## **PNCWA Bioenergy and Co-Digestion Webinar**

Presentation Title	EPA RFS set rule overview and impact on WRRFs in the PNW
Presenter	Josh Newman
Title	Biogas Utilization Program Manager
Employer	City of Portland Bureau of Environmental Services
Address	5001 N. Columbia Boulevard, Portland, OR 97203-2098
Phone	503.823.2438
Summary of Lesson Content	<ol> <li>Biogas environmental attribute credit world an overview</li> <li>General description of the Federal Renewable Fuel</li> <li>Standard</li> <li>EPA's 2022 Proposed Set Rule and Other Changes (outline)</li> <li>Proposed Co-digestion apportionment methodology</li> <li>Proposed eRIN program</li> <li>Summary of opportunities for WRRFs</li> </ol>
Bio	Josh is an Environmental Engineer with 30+ years experience in the wastewater field working in both public and private sectors. Over the last decade, Josh's work has focused on biogas utilization, the associated technology, and environmental attribute policy and market analysis. He is currently the Biogas Utilization Program Manager for the Portland Bureau of Environmental Services.

	SSO pretreatment
Presentation Title	
Presenter	Derya Dursun
	Senior Associate/ Applied Research Lead for Residuals
Title	and Biosolids Practice Group
Employer	Hazen and Sawyer
Address	11260 El Camino Real Suite:102 San Diego, CA 92130
Phone	858-7645529
Summary of Lesson Content	
	Overview of project objectives - definition of Source separated organics (SSO)
	<ul><li>2. Review of existing technologies for SSO pretreatment</li><li>3. Evaluation of existing technologies and management strategies</li></ul>
	4. Summary on considerations for SSO pretreatment
Bio	Dr. Dursun is a Environmental Engineer over 15 years of experience. She has received her PhD in 2007 on conditioning and dewatering of biosolids and since then she has been involved in projects ranging from process models to technology evaluations. Prior to joining Hazen, she has also worked as an Associate Professor and involved several research projects on biosolids management. She is currently involved in biosolids and energy master plans, technology evaluations, and optimization studies. She has over 50 publications in conferences, and peer reviewed journals. She has
	recently completed SSO pretreatment project and actively involved in three research projects with the Water Research Foundation.

	Eugene/Springfield MWMC overview of recent RNG
Presentation Title	facility and operational production
Presenter	Mark Van Eeckhout
Title Employer Address Phone Summary of Lesson Content	Civil Engineer City of Springfield (MWMC) 410 River Ave. Eugene, OR 97401 541-682-8683  1. Overview of MWMC case for RNG vs. CHP 2. Description of design process and equipment selection 3. Discussion on partnering with local gas utility 4. Construction and start up challenges 5. Ongoing Operations
Bio	Mark Van Eeckhout is a Civil Engineer with the Metropolitan Wastewater Management Commission (MWMC) and the City of Springfield Environmental Services Division. He serves as a project manager for the MWMC, overseeing capital projects including the construction of Renewable Natural Gas facilities. He has worked for the City of Springfield since 2013, prior to which he worked for Los Alamos National Labs as an environmental engineer. Mr. Van Eeckhout holds Bachelor's (1996) and Master's (2002) degrees in Civil/Water Resource Engineering from University of New Mexico (UNM) and a Master's in Business Administration from Anderson School of Business-UNM (2006).

Dracantation Title	Integrated bioenergy and biosolids master planning
Presentation Title	Dwwn Liels
Presenter	Bryan Lisk
Title	Associate Vice President
Employer	Hazen and Sawyer
Address	4011 Westchase Blvd. Raleigh NC 27607
Phone	919-349-6529
Summary of Lesson Content	<ol> <li>Overview industry trends supporting the need for integrated biosolids and bioenergy recovery planning</li> <li>Integrated planning effective strategies</li> <li>Digital solutions used to navigate changing biosoids and bioenergy recovery conditions</li> <li>Case studies and a summary of opportunities for WWRF's to consider</li> </ol>
Bio	Bryan Lisk is Hazen and Sawyer's national energy management services leader with 25 years of energy management and design experience in the water and wastewater field. Bryan is involved in many aspects of energy management including energy strategic planning, energy program development, bioenergy recovery, and energy data management and visualization. Bryan specializes in renewable and non-renewable onsite power generation systems, energy procurement services and power distribution systems. Bryan is also a Certified Energy Manager by the Association of Energy Engineers.