

MINUTES OF THE HOUSE COMMITTEE ON ENVIRONMENT.

The meeting was called to order by Chairperson Joann Freeborn at 3:30 p.m. on March 14, 2000 in Room 231-N of the Capitol.

All members were present except: Rep. Dennis McKinney - excused

Committee staff present: Raney Gilliland, Kansas Legislative Research Department
Mary Torrence, Revisor of Statute's Office
Mary Ann Graham, Committee Secretary

Conferees appearing before the committee: Dr. W. L. Hargrove, Director of KCARE, Kansas State University, 044 Waters Hall, Manhattan, KS 66506
Dr. Jay Ham, Associate Professor, Department of Agronomy, Kansas State University, Manhattan, KS 66506
Dr. Alan Schlegel, Professor, Southwest Research-Extension Center, Kansas State University, Manhattan, KS 66506
Dr. Ronald Hammerschmidt, Director, Division of Environment, KS Dept. Health and Environment, Forbes Field, Bldg 740, Topeka, KS 66620-0001

Others attending: See Attached Sheet

Chairperson Joann Freeborn called the meeting to order at 3:30 p.m. She called the committee's attention to a document that had been distributed from Secretary of Agriculture, Jamie Clover-Adams, regarding the Governors' Ethanol Coalition. Attached is a letter from the Governor of Iowa and the Governor of Nebraska. (See attachment 1) She pointed out the last paragraph of the letter which she found to be very interesting and also the paragraph from Ms. Browner, Environmental Protection Agency.

The Chairperson recognized Rep. Gerry Ray, Chairman for the sub-committee on **SB568**, and thanked members of the sub-committee, Rep. Bill Light, Rep. Laura McClure, Rep. Clay Aurand, and Rep. Tim Tedder, for their hard work and effort.

Rep. Gerry Ray had copies distributed of the Sub-committee Report (See attachment 2) to all committee members. She announced that **SB568** was used as a vehicle for the report on deer issues and that she probably will recommend a substitute bill for **SB568**, so that the bill can be cleaned up.

Mary Torrence, Revisor of Statutes, explained the bill, point by point. Questions and discussion followed. Secretary Steve Williams, Kansas Department Wildlife and Parks, was in attendance to answer questions.

Rep. Douglas Johnston made a motion to adopt the sub-committee report. Rep. Clay Aurand seconded the motion. Motion carried.

Rep. Sharon Schwartz made a motion in Section 3, pg 6 to include language for annual report on deer/vehicle accidents. Rep. Henry Helgerson seconded the motion. Motion failed.

Rep. Laura McClure made a motion to delete new section (o), pg. 3. Rep. Vaughn Flora seconded the motion. Motion failed.

Rep. Gerry Ray made a motion on pg. 7, line 9, to change language to read "after its publication in the Kansas Registrar". Rep. Clay Aurand seconded the motion.

Rep. Douglas Johnston made a motion the new substitute for **SB568** be recommended favorable for passage as amended. Rep. Sharon Schwartz seconded the motion. Motion carried.

Rep. Gerry Ray thanked the committee and the sub-committee for their hard work on the sub-committee

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report.

Chairperson Freeborn announced that due to the lack of time the committee will not have final action on **SB469** and **HCR5069** today.

The Chairperson welcomed Dr. Bill Hargrove, Director of KCARE, Kansas State University, to the committee. He introduced Dr. Jay Ham, Associate Professor, Department of Agronomy and Dr. Alan Schlegel, Professor, Southwest Research-Extension Center. They presented an Update and Summary of Research and Extension Programs in Animal Waste Management and Utilization. (See attachment 3)

Dr. Jay Ham briefed the committee, with the help of overhead slides, the evaluation of lagoons. (1) The average seepage rate from 15 lagoons in Kansas was 1/20 inch per day. The existing 1/4 or 1/8 inch per day design standards can be achieved with soil-lined lagoons at most locations in Kansas. (2) Analysis shows that the risk of groundwater contamination is very site and species specific. Research results suggest that lagoon integrity and the potential to contaminate groundwater is affected by waste concentration and toxicity, aquifer and soil properties, and the expected life of the facility. (3) Significant quantities of ammonium nitrogen tend to accumulate under anaerobic lagoons. The mass and thickness of the contaminated soil zone is dependent on the quantity and quality of the seepage, soil type, and lagoon age. (4) New lagoons reach a stable seepage rate after 6 to 18 months of use. Whole lagoon seepage rates from new lagoons should be measured after a facility is operational for 18 months, to determine if the lagoon meets the design specifications. (5) In general, research at more than 30 waste lagoons shows that the risk of groundwater contamination from soil lined lagoons is minimal except in areas with vulnerable aquifers (ie, shallow water tables, sandy soils). This statement assumes that the soil underlying lagoons is properly remediated at the time of lagoon closure, regardless of location or aquifer depth. (See attachment 4)

Dr. Ham showed the committee an example screen from a computer software program that provides site-specific design recommendations for waste treatment lagoons. By entering lagoon information the computer will calculate maximum seepage rates, and determine how the lagoon liner would need to be constructed. (See attachment 3) Questions and discussion followed.

Dr. Alan Schelgel was welcomed to the committee. He discussed soil sampling in cropped fields where waste has been applied. (6) Good management is the key to minimizing environmental impact from land application of waste materials. (7) Livestock wastes can be applied to soil for a long period of time without causing soil chemical problems, if applied at agronomically appropriate rates. (8) Soil physical properties are generally improved by application of animal wastes when applied at agronomically appropriate rates. (9) Excessive applications of livestock or municipal wastes can cause very high nutrient levels and degrade soil physical properties. (See attachment 4) Questions and discussion followed.

The Chairperson thanked Dr. Hargrove, Dr. Ham, and Dr. Schelgel, for their presentation.

Dr. Ronald Hammerschmidt, Director, Division of Environment, KDHE, was welcomed to the committee. He commented that there has been a lot of discussion about lagoons and briefed the committee on how the Department handles waste in the state, which range from simple septic systems to the modern low flow waste systems which are usually buried. In some suburban areas with everyone on a septic system you may have a very concentrated system in a small area. If these people are also on domestic water wells there could be a problem with contamination of drinking water. He discussed mechanical anaerobic waste water systems which are used by most municipalities in the state. One of the best ones in the state was built north of the City of Topeka. There are many varieties of lagoon systems, some are designed to be three stages, while others are a single system. Most of these systems are not helped mechanically. An anaerobic system means a lack of oxygen and many of the systems are anaerobic. Not all of the lagoon systems are alike even though they may look alike. In some parts of the state, especially the western part, they are seeing some dependence on evaporative lagoon systems. The water is not going anywhere, it is being evaporated into the atmosphere and require more maintenance. There is a broad range of lagoon systems in the state and you really have to look at the area you are in, how much water you have to deal with, what the species are, and a whole variety of different situations. If he was asked at this particular time what the single most common methodology used in the state for handling waste water, he would say a lagoon system of some sort. If he was asked the single

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highest most volume of waste water that is treated for municipalities, he would say mechanical, being that larger cities tend to use mechanical systems of some sort, usually anaerobic, where as, smaller cities tend to use lagoon systems. (No written testimony) Questions and discussion followed.

The Chairperson thanked Dr. Hammerschmidt for his comments.

The meeting adjourned at 5:55 p.m. The next meeting is scheduled for March 16, 2000.