

**Land Quality Division**

# **EQC RULES HEARING**

**September 12, 2013**



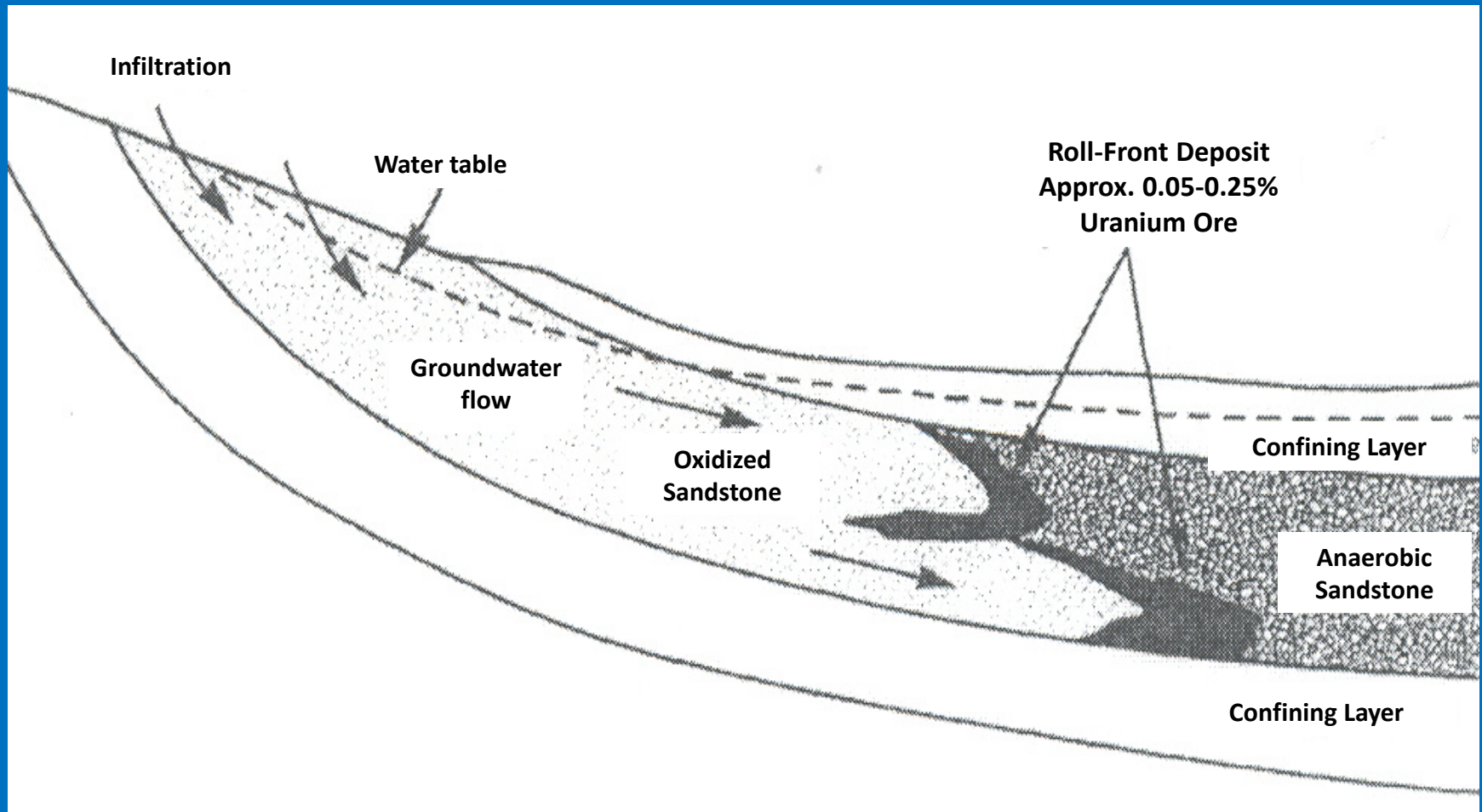
**WYOMING**

# Noncoal Chapter 11

## In Situ Mining

- The Land Quality Division is proposing to revise several sections of Noncoal Chapter 11. The changes are intended meet EPA requirements, make corrections where necessary, improve efficiency related to processing applications and permits, and remove unnecessary rule language.

