MINUTES OF THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES.

The meeting was called to order by Chairperson Senator David Corbin at 8:13 a.m. on March 23, 1999 in Room 254-E of the Capitol.

All members were present except: Senator Goodwin who was excused.

Committee staff present:

Raney Gilliland, Legislative Research Department Lila McClaflin, Committee Secretary

Conferees appearing before the committee:

Ron Hammerschmidt, Director, Kansas Department of Health & Environment, (KDHE)

Greg Foley, Kansas Department of Health & Environment, (KDHE)

Steven M. Graham, Assistant to the Dean and Director, Kansas Center for Agricultural Resources and the Environment, Kansas State Research and Extension, Kansas State University

Others attending:

See attached list.

Chairperson Corbin said the purpose of the meeting was for KDHE to provide an informational briefing on confined animal feeding facilities and to give an update on how they are implementing HB 2950 that was passed in the 1998 legislative session.

Ron Hammerschmidt, Director, KDHE, said the passage of HB 2950 during the 1998 session assigned additional responsibility to their department. The additional complex statutes primarily addressed swine and invoke KDHE to develop a strategic plan, reorganize existing program, and acquire new staff to address the charges outlined in HB 2950. He said their Program Mission is to work with entities involved in animal agriculture to educate and implement statutory and regulatory requirements to maintain and/or achieve environmental compliance to protect the waters of the state. He responded to several questions regarding the new staff that they have hired and where they are housed. Responding to another question on how they were responding to the Legislative Post Audit Report on delay in issuing permits, he said the permit tracking process has had a major overhaul and they have new computer programs in place with build in steps to help the tracking process (Attachment 1). He introduced Greg Foley.

Greg Foley, KDHE, further discussed the new database and the design of the feedlot permitting system for the Livestock Waste Management Program (LWMP), Bureau of Water and Bureau of Environmental Field Services (BEFS). Mr. Foley said they are working with Kansas State University, Kansas Department of Agriculture and Industry representatives to address external customer training needs. He discussed some of the workshops they have held on existing swine facility compliance and swine facility operator certification. The handout from the department also includes a letter from Gary Mitchell, former secretary of KDHE addressed to Dr. Marc Johnson, Dean of Agriculture, Kansas State University requesting assistance in developing an odor management strategy for Kansas that will focus primarily on agricultural facilities (Attachment 1). He responded to several questions regarding how permits are now handled. He referred to Dr. Steven Graham from Kansas State University to respond to a question regarding the presents of nitrates in lagoons.

In summarizing, Mr. Foley stated it is a big learning curve and KDHE, Kansas State University, the Kansas Department of Agriculture and members of the industry are all working together to solve the problems. The lower market for swine products has bought them some time.

CONTINUATION SHEET

MINUTES OF THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES, Room 254-E Statehouse, at 8:00 a.m. on March 23, 1999.

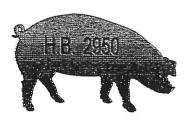
Chairperson Corbin thanked the department for their informative update. Senator Corbin said the prediction is that the pork market will take a further hit before you see any increase in prices. The pork bellies market is the lowest since 1952. Attention was called to the minutes of March 18 and 19. With a motion from Senator Tyson and a seconded from Senator Biggs the minutes were adopted.

The meeting adjourned at 8:55 a.m. The next meeting will be held on March 24, 1999.

SENATE ENERGY & NATURAL RESOURCES COMMITTEE GUEST LIST

DATE: March 23, 1999

NAME	REPRESENTING
Dale Lamble	KDA
GREG FOLEY	KDHE
Garry Koeler	KOA.
Judy Molon	16. ani Contie
Jane Willis	self
Earl Willis Ja	SelE
Faul Johnson	KCC
ED ROWE	LEAGUE OF WOMEN VOTERS/KS
Anthony Perez	Leg. Post Audit
Jom Bruno	Allens Assoc.
Mike Jensen	KPPC
Jim Allen	Seubourd
Hon Gaches	McGill, Caches & Asso.
Charles Blyann	KNRC/KS Sierra Club
Steven Graham	KSG
alanschlegel	X54
/	



Kansas Livestock Waste Management Program

1998 Legislative Report

Prepared by

Kansas Department of Health and Environment

Division of Environment

Bureau of Water

Livestock Waste Management Section

December 30, 1998

Senate Energy & Natural Resources

Attachment:

/

Date: 3-23-99





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^{* -} Available upon request

The 1998 Legislative Session developed and adopted House Bill 2950 that defined requirements for the Kansas Department of Health and Environment(KDHE) to prepare "On or before the first day of the 1999 and 2000 regular legislative sessions, the secretary shall submit a report regarding implementation of the provisions of K.S.A. 65-171d and sections 2 through 22, and amendments thereto, to the house and senate standing committees on agriculture, the senate standing committee on energy and natural resources and the house standing committee on environment." The following information was prepared to address the first half of the above quoted requirement.

