



# Geothermal Alliance of Illinois

Permitting / Design Aspects of Rock River Open  
Loop Projects

# You Want to do an Open Loop System

- A lot of Grey Area
- Each project is different
- Public Officials seem to change constantly
- Local Authorities
- Case by Case



# Who's on First?

- Abbott and Costello in comparison to public offices working together.



# Local Authority

- Notify the city water division where you would like to drill a well.
- The city has the right to refuse the well if they feel its to close to one of there domestic wells, or jeprodize quality in other ways.



# Test Well

- Treated a standard water well
- Fill out application but no fees until proven to be used.
- Once well is drilled water quantity and quality can be checked.



# Quantity of Water

- Amount needed for the geothermal system will need to be known.
- Draw down test will need to be done to verify the well can produce gallons needed and that same amount will be discharged.



# Quality of Water

- Once the well has been allowed time to rest after drilling draw water sample
- Recommend that you have a third party conduct testing on the sample



# Submit Test Results to Health Department

- Once results are given to Health Department they are relayed to the IEPA
- Would also suggest attaching a letter to explain the water to be used for heating and cooling and in no way for domestic use.





# NPDES

- If water sample is not of sufficient standards. A NPDES permit may be required.
- National Pollutant Discharge Elimination System, is part of the federal Clean Water Act.



# All Clear

- Once the health department hears back from the IEPA all is good the health department will contact the well contractor to pay fee and permit will be issued.

