Feasibility Study of Potential Impacts of Select Alternative Produced Water

Produced Water Evaporation Workshop

January 17, 2018, 8 a.m. – 12 p.m.

Meeting Summary

Oklahoma History Center
800 Nazih Zuhdi Dr, Oklahoma City, OK 73105
(OERB Classroom)

ATTENDEES:

Industry Representatives (from Sign In or Introductions):
Patrick Beck, Southwestern Energy
Nick Cohen, Invenergy
Brent Halldorson, Fountain Quail Energy Services
Kevin Heasley, Sandridge Energy
Dennis Hudgens, Poseidon Saltwater Systems
Robert Huizenga, Cimarex
Mike Mathis, Continental
Thomas McCormick, Marathon Oil Corp.
Rick McCurdy, Chesapeake Energy
Trey Moore, Logic Energy Solutions

Chris Morss, IDE Technologies
Ken Nichols, Devon Energy
Jesse Sandlin, Devon Energy
Omer Zehavi., IDE Technologies
Kushal Seth, Gradiant Energy Services
Alan Schartz, Poseidon Saltwater Systems
Kristin Shanon, Poseidon Saltwater Systems
Mike Skoda, Neptune FS Global
JP Welch, Veolia

OWRB Staff, Agencies, Study Partners, and Consultants:
Lindsey Atkinson, CH2M/Jacobs
Anna Childers, CH2M/Jacobs
Julie Cunningham, OWRB
Michael Dunkel, CH2M/Jacobs
Lloyd Kirk, ODEQ
Nathan Kuhnert, Bureau of Reclamation
Mark Layne, GWPC
Owen Mills, OWRB

Mike Moore, OCC
Dan Mueller, EDF
Nichole Saunders, EDF
Scott Thompson, ODEQ
Kevin Wagner, OK Water Resources Center (OSU)
Dan Yates, GWPC
The second workshop session consisted of seven technical presentations on produced water evaporation technologies. Presentations were provided by Fountain Quail Energy Services, Gradiant Energy Services, Logic Energy Solutions, Neptune FS Global, Poseidon Saltwater Systems, Purestream and Veolia. The presentations are posted on OWRB’s website: www.owrb.ok.gov/pwwg.

**Fountain Quail Energy Services**: NOMAD™ and Modular Base Plant (BMP)™ Systems

**Gradiant Energy Services**: Carrier Gas Concentrator (CGCTM)™

**Logic Energy Solutions**: Submerged Combustion Thermal Process

**Poseidon Saltwater Systems**: Enhanced Evaporation

**Purestream**: Flash Evaporation Technology

**Veolia**: The Modular Bulldozer Design (MBD)™ System