Bureau Mission: To protect and improve the health and environment of Kansans through wise regulation of waters of the state.

Philosophy: Bureau philosophy is to implement the laws in a professional manner which achieves the law's goals reliably and cost-effectively. Program goals are established to enhance public trust and understanding for state government.

*Program Mission: Work with entities involved in animal agriculture to educate and implement statutory and regulatory requirements to maintain and/or achieve environmental compliance to protect the waters of the state.

Executive Summary: The Kansas Department of Health and Environment (KDHE) has been assigned the responsibility for making decisions that affect the physical health and environment of Kansans. The 1998 session assigned additional complex statutes, primarily addressed at swine, that invoke KDHE to develop a strategic plan, reorganize existing program, and acquire new staff to address the charge outlined in House Bill 2950. This team must have the knowledge to assess all aspects of a situation, the skills to implement chosen responses, the judgement to determine the repercussions of any given decision, and the dedication to work on sensitive environmental issues under difficult conditions.

The Livestock Waste Management Program history in Kansas dates back to the adoption of regulations in 1968. Kansas livestock facilities that are greater than 300 animal units are required to register with the department. The registration will allow staff to visit and evaluate the site to make a determination if a significant potential to pollute exists. An Animal Unit(AU) is terminology that describes a value or factor to calculate potential waste loads that considers the variability associated with multi-specie regulation. Facilities that are greater than 1000 AU's are subject to National Pollutant Discharge Elimination System (NPDES) requirements. The NPDES provisions are Federal mandates spawned from 1972 amendments to the Federal Water Pollution Control Act also known as the Clean Water Act. KDHE has been delegated the authority, via legislative action, to implement the federal program in conjunction with the state program.



Program Accomplishments:

The primary focus of this report is to identify the components and methods KDHE has and/or will be using to implement the provisions of H.B. 2950. Every component found within the report could be included in this focus area, however, to identify the strategic implementation efforts, this section will address a brief synopsis of District Office activity. The following data represents activity for the Federal Fiscal Year 1998, October 1, 1997 thru September 30, 1998:

Activity	Totals					
Inspections						
Federal Facilities	. 334					
State Facilities	374					
Certified Facilities	91					
Complaints	121					
Discharges	14					
Site Appraisals	358					
Post Construction Inspections	14					
Permits Issued:						
Federal	48					
State	35					
Certifications	109					
Renewals	41					
Other Activities:						
Technical Assistance						
Telephone	1395					
On-Site	280					
Follow-up Inspections	117					

Note: All Federal facilities were inspected in calendar year 1998!



Central Office activities throughout the calendar year centered around the legislative session and changes to implement the new statutory requirements. Primary activities included the development of regulations, program manual implementation guidance, a new database, preparation of position descriptions, hiring newly authorized Livestock Waste Management staff, of training new and existing staff, coordination with swine advisory committee, and the review and preparation of concurrence reports on agricultural permits receiving comments.

The majority of the year the central office staff consisted of an Environmental Scientist, a Professional Environmental Engineer, and an Environmental Technician. As of January 4, 1999 all the central office vacancies will be filled. Appendix B includes organizational charts for the central and district offices. The steep learning curve creates challenges for program staff, however, a sound strategic plan and realistic implementation timelines will ensure successful long-range results.

Regulations:

In late 1997, KDHE had developed a set of preliminary draft regulations updating the current regulatory requirements and design standards. The regulations and design standards are used in administering water pollution control activities associated with animal and other process wastes generated by confined livestock feeding operations. As a part of KDHE's attempt to obtain public input on the various concepts and proposals being considered, the text of these concepts and proposals was published in its entirety in the Kansas Register on December 18, 1997.

