	r Wastewater Training ng Education Units				
DEPARTMENT OF Request Date October 5, 2023					
State of Washington Course Title Pacific Northwest P	retreatment Workshop Course Location				
_Heathman Lodge 7801 NE Gr Start Date November 6, 2023 End Date November 8, 20	Teenwood Drive Vancouver, Washington 98662023Total Classroom Hours 20				
CEUs Requested (1 hour class time = 0.1 CEU) 2.0					
Course format: Classroom Correspondence	On- Conference X Recurring line				
Explain how this course meets the professional growt wastewater treatment plant or to manage the operatio treatment plant. Please see accompanying course	n and maintenance of a domestic wastewater				
How will attendance be monitored/verified? Registra	tion				
Contact Name Patrick Bryan	Company Western States Alliance				
Mailing address 8620 Holly Drive, Suite 250City EverettState WAPhone Number (559) 940-5270e-maiRequired Attachments:	Zip <u>98208</u> l <u>pbryan@pprc.org</u>				
Course Agenda with timeline – include start and	d end times, breaks & lunch				
Course Summary or Brochure w/course summa	ries				
Instructor Information – short biography and credentials or Brochure w/instructor bios					
Return completed form and required attachments to:	Department of Ecology Wastewater Operator Certification PO Box 47696 Olympia, WA 98504-7696				

Or email completed form and attachments to: <u>mailto:opcert@ecy.wa.gov</u>

Accommodation Requests:

To request ADA accommodation including materials in a format for the visually impaired, call Ecology at 360-407-6600. Persons with impaired hearing may call Washington Relay Service at 711. Persons with

OpCert Staff Use			
CEUs Course ID	Approval Date		
Expiration Date - Reviewed by speech disability may call TTY at 877-833-6341. ECY 040-201 (7/14)			

10/6/23

OESAC / CEU Committee P.O. Box 577 Canby, OR 97013-0577

Dear CEU Committee:

The Pacific Northwest Pretreatment Workshop continues to bring together municipal, state, and federal wastewater and pretreatment staff from cities in Oregon, Idaho, Washington, and Alaska this year at for its 30th annual workshop. Attendees are mostly municipal employees responsible for administering Industrial Pretreatment Programs under 40 CFR 403. Under this program, pretreatment staff administer and enforce industrial discharge permits, monitor industrial discharges, develop local limits and implement other programs as needed to protect the publicly owned treatment plants, collection system, and workers.

This year, the pretreatment workshop is applying for 2.0 Wastewater and Collection System CEU's with the Oregon Environmental Services Advisory Council (OESAC). The 2022 Pacific Northwest Pretreatment Workshop will be held in-person in Vancouver, WA. The following is a brief outline of the presentations for the 29th Annual Pacific Northwest Pretreatment Workshop and course timelines:

Monday, November 6, 2023:

01-EPA Update

A presentation on the status of EPA's pretreatment program from a national perspective. He will discuss the status of categorical pretreatment regulations as well as any new proposed regulations or changes to existing standards. Mr. Garcia will also provide insight on the direction of the program and oversight activities.

(1.0 Hour)

<u>02-How Pre-treatment Intersect and supports One Water Goals</u> Michael Simpson, Principal Environmental Engineer, Pre-Treatment Manager

A 2022 WRF Report detailed the evolution of the pretreatment program in the fifty plus years since the passing of the Clean Water Act in 1972. Increasingly pretreatment programs are exceeding the original goals of protecting POTW from pass-through or interference from pollutants; their focus now includes sustainability, community resilience, beneficial reuse, and one water. In this presentation, we will discussed LASAN shifting focus to include One Water, Environmental Justice, Economic Development, and other green initiatives in their pretreatment program planning. This presentation will outline how the LASAN's pretreatment program is driving sustainable water management and a one water future for the City of Los Angeles.

(1.0 Hour)

03-A Loaded Question: How do we develop mass-based local limits?