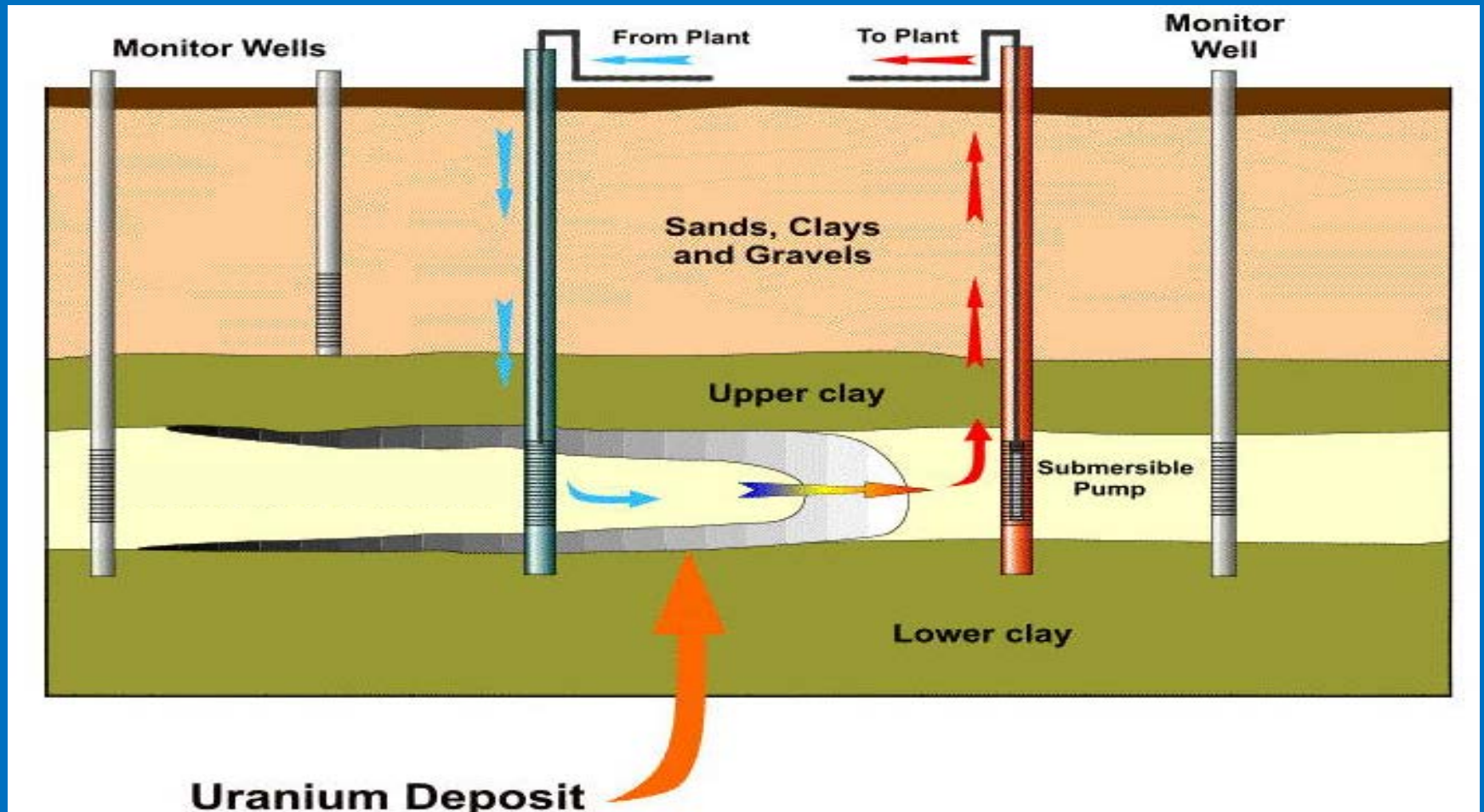
# Formation of a uranium “roll front” ore deposit



