



# INFORMATION-EXCHANGE WEBINAR

An American Ground Water Trust program  
SOLUTIONS TO GROUNDWATER CONTAMINATION



## PFAS AND RELATED COMPOUNDS

**Wednesday, June 24, 2020**

MORNING SESSION 9:00 TO 12:10 – AFTERNOON SESSION 12:50 TO 4:00 (Pacific daylight time)

“110 million Americans have some PFAS in their drinking water”

(Estimate from EWG—Environmental Work Group)

### What about water supplies in the Northwest? – Washington, Oregon, Idaho, British Columbia?

This program has been held in workshop format in Cincinnati, OH, Grand Rapids, MI, Sacramento, Montclair, Fresno and Bakersfield, CA, Pittsburgh, PA, Mount Laurel, NJ, Phoenix, AZ, Albuquerque, NM, Westford, MA and Tallahassee, FL.

The American Ground Water Trust (AGWT) is a 501(c)(3) non-profit education organization

### CONTINUING EDUCATION

Approved for WA Waterworks Operators - Course ID #A2899, .6 CEUs

Application pending approval for WA Wastewater Operators

Approved for ID Drinking Water and Wastewater Operators – Course #WWP200510939, .6 CEUs

Application pending approval for OR Water and Wastewater Operators

For CE Requirement information for this webinar, please go to our website, [www.agwt.org/events](http://www.agwt.org/events)



“One of the most seminal public health challenges for the next decades.”

Patrick Breyse, Director of the U.S. Centers for Disease Control’s National Centre for Environmental Health, describing the contamination of drinking water supplies by AFFF firefighting foam.

Many states are confronting contamination of groundwater and surface water from so-called emerging contaminants. [The contaminants have been there a long time – it is our awareness that is emerging!] There are technical, regulatory and legal challenges for communities responding to contamination. Water providers are faced with an urgent need to deal with concerns about health issues, regulations, property values, remediation options and infrastructure costs. The webinar will provide objective information to facilitate water providers, elected officials, citizens and community leaders with policy, planning and management decisions.

Over 5,000 PFAS (per- and polyfluorinated alkyl substances) occur in the world today and many PFAS compounds transform into highly persistent perfluorinated chemicals in the environment. The compounds are connected to several cancers, liver, kidney and reproductive disorders and other health effects.



AGWT Events Page

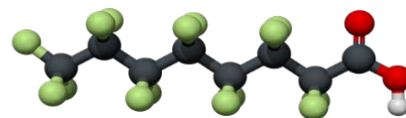
Webinar participants will learn about the chemistry background, sampling & testing protocols, treatment technologies, cost recovery options and the challenges of environmental persistence of contamination. Presenters will provide technical solutions for treatment and remediation and will discuss regulatory and legal solutions to protecting drinking water integrity and consider ways to find funding for treatment or new supply.



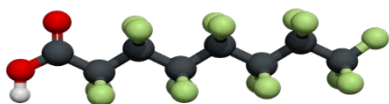
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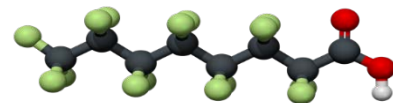
### Sponsors of American Ground Water Trust PFAS Education Programs



To become a sponsor, call 800 423 7748 or visit our website for this webinar at [www.agwt.org/events](http://www.agwt.org/events).



## Webinar Details



8:55am - Log-in available – code provided via e-mail to registered participants.

**Webinar morning session - 9:00 am (Pacific Daylight Time)**

**Wednesday June 24<sup>th</sup>**

### **THE DEPTH AND EXTENT OF PFAS IMPACTS ON WATER RESOURCES**

Andrew Stone, Executive Director, American Ground Water Trust, Concord, NH

### **THE CHEMISTRY OF PFAS COMPOUNDS AND THE EXTENT OF THEIR USE THROUGHOUT THE US**

Elizabeth Denly, PFAS Group Program Director and Quality Assurance & Chemistry Director, TRC Companies, Lowell, MA

### **PFAS – LESSONS FROM 15+ YEARS OF ISOTOPE-DILUTION PFAS TESTING ON THOUSANDS OF WATER, SOIL AND TISSUE SAMPLES**

Bharat Chandramouli, PhD, Product Manager and Senior Scientist, SGS AXYS Analytical Services Ltd., Sidney, BC, Canada