Elizabeth Toot-Levy, Geosyntec Consultants

Abstract: Concentration based local limits (whether they are based on uniform flow or contributory flow) are often preferred by local control authorities for ease of program management. However, many POTWs are finding that allocating local limits based on mass can results in more achievable local limits for industrial users that may struggle to meet a uniform concentration limit while still providing protection for the POTW. This presentation will review the federal pretreatment regulations and guidance as they relate to the development of local limits and walk through the calculation framework for developing mass-based allocations. The presentation will then provide case studies illustrating examples of where mass-based local limits have been developed and are currently being utilized.

(1.0 Hour)

04 EPA Enforcement Case Study, Industrial Pretreatment

Eric Martinson, Resident Agent in Charge Criminal Investigation Division, US EPA Portland, OR

Pacific Northwest Pretreatment Workshop 2023 Mr. Martinson will give a presentation on a plating shop that was discharging to an approved POTW in violation of pretreatment standards after employees tried to fool inspectors with non- functioning

equipment. The plating shop's owner also made multiple false statements in an attempt to illegally dispose of hazardous wastes as non-hazardous waste in order to save money.

05-PFAS Update and Compliance

Kevin Masterson,

The presentation will look at the latest information related to PFAS regulations, state and EPA, and how the water and wastewater industry is reacting. In an effort to address PFAS early on, some states are looking at PFAS limits for drinking water as well as land applied biosolids. We will also examine the potential impact of PFAS on the beneficial use of biosolids in agriculture and other reuse options based on the latest data and research. The presentation will review upcoming studies related to PFAS in biosolids and how to stay up-to-date on these efforts, and potential technologies that can address emerging contaminants such as PFAS.

06-NELAC - Benefits of field quality systems

John Mormon,

This constant state of change causes a need for continuous updates to lab analysis. Analytical methodologies available from both the USEPA and Department of Defense (DOD) can dictate PFAS sampling and reporting requirements for drinking water and wastewater facilities. In this presentation, Lindsay Boone, a PFAS expert and Technical Program Manager at Enthalpy Analytical will cover PFAS methodologies and how they can impact facilities and their permit requirements. Don't miss this informative presentation on PFAS that will help answer all the questions that make PFAS requirements feel like it's the wild, wild west...or is it?

(1.0 Hour)

07-Data Integrity Ethics

Silvia Labie, Statewide Pretreatment Lead Washington Department of Ecology Olympia, WA

A guidance for evaluating if an industry is covered under a categorical effluent guideline and how to incorporate this into a permit. This is a crucial part of a successful pretreatment program due to the risk to treatment plant interference or passthrough from some Categorical Users. (1.0 Hour)

08-Local Limits - Mass based limits

Jason Flowers, Geo Syntec

Traditional local limit development may not meet all of these needs, so flexibility and creativity are needed to protect the utility without imposing unnecessarily stringent limits. In this session, new

(1.0 Hour)

(1.0 Hour)

strategies for approaching local limit development will be presented, along with case studies on how the strategies have been used in communities. (1.0 Hour)

Tuesday, November 7, 2023:

<u>09- Legacy of a manufacturing facility and the unknown dangers to</u> pretreatment inspectors

Angela Walker, Brunswick - Glynn County Joint Water & Sewer Commission

Industrial manufacturing and the demands for products adds additional responsibilities to wastewater treatment personnel. On top of these additional responsibilities, the various types of water pollution from the waste released from various sectors like industry and agriculture has greatly contributed to the need for skilled pretreatment inspectors. Therefore, the proper treatment of wastewater before disseminating it into water bodies has become indispensable to maximize the quality and quantity of potable water. Water pollution generally results from human activity, and the pollutants released mostly come from industrial dumps, sewage leakages, oil spillages, heavy metals, animal wastes, chemical wastes, eroded sediments, deforestation, littering, fertilizers, herbicides, pesticides, etc.