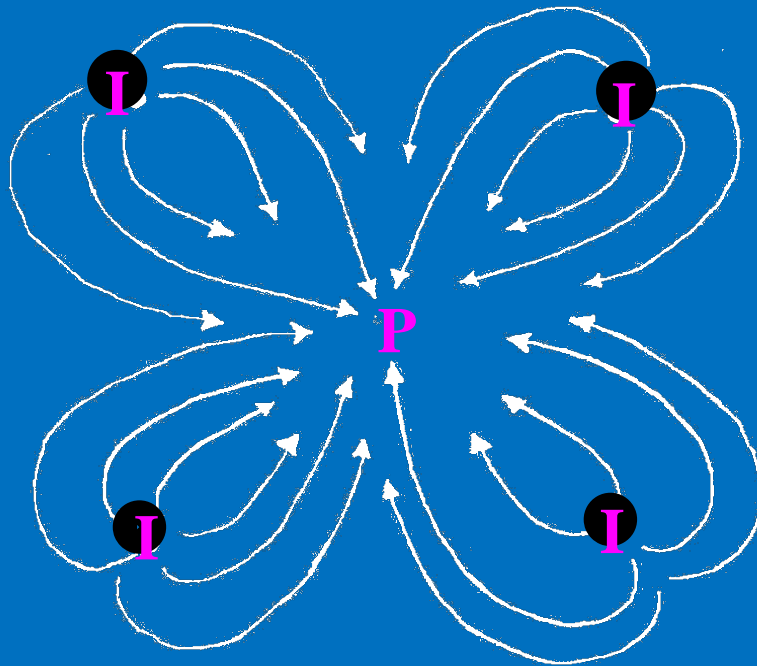
# Uranium Roll Front Deposit



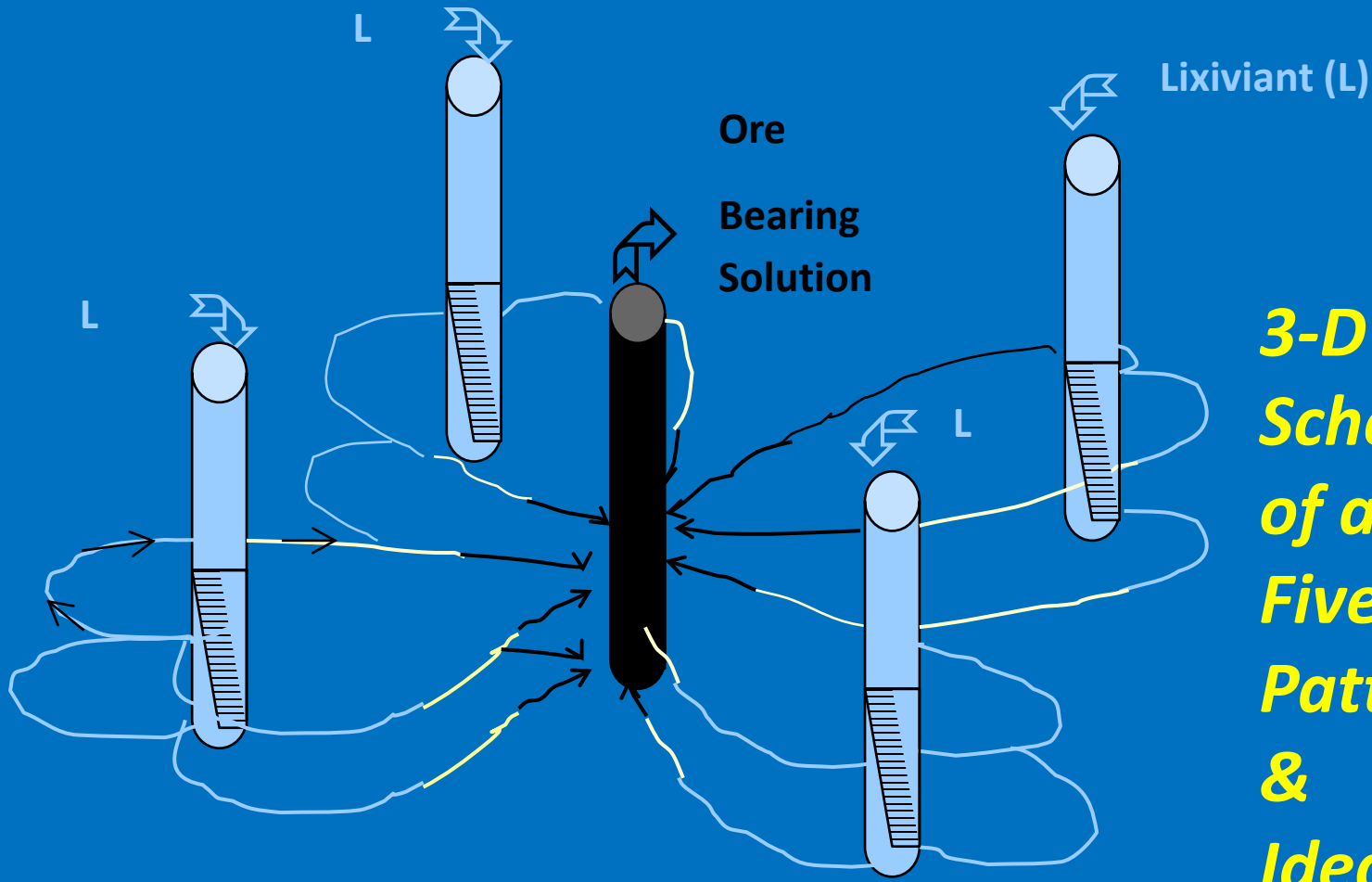
# ISL Mining Process



# Injection and Production Wells



*Aerial Schematic of a  
Five-Spot Pattern  
& Idealized Flow Lines*



**3-D  
Schematic  
of a  
Five-Spot  
Pattern  
&  
Idealized  
Flow Lines**

# Proposed Changes to Chapter 11

- Section 1 – Definitions
  - Added definitions for: “area permit” and “fact sheet”
  - Removed “state decision document” definition
  - Update revision date for WQD Chapter 8 citations
  - Revise section headers as necessary due to added and removed definitions



# Proposed Changes to Chapter 11

- Section 2 – General Requirements
  - Number of copies of application submitted reduced from 3 to 2
  - WQD Chapter 8 citations updated
  - Added general requirements for “area permits” in support of new definition
  - Removed 1 year compliance window

# Proposed Changes to Chapter 11

- Section 4 – Application, Mine Plan
  - Impoundment section revised to eliminate dual regulation of impoundments regulated by Nuclear Regulatory Commission
  - Requires leak detection plan for all impoundments that are not regulated by NRC

# Proposed Changes to Chapter 11

- Section 6 – Well construction requirements
  - Revised annular seal requirements to be consistent with recently revised Chapter 8
  - Proposed revision requires that annular seals be created using one of the approved sealant materials in Chapter 8
  - Revised requirements regarding well construction reports
  - Subsection (ii) revised to include factors that were inadvertently not included in Chapter 11 submitted to SOS during 2005 rulemaking
  - Update WQD Chapter 8 citation

# Proposed Changes to Chapter 11

- Section 8 – Plugging drill holes and well repair, conversion and plugging of wells
  - Added citation to Chapter 8 “sealant materials” to provide consistency
  - Revised the requirements of the section to be more consistent with language in Chapter 8 while maintaining consistency with 40 CFR 146.10 to insure rules are as effective as Federal requirements