During the 1998 Legislative Session a number of bills were introduced addressing livestock waste management associated with swine facilities. During the session, the Substitute for House Bill No. 2950 (HB 2950) was passed, signed by Governor Graves, and published in the Kansas Register on May 7, 1998. Provisions of HB2950 required KDHE to develop and adopt regulations by January 1, 1999 that were required to implement and administer the provisions of HB 2950. In lieu of the concepts and proposals considered in the December 1997 draft regulation and the revised draft design standards, KDHE concentrated on making the critical program changes needed at this time to comply with Legislative intent regarding implementation of the HB 2950 provisions by January 1, 1999.

On June 11, 1998, KDHE conducted a public meeting to obtain input from the livestock industry, trade associations representing the livestock industry in Kansas, environmental groups, governmental officials, the U.S. Environmental Protection Agency, the general public, and other state and federal agencies as to what they wanted to see addressed in the proposed regulations that would be required to implement HB 2950.

During the development phase of the draft regulations, a preliminary draft of the regulations were presented to and discussed with the Secretary's Swine Facility Advisory Committee on July 30 and August 4, 1998 to receive their input.



The draft regulations, regulatory impact statement, and scheduled public hearings were public noticed in the Kansas Register on August 27, 1998. KDHE staff met with the Kansas Legislature Joint Committee on Administrative Rules and Regulations (Joint Committee) on September 9 and 18 and October 6, 1998 to discuss the draft regulations. These meetings resulted in a letter from the Joint Committee to KDHE dated October 7, 1998, summarizing their comments and concerns.

During the public notice period, KDHE received thirty (30) written comments regarding the proposed regulations. A total of four public hearings were conducted statewide in Manhattan, Iola, Hays, and Garden City on the afternoons/evenings of October 26 and 28, 1998. The transcripts, attendance records, and materials presented to KDHE at the hearings are available upon request. A total of 91 individuals participated in the public hearings and 23 people made oral presentations and/or written comments to KDHE.

Secretary Gary R. Mitchell formally adopted and submitted the regulations, KAR 28-18-1 through 28-18-15 and KAR 28-18a-1 through 28-18a-32 to the Joint Committee on Administrative Rules and Regulations on December 11, 1998.

Program Strategies:

Hiring of New Staff: The 1998 Legislature allocated 11.5 new Full Time Equivalent (FTE) positions and \$558,700 to assist in the implementation requirements of the statutory mandates required within HB 2950. After a comprehensive program analysis, KDHE staff developed a strategic plan to outline a roadmap for delivery of the newly adopted requirements. The plan identified several key areas that required change for the enhanced program delivery requirements. Key components within the plan included Data Management, Equipment, Monitoring Program, Internal and External Customer Training/Education, and Implementation/Guidance Manuals. The key elements were utilized in the evaluation of staffing allocations of the 11.5 FTE's. The following tables identify the position descriptions and locations of new Livestock Waste Management Program staff:

Position Description Location

Professional Environmental Engineer I	North Central District (Salina)		
Professional Environmental Engineer I	Southwest District (Dodge City)		
Environmental Technician III	South Central District (Wichita)		
Environmental Technician III	Northwest District (Hays)		
Environmental Technician III	Southeast District(Chanute)		
Office Assistant III	Southwest District (Dodge City)		
Professional Environmental Engineer II	Central Office		
Environmental Scientist III	Central Office		
Environmental Geologist I	Central Office		
Environmental Technician IV	Central Office		

Position Description	Location
Office Specialist	Central Office

* 0.5 FTE position will provide System Software Analyst - Statewide

The Central Office organizational chart referenced in Appendix B, will consist of two core units, a technical support unit and an implementation/training unit. The technical unit mission is to address design review problems encountered in the district offices, prepare technical review concurrence documents on permits receiving comments, preparing technical bulletins to transfer new technologies to the district staff and to assist in maintenance of the design standards and regulations. The implementation unit mission is to develop and maintain program guidance manuals that provide clear concise direction on programmatic issues, continual in-field training for new employees and to ensure consistent program implementation is occurring statewide. In addition, this unit will assist in temporary overload work areas, develop and administer the ground water monitoring program components for swine facilities, statutorily required to install wells, and conduct training seminars for internal and external customers on multiple program related issues.