(1.0 Hour)

<u>10 'PFAS Sampling and Analytical Considerations and the Next Frontier</u> Taryn McKnight, Eurofins

How to make an Industrial user survey work for your POTW. Will share guidance for managing a successful survey effort. This presentation will also include discussion of how to move forward after the POTW has performed the survey and generated findings.

(1.0 Hour)

11 State Updates / WA - OR - ID

Maia Hoffman & Terry Alder, State Pretreatment Coordinator State Pretreatment Coordinator Washington State Department of Ecology Idaho Depart of Environmental Quality

State pretreatment update

(1.0 Hour)

12 Clean Sampling

ALS

As changes occur in communities and their industries, changes may also need to occur with a utility's local limits to prevent pass-through and interference while still facilitating their community's economic development. Traditional local limit development may not meet all of these needs, so flexibility and

creativity are needed to protect the utility without imposing unnecessarily stringent limits. In this session, new strategies for approaching local limit development will be presented, along with case studies on how the strategies have been used in communities. The technical basis for the allocations and the negotiations with regulators and local industries will be discussed.

(1.0 Hour)

13 Sampling, Monitoring and Pretreatment Perfection

Morgan Crowell, SWIFT Comply

A present an overview of best practices for industrial wastewater sample collection using the ultraclean sampling method. How to prepare, clean sampling equipment and perform Low Level Metals Sampling using clean hands/dirty hands.

(1.0 Hour)

<u>14 Wipes</u>

Frank Dick

Will discuss how wastewater treatment plants and disposable waste loading into plant and share insight for developing a program for municipal agencies.

(1.0 Hour)

15 Table Topics

Tables will be set up with a facilitator who will lead the discussion on specific topics that attendees will participate in. The table topics include:

Pollution PreventionBest Management PracticesSite-Specific LimitsFlushable WipesLocal Limits DevelopmentExtra-Strength SurchargesIncentive Awards ProgramsHauled Waste Mercury Minimization Plans FOG Programs LaboratoryIssues Non-Discharging CIUs

(2.0 Hour)

Wednesday, November 8, 2023:

16 PFAS Communicating about PFAS While Maintaining Public Trust Libby Barg Bakke

In an effort to address PFAS early on, some states are looking at PFAS limits for drinking water as well as land applied biosolids. We will also examine the potential impact of PFAS on the beneficial use of biosolids in agriculture and other reuse options based on the latest data and research. Finally, the webinar will review upcoming studies related to PFAS in biosolids and how to stay upto-date on these efforts, and potential technologies that can address emerging contaminants such as PFAS

(1.0 Hour)

18 PFAS and Emerging Pollutants

David James, Texas

45 years' experience providing environmental technical and compliance assistance to public and private entities, specializing in developing and implementation of SSO and FOG abatement and pollution prevention programs, 26 years with Texas Commission on Environmental Quality, 12 years as WWTP O & M Services, BS and MS, Civil Engineering, Texas A & M. Texas Class A Wastewater Operator, life time member of the American Water Works Association and the Water Environment Federation

(1.0 Hour)

<u>19 EcoBiz</u>

Fran Gilliand, Oregon's EcoBiz

Program and How Green Business Certification Programs Can Work with Pretreatment Programs.

(1.0 Hour)

20 Amalgam Waste Management

Trestan Fairweather

Trestan Fairweather is currently an Environmental Compliance Inspector in the Dental/Admin group in IWMD (Industrial Waste Management Division). He graduated from California State Polytechnic University, Pomona with his degree in Botany. Trestan has been with the city of Los Angeles for approximately 2 years now and is ultimately an environmentalist. Trestan makes efforts to make sure dental offices are in compliance with their permits, and make sure that they understand all the discharges to the sewer system their office generates that may cause harm to our oceans and streams. In his spare time, Trestan likes to take up gardening and take long hikes in nature with his family and 2 dogs Apollo and Louie.

