June 2021 – CSUR Technical Webinar

Methane Emissions Management: Updated Regulations, Technologies, and Funding Programs

To continue with the topic of Environment and the associated Methane Emission Reduction mandate, CSUR invited two local experts who are familiar with regional & national regulations, initiatives and programs for a technical session to discuss various aspects within this space. With the session's objectives of diving deeper into the specific regulations, detection, measurement & reporting requirements, and funding programs available to offset the additional burden on the operators, the featured presenters were Milos Krnjaja (Senior Technical Advisor, Alberta Energy Regulator – AER) and Jackson Hegland (Executive Director, Methane Emissions Leadership Alliance – MELA). While the conversations around emissions continue to evolve, it is comforting to note that operators and industry professionals can call on experts like Milos and Jackson to help understand, investigate possible solutions and remain compliant with updated regulations using appropriate & suitable technologies.

Milos' presentation focused on the updated regulations here in Alberta, including changes within Directives 17 & 60 (Section 8), and recently published Manuals 015 & 016. While Milos highlighted the most current regulations and recent changes, he encouraged the audience to periodically visit the AER Website to stay abreast of ongoing changes and updates. The speaker also delved into the various emission categories (venting vs. fugitive, routine vs. non-routine and planned vs. unplanned) and the updated limits, allowances & reporting timelines. He also provided some context regarding AER's surveillance and compliance systems, including their expanded inspection program and incorporation / consideration / acceptance of emerging surveillance & measurement technologies.

Jackson's talk revolved around managing the overall methane emissions process from an organizational perspective and the various converging factors that are driving the actions. He identified several factors that are now deeply rooted (and expected) for organizations to adhere to: Investor Expectations, Policy & Regulations, Social Pressure (ESG), Industry Readiness and Technology Availability. Having these and other factors built into the corporate culture are congruent with being able to unlock the capital required for companies to conduct their businesses. He also provided solutions and technologies, both current & emerging, available for operators to achieve their emission reduction & measurement targets. Finally, Jackson went through various Federal & Alberta based organizations and funding mechanisms that

operators can access. He recommended that operators assess the specific eligibility and submission requirements of each funding program, including the possibility of stacking (concurrent access from more than one) for optimal reimbursement.

As producers continue their efforts to minimize or mitigate emissions from their operations, both speakers alluded to the fact that a significant portion of the emissions could be controlled via marginal cost. However, a thorough and rigorous assessment will likely be necessary to identify (and rank) all the reduction opportunities.

Summary

This session will discuss the converging factors driving action in methane emissions management in Canada's oil and gas sector. Facing a new set of regulations, producers are looking for low-cost compliance tools. The solutions are available, and with continued collaboration between these organizations and others Canada can continue to drive emissions reduction activities through innovation and action.

About Milos' presentation: To meet the goal set out by the Provincial Government and achieve equivalency with the Federal Government, the AER developed and updated regulatory requirements to regulate methane emissions. The requirements address the primary sources of methane emissions from Alberta's upstream oil and gas industry: fugitive emissions and venting, which includes emissions from compressors, pneumatic devices, and glycol dehydrators. The requirements also focus on improved measurement, monitoring, and reporting of methane emissions. This presentation will discuss the regulations, the updates and touch on what this will mean for future compliance.

About Jackson's presentation: The Methane Emissions Leadership Alliance will discuss how its members are positioned to service regulatory compliance activities in methane management. With a focus on detection, quantification, and mitigation, MELA technology and service providers support industry with their reduction ambitions and can help companies unlock the multiple government funding mechanisms in existence today. Jackson will discuss this funding landscape in detail and further discuss some of the innovative initiatives ongoing today where organizations throughout the eco-system are collaborating to drive world class performance.

PRESENTER: Milos Krnjaja, Senior Technical Advisor - Alberta Energy Regulator (AER) and Jackson Hegland, Executive Director - Methane Emissions Leadership Alliance (MELA)

Milos Krnjaja
AER

Milos Krnjaja, Professional Engineer (P.Eng), has been active in the oil and gas sector for over 20 years, working on assets throughout Canada for various companies and currently working with the Alberta Energy Regulator focussing on air emissions and methane regulations. Milos graduated from the University of Calgary with a degree in chemical engineering. Milos has spent several years evaluating oil and gas operations for energy usage and opportunities for air emission reductions. Milos has taken numerous emission reduction projects from conception to execution.

Jackson Hegland
MELA

Jackson is the Executive Director of the Methane Emissions Leadership Alliance: an industry association composed of methane reduction technology and service providers from throughout Canada and the United States. He is also President of Modern West Advisory, a strategic consulting firm working with oil and gas industry, government, and clean technology providers on emission reduction & management activities. He is a partner with Carbon Connect International (with offices in Calgary, AB and Fontainebleau, France) and the Director of Aspenwood Innovation in Princeton, NJ. Jackson has over 14 years of experience as an oil and gas professional building carbon management and ESG strategies, collaborating with industry and government on climate change policy design, and evaluating & executing greenhouse gas emission reduction projects throughout Western Canada and the US. He graduated from Princeton University with a degree in Environmental Economics.

About MELA: The **Methane Emissions Leadership Alliance** members consist of businesses that develop, manufacture, or deploy commercial technologies to reduce methane emissions across the spectrum of the oil and gas industry needs. From detection, measurement and repair of methane leaks, to emissions at the well-head, at gathering stations, in processing, and in transmission and distribution, MELA members provide the services, solutions, and data critical to sound methane emissions management and policy. Through strategic partnerships, innovation, and collaboration, MELA is a partner in methane emissions reduction practices throughout North America's oil and gas industry.