

## OGMCOAL - OSM- In Situ Coal Meeting (Denver, CO)

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**From:** Steve Christensen  
**To:** Andrew Bedingfield; Betsy\_Herrmann@fws.gov; Bill Bates; Carmen Bailey...  
**Date:** 9/8/2011 10:51 AM  
**Subject:** OSM- In Situ Coal Meeting (Denver, CO)  
**CC:** OGMCOAL; Roger\_Bankert@blm.gov; arowley@fs.fed.us; bpostle@osmre.gov;...  
**Attachments:** In-Situ Meeting September 2011.docx

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Greetings,

As requested during the conference call, I've attached the agenda for the upcoming OSM in-situ coal processing meeting.

Give me a call if you have any questions or something you'd like me to follow up on.

Regards,  
Steve

Steve Christensen  
Environmental Scientist III  
Utah Division of Oil, Gas and Mining  
(801) 538-5350

# **DRAFT**

## **In-Situ Processing Workshop:**

### **MEETING/EVENT DATE & TIME:**

8:00 am-5:00 pm: Tuesday, September 20<sup>th</sup>, 2011 (Linc Energy/Lawrence-Livermore Laboratories, In-Situ Team).

8:00-11:30 am: Wednesday, September 21<sup>st</sup>, 2011 (In-Situ team only).

### **LOCATION:**

Office of Surface Mining Reclamation and Enforcement Western Region Office  
1999 Broadway STE 3320  
Denver, CO 80202

### **PURPOSE OF MEETING:**

To educate federal, state and tribal employees about in-situ coal mining, and discuss state and federal approaches for future permit applications.

### **ATTENDEES:**

Al Klein- OSMRE

Billie Clark- OSMRE

Lou Hamm –OSMRE

Duane Matt – OSMRE

John Stucker- Navajo Nation

Rick Fredericksen- Alaska

Russ Kirkham- Alaska

Bruce Beechie- North Dakota

Jim Deutsch- North Dakota

Robert Smith- Montana

Carol Bilbrough- Wyoming

Mark Rogaczewski- Wyoming

Dan Hernandez- Colorado

Steve Christiansen- Utah

Monte Anderson- New Mexico

John Sieving- OSMRE

Jeff Fleischman- OSMRE

Rick Williamson- OSMRE

Robert Postle- OSMRE

Kenneth Walker- OSMRE

**AGENDA:** September 20<sup>th</sup>, 2011

8:00-8:10: Introductions: Lou Hamm/Duane Matt

8:10-9:00: Linc Energy- Bartly Kleven

- Linc Energy UCG overview- contrast and comparison
- Linc Energy UCG experience

9:00-9:15: Break

9:15-10:15: Linc Energy UCG technology / process overview- Bartly Kleven

- Site selection
- Hydrology
- Cavity management
- Subsidence modelling
- Ash
- Decommissioning
- Linc compliance history
  
- Linc Energy's next steps with its UCG development- Bartly Kleven

10:15-10:30: Break

10:30-11:30: Current regulatory authority and environment for UCG- Bartly Kleven

- Recommendations
- Closing/Re-cap to transition to Q&A (materials will be provided for further discussion).

11:30-1:00: Lunch

1:00-2:30: Lawrence Livermore Laboratories- Dr. David W. Camp

- Introduction to Presenters: A few slides each introducing LLNL and LINC and our UCG accomplishments and current capabilities.
- What does UCG accomplish?
- Gasification benefits
- Why UCG might be a good thing.
- Examples of module designs and large field designs.
- Technical description of how the process works, how a module grow, and interacts with its environment
- Some descriptions of past and current field tests and early commercial operations

2:30-2:45: Break

2:45-3:45: Hazards and their Management and Mitigation – Dr. David W. Camp

- Overview and listing of things to worry about
- Relationships and interdependencies between the chemistry and physics of UCG and its interactions with the environment
- Surface subsidence
- Changes in hydrogeology and underground structure
- Groundwater contamination
- Water balance, aquifer depletion, process water cleanup and disposition
- Air pollution – conventional, chronic
- Airborne potential episodic release events
- Relative advantages/disadvantages/impacts compared to mining+combustion or mining+gasification

3:45-4:00: Break

4:00-5:00: Monitoring- Dr. David W. Camp

- To control process, stay away from hazardous situations, and learn promptly of problems
- To verify lack of problems or find and measure problems after they occur
- The Role of Pilots and Scale-Up Progression in Hazard Management, Stakeholder Confidence, and Operating Efficiently per Plan
- General questions.

**AGENDA:** Wednesday, September 21st, 2011 (In-Situ team only).

8:00-11:30 am: General discussion- Lou Hamm, Facilitator

**State reports:**

**Alaska:**

Applications received.  
Description of the nature of the request for assistance.

**Colorado:**

Description of the application received from Linc Energy, and how the state is handling the request.

**Montana:**

The state legislature recently directed the Montana Department of Environmental Quality a deadline of October 1, 2012 to come up with In-Situ mining rules. How is Montana addressing this issue?

**North Dakota:**

Applications received.  
How is North Dakota handling the applications?

**Wyoming:**

Linc Energy has recently submitted an application to the Wyoming Department of Environmental Quality to mine in the Powder River Basin. How is Wyoming approaching this application?

The Wyoming Department of Environmental Quality has previous experience with an experimental In-Situ mining project near Hanna, WY. Discuss how this project was handled.

Discussion of Wyoming in-situ Uranium rules and how they might apply.

**Utah/New Mexico/Tribes:**

Discuss applications received.

**In-Situ Guidelines:**

What are the regulatory issues associated with this type of mining?

What are the technical issues associated with this type of mining?

Are there any existing templates we might use to facilitate In-Situ mining guidelines?

Discussion of Ideas on how to approach the formation of a set of guidelines for In-Situ mining.

11:30 am: Adjourn

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