(1.0 Hour)

It is at this time that the Pacific Northwest Pretreatment Workshop Planning Committee would like to ask that you consider the 2023 Pacific Northwest Pretreatment Workshop eligibility for 2.0 CEU's. We are offering 20 hours of instruction and have enclosed paid on line;

 10.0 Hours
 \$ 75

 10.0 Hours (@\$10/hr)
 \$ 100

 \$ 175

If there are any questions about the Pacific Northwest Pretreatment Workshop, please contact Patrick Bryan at (559) 940-5270 or at pbryan@pprc.org. Thank you again.

Sincerely,

Patríck Bryan

Patrick Bryan, PNPW Planning Committee

Attached: Workshop Agenda Speaker Biography (separate PDFs)

Workshop Agenda (subject to change)

	Monday - November 6, 2023		Monday - November 6, 2023 Tuesday - November 7, 2023			Wednesday - November 8, 2023		
Time	Sect.	Session Title	Time	Sect.	Session Title	Time	Sect.	Session Title
8:00 - 8:15		Welcome, Opening Announcements	8:00 - 8:15		Opening Announcements	8:00 - 8:15		Opening Announcements
8:15 - 9:00	1	<u>EPA Update</u> <u>US Environmental Protection Agency Representative</u>	8:15 - 9:00	9	TOPIC TBD Angela Walker, Brunswick - Glynn County Joint Water & Sewer Commission	8:15 - 9:15	17	PFAS Communicating about PFAS While Maintaining Public Trust Libby Barg Bakke and
9:00 - 10:00	2	How Pre-treatment Intersect and supports One Water Goals Michael Simpson, Principal Environmental Engineer, Pre-Treatment Manager	9:00 - 10:00	10	'PFAS Sampling and Analytical Considerations and the Next Frontier Taryn McKnight, Eurofins	9:15 - 10:00	18	<u>PFAS and Emerging</u> <u>Pollutants</u> David James
10:00 - 10:15		BREAK	10:00 - 10:15		BREAK	10:00 - 10:15		BREAK
10:15 - 11:00	3	A Loaded Question: How do we develop mass-based local limits? Elizabeth Toot-Levy, Geo Syntec Consultants	10:15 - 11:00	11	State Updates / WA - OR – ID Maia Hoffman, WA Department of Ecology, Genet B, Terry Alber	10:15 - 11:00	19	EcoBiz Fran Gilliand
11:00 - 12:00	4	POTW Criminal Case Study Eric Martenson, EPA Criminal Investigation Division	11:00 - 12:00	12	Clean Sampling ALS	11:00 - 12:00	20	Amalgam Waste Management Trestan Fairweather



12:00 - 1:00	LUNCH	12:00 - 1:00		LUNCH	12:00 - 12:15	Workshop Wrap-Up
1:00 - 2:00 5	PFAS Update Kevin Masterson TBD	1:00 - 2:00	13	Sampling, Monitoring and Pretreatment Perfection Morgan Crowell, SWIFT Comply		
2:00 - 3:00 6	NELAC - Benefits of field quality systems John Mormon TBD	2:00 - 3:00	14	Wipes Frank Dick		
3:00 - 3:15	BREAK	3:00 - 3:15		BREAK		
3:15 - 4:00 7	Data Integrity Ethics Silvia Labie	3:15 - 4:15	15	Round Table Discussion Table Topics Announced at Workshop Topics FOG, PFAS, MMP, Dental, Emerging Pollutants, Wipes, Food trucks, Incentive programs		
4:00 - 5:00 8	Topic, TBD Jason Flowers, Geo Syntec	4:15 - 5:00	16	Round Table Discussion Table Topics Continued		

