Water and Air Quality Issues in Oil and Gas Development: The Evolving Framework of Regulation and Management

June 5-6, 2014 Univ. of Colorado Law School, Wolf Law Building

Presented by the Getches-Wilkinson Center for Natural Resources, Energy, and the Environment, in conjunction with the Air-Water-Gas Sustainability Research Network

Technological advances for extracting oil and gas from shale deposits have ushered in a new era of energy development in key resource-rich pockets throughout the US. In this event, we review the ongoing efforts of governments and industry to develop the regulatory and management practices necessary to protect water and air resources, drawing on the latest scientific research to tackle areas of uncertainty and to inform future action.

JUNE 5th

8:00 to 8:45 Registration; coffee 8:45 to 9:00 Welcome Remarks

SESSION 1: Setting the Stage

9:00 to 9:30 <u>Framing the Discussion: Tackling Issues of Uncertainty, Terminology, and Sensitivity.</u>

SPEAKER: Patty Limerick, University of Colorado.

9:30 to 10:15 Oil and Gas Development from Shale: Engineering 101.

SPEAKER: Stuart Ellsworth, Colorado Oil and Gas Conservation Commission (invited)

10:15 to 10:45 Break

10:45 to 11:15Introduction to the Regulatory Framework and the Jurisdictional Issues. SPEAKER: Bruce Baizel, Oil and Gas Accountability Project, Chair of Board of STRONGER

11:15 to Noon <u>Prerequisites to Earning the "Social License to Operate</u>." SPEAKERS: Britt Banks, Getches-Wilkinson Center (Moderator); Kate Fay, Noble Energy (invited); Gary Graham, Western Resource Advocates (invited); and Howard Boigon, Hogan Lovells (invited)

Noon to 1:00 Lunch (provided on site)

SESSION 2: Water Supply & Quality

1:00 to 1:30 What We Know (and Don't Know) About Water Supply & Quality Impacts: Part

1, Water Quality.

SPEAKER: Joe Ryan, University of Colorado

1:30 to 2:00 What We Know (and Don't Know) About Water Supply & Quality Impacts: Part

2, Water Quantity.

SPEAKER: Corrie Clark, Argonne National Lab

2:00 to 2:30 Details of the Regulatory Framework.

SPEAKER: John Martin, Crowell & Moring

2:30 to 3:00 Experience on the Ground: Pavillion, WY

SPEAKER: Abrahm Lustgarten, ProPublica

3:00 to 3:30 Break

3:30 to 4:00 Experience on the Ground (part 2): Water Use in the Marcellus SPEAKER: Susan Packard LeGros, Center for Sustainable Shale Development

4:00 to 5:00 Session Wrap-Up: The Path Forward

SPEAKERS: Kathryn Mutz, University of Colorado (moderator); Laura Belanger, Western Resource Advocates; Cabell Hodge, Colorado Energy Office; Steven Musick, Ground Water

Protection Council

5:00 Poster Session and Reception

JUNE 6th

SESSION 3: Air Quality

8:30 to 9:00 What We Know (and Don't Know) About Air Quality Impacts.

SPEAKER: Anna Karion, NOAA

9:00 to 9:30 <u>Details of the Regulatory Framework.</u> SPEAKER: Olivia Lucas, Faegre Baker Daniels, LLP

9:30 to 10:00 Tribal Development of Oil and Gas

SPEAKER: Roger Fragua, Cota Holdings, LLC

10:00 to 10:30 Break

10:30 to 11:00 Experience on the Ground: Case Study of Weld County, CO.

SPEAKER: Garry Kaufman, Deputy Director of the Colorado Air Pollution Control Division

11:00 to Noon Session Wrap-Up: The Path Forward.

SPEAKERS: Jim Martin, Beatty & Wozniak, P.C.; Jill Cooper, Anadarko

Noon to 1:15 Lunch

SESSION 4: Looking Ahead and Moving Forward

Session Chair/Co-Chairs: Britt Banks, Kathryn Mutz, Matt Samelson

1:15 to 2:00 Understanding the Impacts – Issues of Research

SPEAKERS: Rich Haut, Houston Advanced Research Center; John Adgate, CU School of Public

Health; Cindy Beeler, Environmental Protection Agency

2:00 to 2:45 Exploring New Frameworks of Regulation and Management

SPEAKERS: Rick Collins, CU School of Law; Mark Boling, Southwestern Energy

2:45 to 3:15 New Models for Communities and Companies – Defining Good Practice from the

Ground Up.

SPEAKERS: Steve D'Esposito and Rich Whitley, RESOLVE

3:15 to 3:45 Break

3:45 to 5:00 Concluding Remarks and Recommendations on the Path Forward – Session Open

to the Public

SPEAKERS: Britt Banks (moderator); Matt Lepore, Colorado Oil & Gas Conservation Commission; Dan Grossman, Environmental Defense Fund; Joan Card, Environmental Protection Agency; Jep Semen, Colorado Petroleum Association (invited)