuric Oxide and Methyl Mercuric Chloride.

b) Design criteria for Cyanide (all forms) - uncomplexed, e.g., Potassium Cyanide.

c) Design criterion for Turbidity – Formazin is the source for Turbidity.

d) Design criteria for Chlorinated Acid Herbicides – should be supplied in the acid form of the target herbicide.

e) Design criteria for 2,4-D – should be at least half the butyl ester with the remainder in the acid form.

f) Design criteria for Diquat – Starting material is Diquat Dibromide Monohydrate as required in the method. All assigned values and reported values should be as Diquat.

g) Design criteria for Endothall – Starting material is Endothall Monohydrate as required in the method. All assigned values and reported values should be as Endothall.

h) Design criteria for Decachlorobiphenyl – The source of the Decachlorobiphenyl is one of the following Aroclors: 1016, 1221, 1232, 1242, 1248, 1254, 1260. The assigned value of the Decachlorobiphenyl is to be calculated by the provider from the concentration of the Aroclor used to prepare the sample according to Table 1 of the USEPA Method 508A.

i) Design criteria for Corrosivity (Langlier Index) – The assigned value is to be calculated based on the solution ionic strength as calculated from Total Filterable Residue.

14) Volatile Organic Compounds must contain all three Xylene isomers. The concentration range of o-Xylene and m&p-Xylene is 1-25 µg/L each.

# Attachment E: PTPEC Committee Action Item Summary – 2023/2024

Item	Task Description	Document Number	TNI Contact	Task Added	Start Date	Due Date	Complete Date	Comments
431	Discuss with IT Committee the need for LAMS updates to be communicated to the PTPEC.			10/31/19				2/17/21: Shawn to discuss with Mei Beth and Jerry.
437	Reach out to Sennet Kim and ANAB to confirm there is still an issue related to SCM FoPT table metals footnotes for fixed limits.			3/26/20	3/26/20			<ul> <li>2/17/21: On-going Shawn working with William to access data.</li> <li>4/21/22: Shawn to follow-up.</li> <li>Sennet has left A2LA.</li> <li>8/17/22: Shawn thinks this is still an issue. Need to look at this during evaluations. Fred said Nick Slawson is taking over as PT contact for A2LA.</li> </ul>

Item	Task Description	Document Number	TNI Contact	Task Added	Start Date	Due Date	Complete Date	Comments
455	Update SOP 4-107: FoPT Table Management	SOP 4-107	PTP SOP Subcommittee	2/19/21			11/29/23	<ul> <li>2/18/21: Need procedures to make non-ARA changes to the table?</li> <li>3/16/21: Received initial Policy Committee comments to review.</li> <li>4/21/22: PTPEC approved. Sent to Policy Committee.</li> <li>8/12/22: Policy sent comments to PTPEC. Add to agenda.</li> <li>10/28/22: Sent to PTP SOP Subcommittee. To be discussed in December.</li> <li>2/23: A few more changes are needed. Resubmitted to PT SOP Subcommittee.</li> <li>10/27/23: SOP completed, approved by PTPEC and sent to Policy Committee for review.</li> <li>11/29/23: SOP approved and posted. COMPLETE</li> </ul>

Item	Task Description	Document	TNI Contact	Task Addod	Start Date	Due Date	Complete	Comments
156	Undata SOR 4 101:	SOD 4 101	DTD SOD	Added	2/18/21		Date	2/18/21: Combined
430	Percommendation Evaluation	SOF 4-101	Subcommittee	2/10/21	2/10/21			workgroup established to
	and Calculation of Acceptance		Subcommittee					complete SOP
	Criteria and Applicable							3/18/21: workgroup met and
	Concentration Ranges for							SOP Subcommittee will send
	Proficiency Tests							final DRAFT to Chemistry
	Tronciency Tests							FOPT Subcommittee for
								examples
								Update 8/17/22: Examples
								requested from Chemistry
								FoPT Subcommittee that has
								not met. PTPEC needs to
								talk about when the next
								limit updates will occur.
								3/24/23: Examples have been
								added by Chemistry FoPT
								Subcommittee and
								resubmitted to the PT SOP
								Subcommittee.
								6/23/23: Make sure SOP 4-
								101 includes procedures for
								how data is received.
								11/29/23: Submitted to
								PTPEC for final vote.
								Vote will be in December.
								12/18/23: Approved by
								Committee and sent to
								Policy for review.
								,

Item	Task Description	Document	TNI Contact	Task	Start Date	Due Date	Complete	Comments
		Number		Added			Date	
458	Improve communication with			2/18/21	8/1/22			8/1/22: Discussed at Crystal
	non-TNI AB stakeholders.							City meeting.
								Need to help Advocacy
								update the White Paper to
								help reach out to other states.
								Ambassador program. Also
								need to include more non-
								NELAP ABs in the
								Executive and Expert
								committees. Outreach
								needed.
								10/28/22: Workgroup
								formed to update paper.
								3/24/23: Paper completed
								and sent to Advocacy
								Committee.

