Study Session Topics

9:00 A.M. Calendar Updates (WHR)
BoCC Administration Manager

9:45 A.M. BOCC Updates (WHR)
Board of County Commissioners

11:00 A.M. Communication Services Update (WHR)
Communications Services

11:30 A.M. *Injection Well Update (WHR)
Discussion of a request for direction on aspects of the Oil and Gas Injection Well regulations in order to select an appropriate level of regulation for the disposal of Class II oil and gas exploration and production (E&P) waste by underground injection within unincorporated Arapahoe County

Request: Information/Direction

Jason Reynolds, Current Planning Program Manager
Jan Yeckes, Planning Division Manager, Public Works and Development
Bryan Weimer, Director, Public Works and Development
Todd Weaver, Budget Manager, Finance
Robert Hill, Senior Assistant County Attorney
Documents:

BSR INJECTION WELLS STUDY SESSION 3-12-19.PDF
DRAFT INJECTION WELL CODE.PDF
I-2 ZONING LOCATIONS.PDF

Break

1:00 P.M.  *Align Arapahoe - Quality Of Life (WHR)
Align Arapahoe - Quality of Life

Request: Information/Direction

Manisha Singh, Director, Department of Strategy & Performance
Elected Officials and Department Directors

2:00 P.M.  *El Paso County Long-Term Growth Lessons Learned With Commissioner Waller (WHR)
Discussion of El Paso County long-term growth lessons

Request: Information/Direction

Commissioner Mark Waller, El Paso County

3:00 P.M.  *Tri-County Health Department Update (WHR)
Update from the Tri-County Health Department

Request: Information/Direction

Dr. John Douglas, Executive Director, Tri-County Health Department

4:00 P.M.  *Executive Session (WHR)
Executive Study Session and County Attorney Administrative Meeting [Section 24-6-402 (4)C.R.S.][As required by law, specific agenda topics will be announced in open meeting prior to the commencement of the closed and confidential portion of this session] (WHR)

Ron Carl, County Attorney

* To Be Recorded As Required By Law
WHR - West Hearing Room

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Board Summary Report

Date: March 12, 2018

To: Board of County Commissioners

Through: Bryan Weimer, Director, Public Works and Development
Jan Yeckes, Planning Division Manager

From: Jason Reynolds, Current Planning Program Manager

Subject: Oil & Gas Injection Well Regulations Update

Direction/Information
Staff is seeking general direction on aspects of the Oil & Gas Injection Well regulations from the BOCC.

Request and Recommendation
Staff request that the BOCC provide direction on the scope of the potential code changes. Based on previous study sessions, we drafted regulations that would allow injection wells in I-2 heavy industrial zoning districts through a Certificate of Designation and a Use by Special Review/1041 process. Our goal is to select an appropriate level of regulation for the disposal of Class II oil and gas exploration and production (E&P) waste by underground injection within unincorporated Arapahoe County. Staff is seeking feedback on the general scope of the regulations.

Background
On June 19, the BOCC adopted a six-month moratorium on new Injection Well applications for Public Works and Development staff to investigate appropriate regulation for Injection Wells as a land use. Currently, the Land Development Code does not address Injection Wells. However, based on similar uses that are allowed in the I-2 Heavy Industrial zone district, Planning Division staff has interpreted the Land Development Code (LDC) in accordance with 1-801.14.02, to allow Injection Wells in the I-2 zone district subject to certain land use approvals. This section addresses Code Interpretations and Determination of Unlisted Uses.

On September 18, 2019, the BOCC supported drafting injection well regulations that would limit these types of facilities to the I-2 heavy industrial zoning district. As part of the Land Development Code reorganization, staff incorporated injection wells into the draft use tables. Staff will be referring the draft code reorganization for public comment in the next few weeks.
**Links to Align Arapahoe**

This matter links to the Align Arapahoe goal of Fiscal Responsibility, for anticipating potential damage and subsequent repairs to County roads and Quality of Life for appropriately regulating and evaluating land uses of potential high impact.

**Discussion**

Injection wells are used to dispose of brine generated during oil and gas production. Saltwater is native to the geologic formations holding oil and gas and is drawn to the surface along with the useful oil and gas. The saltwater/brine is roughly twice as salty as seawater and has no economic reuse potential due to the dissolved/suspended solids. Oil and gas producers dispose of the produced brine at saltwater disposal facilities. Injection wells inject the brine deep into the earth, typically beneath the oil-producing formations (and far beneath any water supply aquifers). Like oil and gas wells, injection wells feature metal and cement casings to protect drinking water; they also use casings to protect oil-producing formations.

Injection Wells can generate a number of impacts, some of which are regulated by the Colorado Oil and Gas Conservation Commission (“COGCC”). The COGCC regulates the injection process, from well design to operating pressures, in order to prevent impacts on water supply and protect mechanical integrity of the well. COGCC also monitors seismic activity; the attached information from COGCC provides an overview of its permitting requirements and efforts to limit seismic activity.

Commercial Injection Wells can be expected to generate significant truck traffic with tanker trucks bringing E&P waste to the site for disposal. Non-commercial on-site injection wells are not likely to have the same road and traffic impacts as commercial sites, as the injection well is typically located on the same site where the E&P waste for disposal is produced.