Staff Training: Staff Training is a key element to provide the ability for KDHE to meet the expectations outlined in HB 2950. KDHE administrative staff have identified the following priority areas for training needs:

- ♦ HB 2950
- ♦ Newly adopted Kansas Administrative Regulations
- ♦ Implementation Training Reference Manual
- ♦ Windows NT Operating Systems
- ♦ Lotus Notes Communication Systems
- ♦ New Livestock Waste Management Database

Training efforts began in middle May of 1998. The first phase training effort was to involve the management staff at the District Offices in the process of developing guidance as well as training district level managers on the complex components of the law and how it relates to the Livestock Waste Management Program.

Guidance Manual:

This Central Office, Bureau of Environmental Field Services, and District Environmental Administrators workgroup developed the initial working manual for KDHE staff to utilize as a reference document for the complex new rules for the swine industry. The Livestock Waste Program training manual is attached in Appendix C. It is the vision of the section to enhance the Internet site of the KDHE to include the Manual and applicable information and links with search menu option functions. KDHE gathered the entire LWM implementation team in Salina on November 19 and 20, 1998 to conduct an open dialog/training of the Draft Manual in its entirety. Draft Manuals were distributed to all staff and input received during the training session was documented and incorporated when applicable or consistent with the administrations mission.

Database:

The following section previews the overhaul and components of the new data management system. The first training session for district staff occurred December 2 and 3, 1998 where Windows NT and a database overview was given. The December training sessions were conducted in the computer training lab located at Forbes Field, Topeka. Upcoming/ongoing training will include Lotus Notes and multiple in-office one-on-one assistance sessions to increase the working knowledge/comfort level of LWM staff. The database will have a live link to the Kansas Department of Agriculture for input of Nutrient Utilization Plan components and facility information access. In summary, tremendous commitments have been made by the agency, not only to develop the system, but to ensure the opportunity for successful implementation.

Livestock Waste Management Database Introduction

The existing Feedlot system was analyzed for year 2000 compliance during the fall of 1997. The system was designated as non-compliant with a failure date of 01/1999. As the Year 2000 Readiness Assessment was finishing up, a decision was made to replace the Feedlot Application as opposed to the remediation of it. The decision was driven by the legislature wanting to insure that Year 2000 budget appropriations were expended in the most sensible fashion.

The recent legislation required specific technology enhancements to the Feedlot system for swine facilities. This included the ability to publish information on the Internet. This functionality will be incorporated by the January 1, 1999 legislation effective date.

This section of the report presents the detail design of the Feedlot Permitting System for the Livestock Waste Management Program(LWMP), Bureau of Water and Bureau of Environmental Field Services(BEFS). This design is the result of input from the following:

- ♦ Central Office Staff
- ♦ District Environmental Administrators
- ♦ District Water Engineers
- District Environmental Technicians

The System was defined to utilize and enhance existing functions which include:

- Facility information
- ♦ Site Appraisal information
- Permitting/Certification information
- Inspection information
- Reporting abilities



The requirements of legislation to place certain documentation on the Internet was included in the system expansion. In addition, based on management direction, the system was defined to provide the following capabilities:

- System Controls
- ♦ Enforcement Tracking
- ♦ Correspondence History
- ♦ File Tracking(Barcoding)
- ♦ Complaints

The combination of these functions provide a comprehensive and technology based package for LWMP and BEFS.

Livestock Waste Management Database Workflow

Analysis of the feedlot system and its corresponding work flows, provided the information necessary to determine the functional steps required to develop the proposed system. A flowchart has been used to show the overall system processes. Each function within the overall process is listed below and will be described in detail on the following pages.

Function	Description
Application/Registration	Data entry of facility and animal information
Site Appraisal	Entry of site appraisal information
Plan Documentation	Establish and collect documentation needed for plan
Plan Review/Approval	Review of plan and documentation for completeness
Public Comments	Collection of information during public comment
Public Hearing	Information needed for public hearings
Certifications	Preparation of certifications
Permits	Preparation of permits
Inspections	Print inspection form and data entry
Enforcement	Follow up processes to ensure compliance of permit
Nutrient Testing .	Entry of soil and water well test results
Correspondence tracking	History of correspondence prepared by system
File Request	Electronic requesting and tracking of permit files
Invoice	Billing and payment processing

Function	Description
Reports	Reporting system access
Renewal	steps necessary to process a permit renewal
Expansion	Special facility expansion processing
Controls	Control table information
Complaints	Complaint tracking and processing

The following descriptions outline subsequent pages and the abridged version pictorial tour of the Livestock Waste Management Database.