Pac	ific Northwest Pretreatment Workshop November 6, 7 & 8, 2023	A A SC A A A A A A A A A A A A A A A A A
Presentation PFAS While Maintaining Public Trust, In an effort to address PFAS early on, some states are looking at PFAS limit drinking water as well as land applied biosolids. We will also examine the potential impact of PFAS on the beneficial use of biosolids in agriculture at other reuse options based on the latest data and research. Finally, the webin will review upcoming studies related to PFAS in biosolids and how to stay date on these efforts, and potential technologies that can address emerging contaminants such as PFAS.		
Name & Title	Libby Barg Bakke Technology Integration Lead	
Employer	Carollo Engineers	
Address	3150 Bristol St. Suite 500, Costa Mesa, CA 92626	
Phone & Fax	714-593-5100	
e-mail Address	libby.bakke@consoreng.com	
# years in field	10	
	Professional Association Memberships	
Water Environment Federation (WEF); WEF Residuals and Biosolids Committee; WEF RBC Solid Separation Subcommittee (Past Chair); WEF RBC Bioenergy Subcommittee		



l		
Education (degree)	School Name	Year
BS – Civil and Env. Engineering	Univ. of California, Davis	1999
Work History	Company	Year
Other E	Biographical Information (Interests, Hobbies	s, etc.)
Water for People; adopting	difficult-to-place/senior dogs	
	west Pretreatment ber 6, 7 & 8, 2023 Workshop	A A A A A A A A A A A A A A A A A A A

Biographical Information

		1
Name & Title		
	Eric Martenson	
	Resident Agent in Charge	
	EPA-CID will give a presentation on a plating shop that was discharging	
	in violation of pretreatment standards after employees tried to fool inspe functioning equipment. The plating shop's owner also made multiple fal	
	attempt to illegally dispose of hazardous wastes as non-hazardous waste	
Employer	Environmental Protection Agency – Criminal Investigation	Division
Address	Portland, OR	
Phone & Fax	503 326 3275	
e-mail Address	Martenson.eric@epa,gov	
# years in field	14	
	Professional Association Memberships	
	*	
		X 7
Education (deg	ree) School Name	Year

	orthwest Pretreatment Workshop mber 6, 7 & 8, 2023	Excellence in Pretreatment Training
B.S.	US Coast Guard Academy	1997
Work History	Company	Year
	US Coast Guard – Active Duty	1993-2002
	US Coast Guard – Reserve	2003-Present
	US EPA	2002-Present
Othe	r Biographical Information (Interests, Hobbies,	etc.)
- Youth Sports Coa	ach	
- Active Hiker and	Skier	
- Enjoys walking his three dogs		
	-	

Education (degree)	School Name	Year
None	Thomas Edison University	2014
	Northern Arizona University	2012
Work History	Company	Year
	Clean Water Services	2016 - Present
	City of Maupin	2014
	Grand Canyon National Park- AZ	2011
	west Pretreatment Workshop ber 12, 13, and 14, 2022	R R R R R R R R R R R R R R

	Kellogg Brown and Root- Iraq		2010
	City of Azle-Texas		2008
Other Bi	ographical Information (Interests, Hobb	oies, etc.)
	vest Pretreatment Workshop ember 12 -14, 2022	2 × 500g	CE CONTROL TRAINING CE CONTROL TRAINING ACCEllence in Pretreatment Training
Pre	sentation and Biographical In	forma	tion

Presentation Title & Abstract:	This pres	Implementing and Updating Enforcement Response Plans This presentation will focus on helping sewer agency's pretreatment staff to craft an enforceable and legally defensible enforcement response plan.				
Name & Title	Al Garcia	Al Garcia – Pretreatment Coordinator				
Employer	EPA Reg	EPA Region 8				
Address	1595 Wy	nkoop				
Phone & Fax	303.312.	6382				
e-mail Address	garcia.al	@epa.gov				
# years in field	24					
		Professional Association Memberships				
Education (de	egree)	School Name	Year			
Bachelor of Science	ce degree	U. of Northern Colorado				
Work Histe	ory	Company	Year			
		Littleton Englewood Pretreatment Program	1995 to 2007			
		EPA Region 8 Pretreatment Coordinator	2008 to present			
	Other Bi	ographical Information (Interests, Hobbies, et	ic.)			
Music, Mountain I	biking, sno	wboarding, other sports and life activities where	you crash hard			



