MINUTES OF THE SENATE NATURAL RESOURCES COMMITTEE

The meeting was called to order by Chairman Carolyn McGinn at 8:30 A.M. on February 17, 2005 in Room 423-S of the Capitol.

All members were present.

Committee staff present:

Raney Gilliland, Kansas Legislative Research Department Lisa Montgomery, Revisor of Statutes Office Gina Poertner, Committee Secretary

Conferees appearing before the committee:

Others attending:

See attached list.

The meeting was called to order by Chairman Carolyn McGinn at 8:30 a.m. Karl Mueldener, Director of the Bureau of Water, was recognized by the Chair (Attachment 1). Mr. Mueldener gave a presentation on the sinkhole near the Burlington Northern Santa Fe (BNSF) railroad tracks in Hutchinson. Mr. Mueldener discussed the progression of the sinkhole, public safety concerns, and geologic investigations to determine how best to stabilize the area. He also discussed several other brine wells near the BNSF tracks and private residences.

Senator Lee asked who owns the land where the sinkhole is. Mr. Mueldener stated that Mosaic now owns the land and that this particular sinkhole does not encroach on any private land although it has crept onto the edge of the railroad right-of-way.

Senator McGinn asked what is being done for soil stabilization. According to Mr. Mueldener, rebar and grout have been placed in the hole to attempt stabilization. Filling the hole has also been attempted, but the shale layers collapsed. Senator McGinn also asked if they knew where the other 150 sites are and if some of these were located in residential areas. Mr. Mueldener stated that they know where to look for some due to documentation by mining companies. However, even though some were not documented and they are working on searching for others as there is a possibility that residential areas were built over the sites. The primary concern with these brine wells is topside safety.

Senator Teichman asked about records to locate wells. Mr. Mueldener said records are spotty but they have located a few. There was no registration of wells at the time they were developed.

Senator Ostmeyer requested information on the plan for the sinkhole in Ellis county. Mr. Mueldener stated that KDOT is aware of this and has performed a geologic study of the area. Apparently this sinkhole is due to an old oil or gas well. He also stated that the slower developing sinkholes can be filled in successfully and went on to discuss the concern of groundwater contamination.

Senator McGinn asked if the water was not concentrated enough to pump out. Mr. Mueldener stated that pumping out is not worth the expense at this point. She further asked if the train is in any danger of falling into the sinkhole since it is so closely located to the tracks. Mr. Mueldener stated that Mosaic brought in 60 train cars of ballast to reinforce the railroad bed to prevent this from happening. Mr. Mueldener said there are nine other wells up and down the tracks as well. Senator McGinn asked if the information provided by geophones was accurate, to which Mr. Mueldener stated that they are not perfect but do relay a substantial amount of information.

Senator Teichman asked if there are other areas that are as bad as this particular sinkhole. Mr. Mueldener said that there are some areas of concern. They do know where some active sodium solution mines are, but there are approximately 136 active wells. She further asked if the Department deals only with salt wells. Mr. Mueldener stated they do indeed deal only with salt wells.

Senator McGinn asked Rex Buchanan of the Kansas Geological Survey, for additional information. Mr. Buchanan stated that some areas need further assessment.

CONTINUATION SHEET

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Raney Gilliland asked if it is general theory if salt solution mine pluggings that occurred in the early 1930s are not sufficient and if that's what's causing fresh water to find a path to the salt-bearing zone below. Mr. Mueldener stated that this is not the situation with the Hutchinson sinkhole, that the well only went to 140 feet. The case that Mr. Gilliland described occurs more with oil and gas wells because they go further into the ground. Mr. Gilliland further asked if there is any speculation as to why this is happening now. Mr. Mueldener stated that in the long run, gravity wins.

Senator Lee commented on mines in southeast Kansas and Mr. Buchanan mentioned the field trip for legislators to take place in June 2005.

Senator Bruce asked if the Hutchinson sinkhole was actually a combination of two brine wells. Mr. Mueldener stated this is the case. He further asked how far the cavern stretches, to which Mr. Mueldener stated that they are trying to find out. Senator Bruce followed this by asking if it would help to relocate the railroad track to which Mr. Mueldener replied that it would cost \$600,000 to do the surface work. Senator Bruce asked if bringing in the ballast has been effective. Mr. Mueldener stated that they are reassessing this now and they are not sure if it will be effective long-term. Senator Bruce then asked if the other 150 wells need to be found. Mr. Mueldener stated that they do need to be found but that it is not clear as to who should be leading the charge on this. The Fire Marshall has been helpful.

Senator Taddiken asked if there is information on the rate of progression of the caverns enlarging. Mr. Mueldener stated that if water gets to the salt, the salt will dissolve and the water will just sit there. He then asked how big the funnel is on the Hutchinson sinkhole. According to Mr. Mueldener, this funnel is 30-80 feet.

Senator McGinn stated that this sounds like an isolated situation. She asked if it was different than the Burrton well where the salt is moving with the aquifer. Mr. Mueldener stated that this sinkhole is characteristically different.

Senator McGinn asked for approval on the minutes from 1/27/05, 1/28/05, 2/3/05, and 2/4/05. <u>Senator Ostmeyer made a motion to approve the minutes, seconded by Senator Francisco. Motion passed by voice vote.</u>