  - Reformatted organization of Section 8

# Proposed Changes to Chapter 11

- Section 10 – Aquifer Classification and Exemption
  - Initial reason LQD began looking at possible revisions
  - Updated WQD Chapter 8 citations
  - Revised requirements that an applicant must provide related to aquifer exemption boundaries
    - EPA has disapproved of the methods for delineating aquifer exemption boundaries since 2005 rulemaking
    - Revised method requires description and calculations to support the proposed distance beyond the monitor well ring required to mine and restore groundwater

# Proposed Changes to Chapter 11

- Section 11 – Prohibitions
  - Added the exception language for area permits related to commencing injection into a new injection well
  - Wells covered by area permit may commence injection without having to submit notice of completion for each well while maintaining requirements for individual well which may not be covered by an area permit

# Proposed Changes to Chapter 11

- Sections 13 and 14
  - One incorrect citation in each section was revised to cite to the correct subsection in Chapter 11



# Proposed Changes to Chapter 11

- Section 19 – Revisions to Permit or R&D License
  - Removed reference to State Decision Document and replaced it with reference to “fact sheet”
  - EPA does not use the term State Decision Document





# Proposed Changes to Chapter 11

- Section 21 – Public Notice
  - Section was reorganized to better reflect organization of EPA requirements in 40 CFR 124.10
  - Section 21 was revised to be consistent with the requirements 40 CFR 124.10 including what is provided as part of public notice and who receives the information

# Next Steps

- Add any revisions and update Statement of Reasons as necessary
- Sign Statement of Reasons and forward on for approval by Governor.
- Update any supporting documents with the new requirements (forms, guidance docs, standards)