Presentation and Biographical Information

Presentation Title & Abstract:	PFAS Sampling and Analytical Considerations and the Next Frontier The chemistry of PFAS is unique and challenging and the regulatory approach to addressing PFAS is rapidly evolving. There is currently no consensus on a best analytical method for all matrices or all PFAS, but a multitude of varying approaches. This soup of non-standard methods and emerging analytical approaches has left stakeholders with the challenging job of navigating the options that will best meet their objectives. In addition to the analytical challenges, with their widespread distribution and target detection limits in parts per trillion (ppt), there is heightened concern regarding the potential for sample contamination during sampling. This presentation will begin with a look at some of the regulatory drivers and then review what is being utilized today, from standard and draft methods to user-defined techniques, to comply with these regulations. This discussion will also include available guidance and research studies addressing the concerns around sample collection protocols.
Name & Title	Taryn McKnight, PFAS Practice Leader
Employer	Eurofins
Address	880 Riverside Parkway, West Sacramento, CA 95630
Phone & Fax	916-347-6815
e-mail Address	Taryn.mcknight@et.eurofinsus.com



# years in field 2	22	
	Professional Association Membe	erships
A&WMA, NGWA,	ASTM, ITRC	
Education (deg	ree) School Name	Year
AA Biology	Mesa College	2000
Work Histor	y Company	Year

Other Bi	ographical Information (Interests, Hobbies, etc.)
I taught myself how to quilt during the first few months of the pandemic when we couldn't leave our houses, something I don't think I would have ever found the time to do until I was retired!		



Presentation and Biographical Information

Presentation Title & Abstract:	You Won't Get There without us! How Pre-treatment Intersect and supports One Water Goals A 2022 WRF Report detailed the evolution of the pretreatment program in the fifty plus years since the passing of the Clean Water Act in 1972. Increasingly pretreatment programs are exceeding the original goals of protecting POTW from pass-through or interference from pollutants; their focus now includes sustainability, community resilience, beneficial reuse, and one water. In this presentation, we will discussed LASAN shifting focus to include One Water, Environmental Justice, Economic Development, and other green initiatives in their pretreatment program planning. This presentation will outline how the LASAN's pretreatment program is driving sustainable water management and a one water future for the City of Los Angeles.
Name & Title	Michael Simpson, Principal Environmental Engineer, Pre-Treatment Manager
teEmployer	LASAN and Environment
Address	2714 Media Center Drive, Los Angeles Ca



Phone & Fax	323-342-6047, 3233426111		
e-mail Address	Michael.Simpson@lacity.org		
# years in field	25 yrs		
		Professional Association Memberships	
California Water I	Environme	ntal Association	
National Society of	of Professio	onal Engineer	
Board Member for	r National	Stewardship Action Foundation	
National Society of	of Black Ei	ngineers	
Education (de	egree)	School Name	Year
Civil Engineering		Cal-Poly Pomona	1984
Work Hist	orv	Company	Year
Pre-Treatment Ma	·	LASAN	25 yrs
	Other B	iographical Information (Interests, Hobl	pies, etc.)
Interest in garden	ing, jazz m	usic, circular economy and biomimicry.	