459	ARA: PFAS on DW table	Chemistry	12/1/20	May 2021	12/1/20: ARA sent to
		FoPT			Chemistry FoPT
		Subcommittee			Subcommittee
					2/18/21: Shawn has
					requested data.
					Subcommittee will start
					working on this after data is
					received.
					5/21/21: Data has been
					received. There may not be
					enough. Need to determine
					next steps.
					Update 8/17/22: Survey of
					labs is complete, and data
					needs to be looked at. Amy
					DeMarco will be new
					Subcommittee Chair.
					12/1/22: The Subcommittee
					Will start working in
					February 2023. $2/24/22$ , Degree sting man
					3/24/25: Requesting more
					DT Data from William
					P I Data from william.
					Submitted final
					recommendation to PTPEC
					Needs further discussion in
					December
					12/18/23: A motion was
					made by Tim to approve
					the undate to the Drinking
					Water table to include
					DEAS limits for 20
					r l'AS minis ioi 29 analytas as recommended
					analytes as recommended
					by the Chemistry FoP1
					Subcommittee and
					provided with the agenda
					to this meeting. The
					motion was seconded by
					Eric. Since Jack Denby is

Item	Task Description	Document Number	TNI Contact	Task Added	Start Date	Due Date	Complete Date	Comments
								on leave – super majority is 7/10. Motion passed.
460	Develop PT Program metrics			2/18/21	5/21/21			Update 8/17/22: Developed partially as Charter was updated. Need to formalize.
461	Finish update to Radiochemistry FoPT Table	- DW Rad FoPT		2/18/21			4/28/23	2/18/21: Table submitted to PTPEC. PTPEC waiting for SOP 4-101 to be complete before reviewing table. 4/21/22: Table footnotes need to be updated before PTPEC can vote. Shawn will make these updates. 11/22/22: Updates complete and approved by Committee. Being sent to NELAP AC and PT Providers for comment before effective date approved. 3/24/23: Vote for effective date. 4/28/23: Effective date changed to 11/1/23. Closed
462	Feasibility: Radiochemistry Uncertainty to PT Evaluations			2/18/21	2/22			Jan 2022: Discussed in San Antonio. Radiochemistry Expert Committee to submit recommendation. 7/21/22: Recommendation sent to PTPEC for review. 10/28/22: Recommendations to be reviewed in November. 11/22/22: Radiochemistry Expert Committee recommendation to be sent to ERA for comment.
463	Feasibility: Technology Based PTs			2/18/21				
464	Feasibility: Add Prep Methods on FoPT tables			2/18/21				

Item	Task Description	Document Number	TNI Contact	Task Added	Start Date	Due Date	Complete Date	Comments
465	Feasibility: Air and Emissions PTs			2/18/21				
470	Determine timing for update of FoPT limits.			7/21/22				Determine after completion of SOP 4-101.
471	Advocacy White Paper			1/11/23			4/28/23	Paper submitted.
472	DMR QA is requesting formal comments			1/11/23			2/24/23	Submitted.
473	State of Accreditation Update			4/28/23			Complete	The document was worked on during meeting and will be finalized by email and sent back to Lynn.
474	Ra-226 PTRL Issue – Respond			6/23/23	6/23/23		Complete	Stacie will prepare response and get feedback through email before sending to Annmarie.
475	Potentially develop better process to get data for FoPT table updates.			6/23/23				
476	Choose PTPA evaluator for upcoming evaluations.			10/27/23	10/27/23		10/27/23	Stacie will join Ilona to evaluate PTPAs.
477	TNI leadership and Sigma to meet to manage a historical data base for Sigma.			10/27/23				
478	Address 2 complaints regarding new Radiochemistry FoPT Limits (#48 and #49)		Stacie Ilona	11/29/23	11/29/23		12/18/23	12/18/23: Response approved by PTPEC and Bob Shannon and Kieth McCroan.
1				1	1	1		