Main Menu:

Figure 1 is the main menu of the livestock waste management program database. From this area all functions of the database can be accessed.

Permits:

Figures 2 and 3 are screen views of the database permit utility. This process creates the draft permit in the district. This permit can be modified when the final permit approval is received. After the permit issued date is entered, the system will not allow the permit information to be updated.

Inspections:

Figures 4 and 5 show actual screen views of the inspection utility of the LWMP database. Frequency of the inspection will be based on legislation and the size of the facility in combination with the animal type. When the permit is issued, the next inspection date will be established based on the permit issued date. For ongoing inspections, the next inspection date will be updated by adding the inspection frequency to the inspection date. The technician will have the ability to request an inspection form for a particular facility. Information entered on the form during the inspection will be keyed into the system. This will be used to produce an inspection notification letter to the facility. Compliance issues will be documented into the system for follow-up and/or enforcement.

Reports:

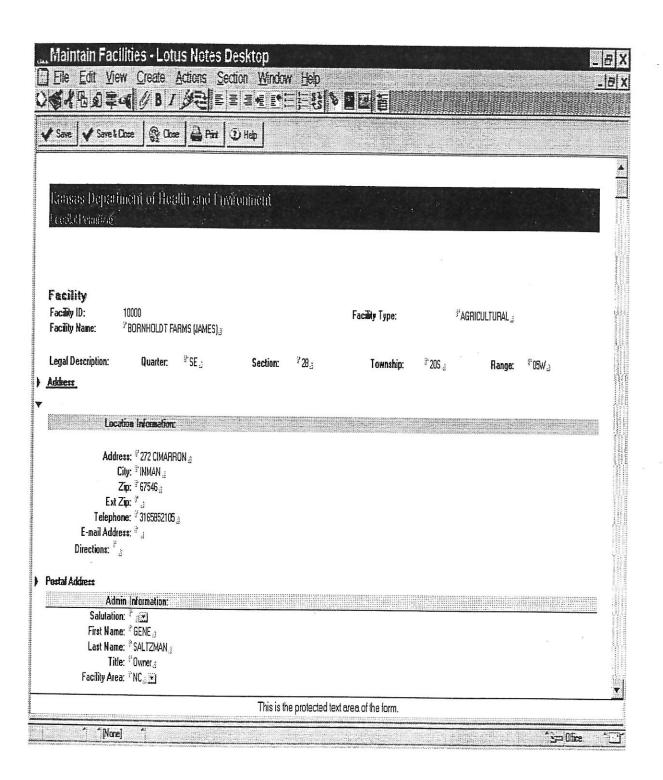
Figures 6 and 7 illustrate the reporting capability of the LWMP database. The system will display a menu of reports to be selected on request. Some of these reports will have the ability to make selections on specific information (i.e. animal types, district and facility size).

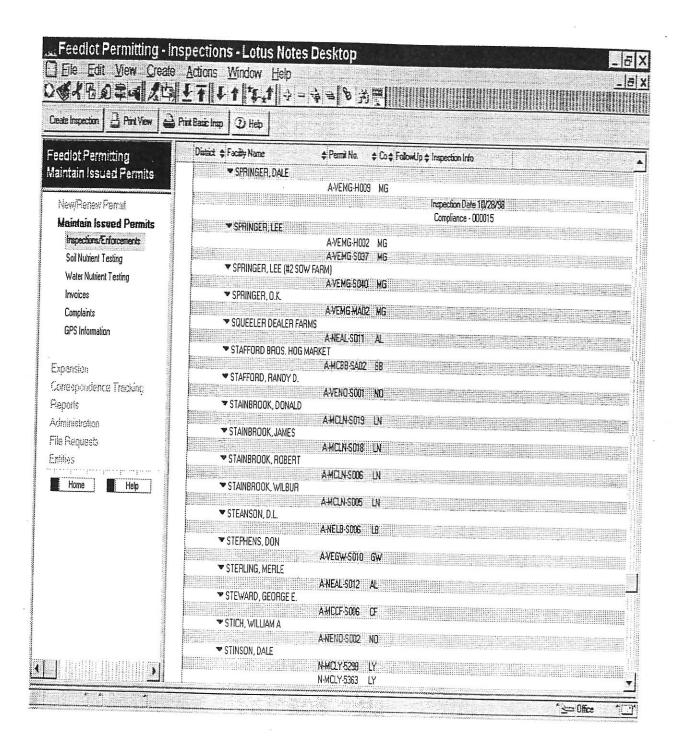
The following illustrations display graphic views that may further illustrate the format and data use abilities through personal computer applications.