Presentation and Biographical Information

Presentation Title & Abstract:	1. Wasl	hington state pretreatment update		
Name & Title	Maia Hoffr	nan, P.E., Statewide Pretreatment Lead	1	
Employer	Washington	n State Department of Ecology		
Address	•	15700 Dayton Ave N, Shoreline, WA 98133 (physical) PO Box 330316, Shoreline, WA 98133-9716 (mailing)		
Phone & Fax	(425) 507-5	(425) 507-5681		
e-mail Address	maia.hoffm	maia.hoffman@ecy.wa.gov		
# years in field	8			
	P	rofessional Association Membership	S	
Education (de	egree)	School Name	Year	
Bachelor of Science Chemical Enginee	·	University of Pittsburgh	2014	



Work History	Company	Year		
Environmental Engineer	General Motors	2015-2017		
Environmental Engineer (municipal facility permit manager (2 years); pretreatment (4 years))	Ecology	2017-present		
Other Bi	ographical Information (Interests, Hobbies, etc.	.)		
Enjoys hiking and skiing in the mountains, gardening, and spending time with family				

Presentation and Biographical Information



Presentation Title & Abstract:	•	EcoBiz Program and How Green Business Certif k with Pretreatment Programs.	ication Programs	
Name & Title	Frances C	Gilliland, Associate Director		
Employer	Pacific N	orthwest Pollution Prevention Resource Center		
Address	8620 Hol	ly Drive, Suite 250, Everett, WA 98208		
Phone & Fax	(805) 705	(805) 705-1686		
e-mail Address	fgilliland	fgilliland@pprc.org		
# years in field	30+	30+		
		Professional Association Memberships		
Certified TRUE Z	ero Waste	Advisor		
Education (de	egree)	School Name	Year	
Bachelors degree i Environmental Sci		University of California, Santa Barbara		
Work History		Company	Year	
Air Quality Spe	ecialist	Santa Barbara County Air Pollution Control District, Santa Barbara, CA		



Principal/Owner	Gilliland Environmental		
Program Director	Green Business Program of Santa Barbara County		
Associate Director	Pacific Northwest Pollution Prevention Resource Center		
Other Biographical Information (Interests, Hobbies, etc.)			
Hiking, traveling, cooking, spending time with family, and volunteering in my community as a Rotarian.			



Presentation and Biographical Information

Presentation Title & Abstract:	POTW Criminal Case Study			
Name & Title	Eric Martenson			
Employer	EPA Criminal Investigation Division			
Address	805 SW Broadway, Portland, OR 97205			
Phone & Fax	503 326 3275	503 326 3275		
e-mail Address	martenson.eric@epa.gov			
# years in field	22			
	Professional Association Memberships			
Education (de	egree) School Name	Year		
B.S. Government	US Coast Guard Academy	1997		



Work History	Company	Year
Officer	US Coast Guard	1997-2002
Reserve Officer	US Coast Guard	2003-2020
Special Agent	US EPA	2002-Present
Other Bi	ographical Information (Interests, Hobbies, etc.	.)
Enjoys football season, grilli	ng, skiing, and fly fishing.	

Presentation and Biographical Information



Presentation	A Loaded Question: How do we develop mass-based local limits?			
Title &	Abstract: Concentration based local limits (whether they are based on uniform			
Abstract:	flow or contributory flow) are often preferred by local control authorities for ease of program management. However, many POTWs are finding that allocating local limits based on mass can results in more achievable local limits for industrial users that may struggle to meet a uniform concentration limit while still providing protection for the POTW. This presentation will review the federal pretreatment regulations and guidance as they relate to the development of local limits and walk through the calculation framework for developing mass- based allocations. The presentation will then provide case studies illustrating examples of where mass-based local limits have been developed and are currently being utilized.			
Name & Title	Elizabeth Toot-Levy			
Employer	Geosyntec Consultants			
Address	500 West Wilson Bridge, Columbus, Ohio 43085			
Phone & Fax	440-227-	440-227-9181 (cell)		
e-mail Address	etootlevy	etootlevy@geosyntec.com		
# years in field	22			
	Professional Association Memberships			
Ohio Water Enviro	onment As	sociation (OWEA)		
Appointed Chair o	Appointed Chair of OWEA Government and Regulatory Affairs Committee			
National Associati	National Association of Clean Water Agencies (NACWA)			
Education (de	egree)	School Name	Year	
MA Environmenta				



BA Water Resources Biology and Environmental	Heidelberg University	2001
Science		
Work History	Company	Year
Scientist	Geosyntec Consultants	2015 - Present
Environmental Specialist	Northeast Ohio Regional Sewer District	2001 - 2015

Other Biographical Information (Interests, Hobbies, etc.)