10-minute break

### **EQUIPMENT AND MEDIA SOLUTIONS FOR REMOVING PFAS FROM WATER**

Kelsey Hakes, Business Development Engineer, AqueoUS Vets, Redding, CA

### **USE OF ADVANCED TECHNOLOGIES TO MITIGATE THE IMPACT OF PFAS ON WATER SUPPLIES**

Dale Wynkoop, Global Director of Sales & Applications, ECT2, (Emerging Compounds Treatment Technologies), Dublin, OH

### **AIR EMISSIONS/DEPOSITION AS A POTENTIAL PATHWAY TO GROUNDWATER CONTAMINATION**

Stephen Zemba, PhD, PE, Project Director, Sanborn Head Associates, Concord, NH

40-minute break for lunch - 12:10pm to 12:50pm

12:45pm - Log-in available for afternoon session – code provided via e-mail to registered participants

**Webinar afternoon session – 12:50pm to 4:00pm**

**Wednesday June 24<sup>th</sup>**

### **CHAIN PFAS REMOVAL WITH SINGLE-USE SELECTIVE ION EXCHANGE RESIN**

Cathy Swanson, Groundwater Remediation Specialist, Purolite Corporation, Fullerton, CA

### **COLLOIDAL ACTIVATED CARBON FOR IN SITU REMEDIATION OF PFAS: A REVIEW OF MULTIPLE CASE STUDIES**

Andrew Punsoni, Northwest District Technical Manager, REGENESIS, Portland, OR

### **CARBON AND RESIN CASE STUDIES FOR REMOVAL OF PFAS AND OTHER CONTAMINANTS FROM GROUNDWATER**

Dave Kempisty, Ph.D., P.E., Business Development Manager, Evoqua Water Technologies LLC, Colorado Springs, CO

10-minute break

### **CASE STUDY OF INVESTIGATIONS AT THE ISSAQUAH PFAS SITE**

Priscilla Tomlinson, Toxicologist, Washington State Department of Ecology, Bellevue, WA

### **PFAS: AN ENGINEERED APPROACH FOR DRILLING, SITE EVALUATION, AND THE SELECTION OF TREATMENT SOLUTIONS FOR CONTAMINATED GROUNDWATER SOURCES**

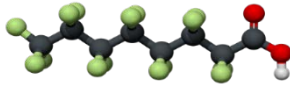
Jim Benjamin, Area Manager, Layne Christensen, Mesa, AZ

### **POLLUTER SHOULD PAY: LITIGATION AS A MEANS TO RECOVER COSTS**

Richard Head, JD, Attorney, SL Environmental Law Group PC, San Francisco, CA

**End of Webinar – 4:00pm**





# Northwest PFAS Webinar

## Wednesday, June 24, 2020

### Registration Form



Registration and payment can be made on-line at [www.agwt.org/events](http://www.agwt.org/events)

**Morning session (9:00am to 12:10pm) and Afternoon session (12:50pm to 4:00pm)** Pacific Daylight Time

General Registration US \$200

Continuing Education Units (check if applying for credit)

**Please send in separate registrations for each person participating in the webinar.  
Instructions for webinar log-in will be sent on receipt of registration.**

All registrants will receive pdf copies of the PowerPoint slides used by presenters during the webinar.  
These pdf files contain detailed information about the presentation topics and are for the personal use of webinar registrants.  
They will be sent by e-mail the day following the webinar.

**Payment Information:**

CHECK [payable to: AGWT]  AMEX/VISA/MC/Discover  PO # \_\_\_\_\_

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Attendee Email\* \_\_\_\_\_

\*The CEU verification process requires that participants are able to receive e-mails during the webinar. For participants requiring CEUs, the e-mail address listed above has to be an e-mail that can receive messages during the webinar. A requirement for CEU credit will be e-mail responses to 6 questions during the webinar.

Position/ Job Title \_\_\_\_\_

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**REGISTER ONLINE:**  
[agwt.org/events](http://agwt.org/events)

**MAIL TO:**  
American Ground Water Trust  
50 Pleasant Street, Suite 2  
Concord, NH 03301-4073

**FAX:** (603) 228-6557

**TEL:** (603) 228-5444

**? QUESTIONS:**  
(800) 423-7748  
9:00-4:00pm (Eastern Time)

### AMERICAN GROUND WATER TRUST

The AGWT was formed in 1986 as a non-profit education organization with the mission of promoting interest and awareness in groundwater issues. The AGWT's conference, workshop and webinar programs and educational materials:



- ◆ Communicate the environmental and economic value of groundwater
- ◆ Showcase groundwater science and technology solutions
- ◆ Increase citizen, community and decision-maker awareness
- ◆ Facilitate stakeholder participation in water resource decisions
- ◆ Promote efficient and effective groundwater management