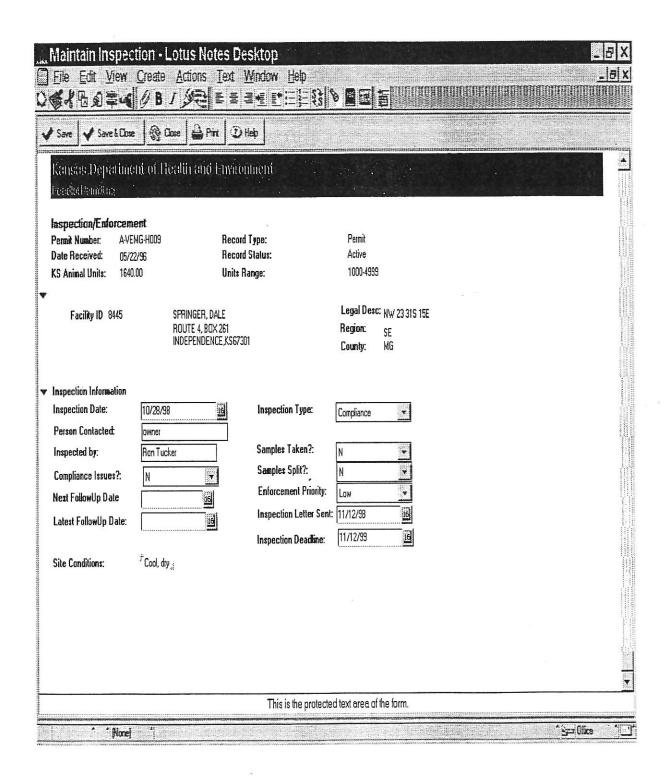


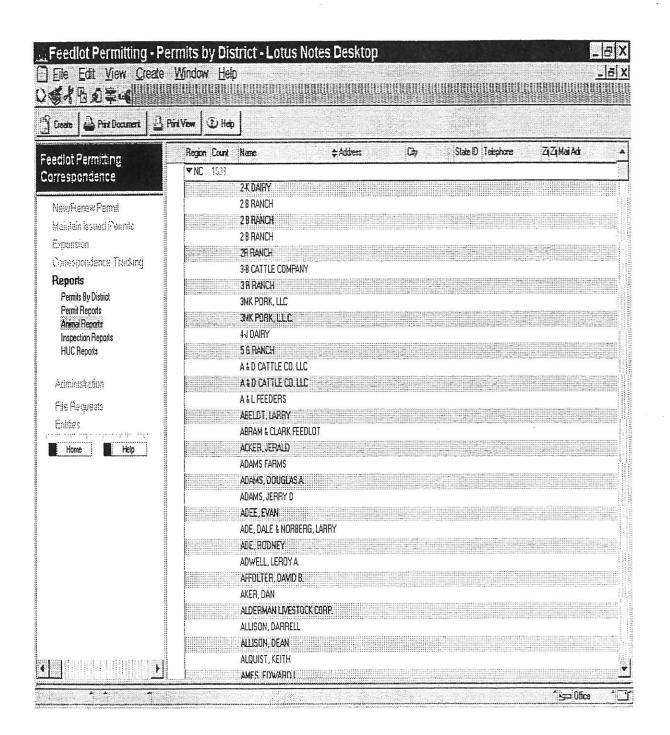
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Correspondence Tracking	10005	JAY, JOHN	RURAL ROUTE 3	OLA	KS	SE	66749 NW 10 255 18E
Consideration (Including	10006	KORTE, LOREN	ROUTE 1	LAHARPE	KS	SE	66751 NE 01 26S 19E
Reports	10007	LUDLUM, WILBURN	RURAL ROUTE 1	MORAN	KS	X	66755 NAV 19 245 2 0E
Administration	10008	MOORE, CHESTER	RURAL ROUTE 3	IOLA	KS	SE	66749 SE 16 25S 18E
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	10022	PINNEO, HENRY	RURAL ROUTE 2	KINCAID	KS	SE	66039 NE 07 22S 21E
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	10024	YODER, LEON	ROUTE 1	WELDA	KS	SE	66091 SE 12 21S 18E
	10025	BALES FARM	RURAL ROUTE	MUSCOTAH	K.S	NE	66058-35 06S 17E
	10026	GILKISON, RICHARD				NE	26 06S 17E
	10027	HEINOLD HOG MARKET	ROUTE 1, BOX 12	effingha m	KS	NE	55023 16 06S 18E
	10028	WALLINGFORD, KENNETH	ROUTE 2	EFFINGHAM	KS	NE	66023 32 06S 19E
	10029	WILSON, WILLIAM				VE	21 05S 17E
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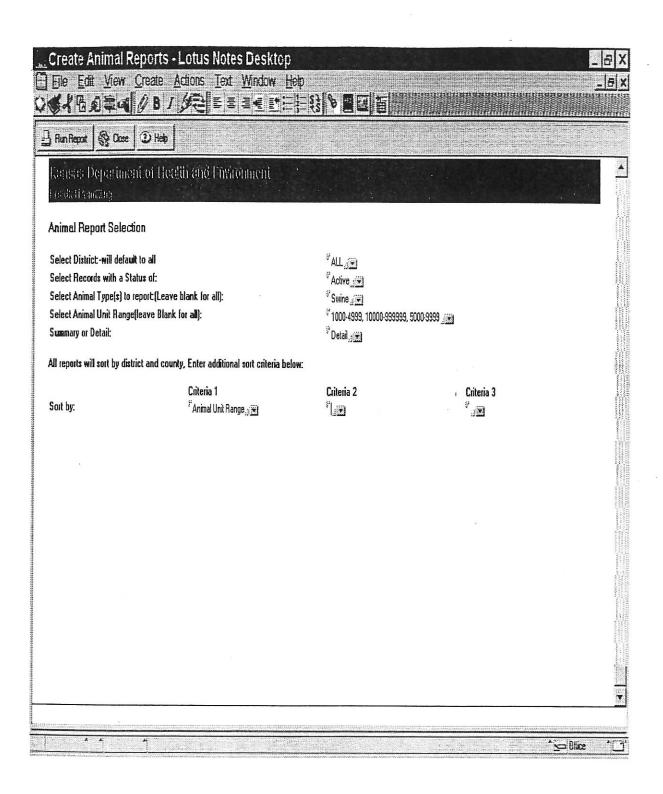