Elizabeth (Beth) Toot-Levy is a senior scientist with Geosyntec Consultants where her practice focuses on Clean Water Act Compliance. She began her Industrial Pretreatment Program career in 2001 working as an Investigator in the Water Quality and Industrial Surveillance at the Northeast Ohio Regional Sewer District, the largest wastewater utility in the state of Ohio. In addition to conducting annual inspections at the numerous industrial users, she was also responsible for developing and implementing the District's mercury program addressing nearly 500 dental facilities, 10 hospitals, numerous schools, and households that had mercury containing devices. After 14 years at the District, she joined Geosyntec and has been instrumental in the growth of Geosyntec's industrial pretreatment practices. She works with municipal clients to develop or update their pretreatment programs, from revising sewer use ordinances to calculating local limits and developing industrial user permitting programs. Recently she has been assisting municipalities to incorporate growing industries such as EV batteries and microchip manufacturers into their programs. She also supports Geosyntec's industrial clients with compliance with municipal pretreatment programs.

Beth has recently been awarded the state of Ohio's F.H.Waring award for her contributions to the industrial pretreatment programs in Ohio.



Presentation and Biographical Information

Title : pretreatment inspectors Abstract:	
 Industrial manufacturing and the demands for products adds addit responsibilities to wastewater treatment personnel. On top of these additional responsibilities, the various types of water pollution from waste released from various sectors like industry and agriculture h greatly contributed to the need for skilled pretreatment inspectors. Therefore, the proper treatment of wastewater before disseminatin water bodies has become indispensable to maximize the quality an quantity of potable water. Water pollution generally results from h activity, and the pollutants released mostly come from industrial du sewage leakages, oil spillages, heavy metals, animal wastes, chemic wastes, eroded sediments, deforestation, littering, fertilizers, herbid pesticides, <i>etc.</i> One of these industrial manufacturing facilities in Georgia has a lon history of contributing complicated waste streams to the sewage to plant. This facility burned earlier this year and some interesting de the environmental impacts of this one facility has left some questio concerning the safety of both pretreatment inspectors and the publ talk will cover this facility and take a look at a few other incidents of problems with this type of facility and the wastewater generated from these facilities. 	e om the has ng it into id uman umps, cal cides, reatment tails of ons lic. This of major



	1			
Name & Title	Angela G Walker / Pretreatment Compliance Coordinator			
Employer	Brunswick-Glynn Joint Water & Sewer Commission			
Address	1703 Gloucester Street, Brunswick, GA 31520			
Phone & Fax	912-217-1111 / 912-335-3501			
e-mail Address	awalker@bgjwsc.org			
# years in field	25 +			
		Professional Association Memberships		
Pacific Northwest Pretreatment Workshop Committee				
Georgia Association of Water Professional- Women's Making Waves Committee				
WEFTEC Pretreatment Committee				
Education (degree)		School Name	Year	
Bach. Of Psychology		Liberty University, Virginia	2016	
Juris master's in international law		Liberty University, Virginia	2018	
Work History		Company	Year	
Pretreatment Compliance Coordinator		BGJWSC	2014-Present	
Other Biographical Information (Interests, Hobbies, etc.)				
Leniov visiting wi	1 0	ily and spending time in nature. I spend som	e of my off hours selling	
Tenjoy visiting wi	th my fam	ity and spending time in nature. I spend som	e of my off flours senting	
<u>_</u>	-	us festivals and online.	e of my off hours sening	



I am currently studying to take my real estate license in Georgia. I love learning about most anything. I am an environmentalist at heart, so I work to preserve our water sources.