**State Regulations**

COGCC regulations for oil and gas exploration and production include injection wells in the definitions for “Oil and Gas Operations” and “Production Facilities” for oil and gas. State approval is required for the injection of Class II waste into any underground formation. This approval starts with an “Underground Injection Formation Permit,” and the application will require, among other things, a description of the nature and source of the injected fluids, the types of chemicals used to treat the injected fluids, and the date of initial fluid injection for new injection wells. Applications may be made for multiple injection wells at a single site location. For the state permit, the COGCC Director may deny an Injection Well application if there is “reasonable cause to believe that the proposed disposal well could result in a significant adverse impact on the environment or public health, safety and welfare.”

To the best of our knowledge, the State has not taken a position that State regulations pre-empt local regulation of Injections Wells. However, COGCC and the Colorado Department of Public Health and Environment (“CDPHE”) allow local land use regulations to require a Certificate of Designation for Injection Well proposals.
Alternatives
The Board is asked to provide direction to staff on the following alternatives:

1. **Prohibit Future Injection Wells**
   Arapahoe County could prohibit Injection Wells. It is not established in the law whether local regulation of class II injection wells are subject to the same state preemption prohibitions as oil and gas production wells. The County Attorney’s Office has not found any Colorado case law deciding that issue one way or another. Although Boulder County’s land use code does not allow the use in any zone district, Boulder County has not yet faced any legal challenge to that regulation. If the Board is inclined to adopt a prohibition similar to Boulder’s, it could be subject to legal challenge in what could be a case of first impression in Colorado.

2. **Do Not Change the Regulations**
   Arapahoe County could leave the code as it exists today. We already have a process established for Injection Wells through staff interpretation of the existing regulations for certain uses in the I-2 zone district. The process being used for the pending Expedition Waters application is the USR/1041 plus a Certificate of Designation within the I-2 Heavy Industrial zone district. Staff recommends either option 1 or 3 because those options would clearly articulate the rules rather than relying on interpretations.

3. **Allow Injection Wells in I-2 Heavy Industrial Zoning Districts**
   The draft LDC identifies injection wells as a potential use in the I-2 zone, requiring a 1041/USR and a Certificate of Designation. Arapahoe County is currently processing an injection well application on 34501 E Quincy Avenue east of Watkins Road using the 1041/USR and Certificate of Designation processes.

   Requiring injection wells to have I-2 zoning would limit available sites for Injection Wells; other than the site with the current application on E Quincy Road or lawful rezoning of new sites to I-2, there are existing I-2 zone districts in Byers (Bijou Telephone Co Op) and Strasburg (Kaufman Transportation LLC site at the intersection of E Hwy 36 and E Colfax Avenue). There are also some I-2 zone districts along the Santa Fe Corridor near W Oxford Avenue; these Santa Fe Corridor sites are likely too remote from E&P waste-generating sites to be useful for disposal. Finally, there are a couple of remnant parcels zoned I-2 that are unlikely to see much activity: one is a portion of the lawn for a mortuary in Denver and the other is a segment of the Highline Canal trail owned by Denver.

**Fiscal Impact**
Regulating Injection Wells could have indirect impacts on County finances. For example allowing more commercial Injection Wells could increase the number of heavy trucks using County-maintained roads. These trucks may be coming from oil and gas facilities located within unincorporated Arapahoe County or may be coming from areas outside Arapahoe County.

**Concurrence**
Whichever option the county chooses, planning staff will publish the draft regulations with that option for public comment.
Reviewed By

Jason Reynolds, Current Planning Program Manager
Jan Yeckes, Planning Division Manager
Dave Schmit, Public Works and Development Department Director
Todd Weaver, Finance Department
Robert Hill, County Attorney’s Office

Attachments:
Draft regulations
I-2 Zoning Locations
The draft Land Development Code includes a comprehensive use table identifying which uses are permitted in which zoning districts. This excerpt from the draft use table shows that commercial solid waste sites (including injection wells) require a use by special review. Section 3-3.4.I clarifies that these facilities also require a Certificate of Designation.

**3-3.4.I**

**Waste Disposal, Resource Recovery, and Recycling Operations**

Commercial sanitary landfills, solid waste disposal site and facility, resource recovery operations and recycling facilities are subject to obtaining the required “Certificate of Designation” as well as all applicable State requirements.

**Definitions Chapter:**

**Solid Waste Disposal Site and Facility**

The location and facility at which the deposit and final treatment of solid, liquid (such as injection wells) or hazardous wastes occurs or a discrete area of land or an excavation where solid wastes are placed for final disposal, which is not a land application unit, waste impoundment, or waste pile. Landfills include, but are not limited to: ash monofills, construction and demolition landfills, industrial landfills, sanitary landfills, tire monofills and similar facilities where final disposal occurs. Commercial facilities are owned by a private, non-governmental entity; non-commercial facilities are owned by a governmental entity.
Bijou Telephone Co-op
1100 N Highway 36
Parcel # 1985-00-00-188
Orica USA
133101 E Quincy Ave
Parcel # 2069-00-00-082
Owner: Kent-Land Limited
2310 W Oxford Ave
Parcel 2077-05-4-00-039
& Others
Unlimited Future & Stanford Properties & MSL 4435 LLC
4495 S Sante Fe Dr, 1909 W Stanford Ave, & Others
Parcel # 2077-09-2-05-002 & Others
Parcel 1973-35-1-00-014
No Situs Address
Owner - Horan & McConaty Funeral Services