Equipment:

The database referenced above requires a 100 Megahertz or greater processor and at least 32 MG of RAM. The entire program staff had inadequate equipment necessary to utilize the system. The agency purchased new or upgraded **all** systems used in the Livestock Waste Management Program to establish a working platform for all users as required by the system.

Compliance Workshops:

KDHE staff are currently working with Kansas State University(KSU), Kansas Department of Agriculture, and Industry representatives to address external customer training needs. The two areas of focus are Existing Swine Facility Compliance and Swine Facility Operator Certification. The projected timelines for the workshops are late February and April respectively. The workshops will be conducted in multiple locations and will be staffed by multiple agency representatives.

Producers will receive informational packets approximately 30 days prior to the workshops with the necessary information for statutory compliance and an announcement of the workshop subjects, times, dates, and locations.

Research Efforts:

The first phase of the KSU study of earthen lagoons for containment of animal waste, partially funded through KDHE and the State Water Plan, has been completed. Results provided in the study, coupled with a review of the literature, suggests conclusive evidence that laboratory tests of a wide variety of Kansas soil types indicate the soils can meet engineering standards for acceptable use as an impermeable liner for animal waste containment. Additionally water balance testing of a limited number of existing animal waste lagoons indicates the ¼ inch per day maximum allowable leakage rate is obtainable using current design and construction techniques. The study also reflects that even lower seepage rates can be achieved with appropriate design and construction considerations.

Questions remain regarding the impacts of animal waste containment lagoons on Kansas groundwater quality. The groundwater sampling conducted has not indicated any widespread nitrate contamination as a result of concentrated livestock feeding operations. However, the limited data and the numerous site specific factors which can affect seepage, groundwater movement and pollutant attenuation preclude any definitive conclusion or definition of the relationships of each of the key design/construction considerations in establishing standards or requirements. The relationship between groundwater resource and use; probable seepage rates; and pollutant concentration can be identified as likely key relationships which should be defined. Additional study should be considered if Kansan's deem it to be critical that the key relationships be defined.

KDHE intends to utilize the information provided in the completed study and any additional studies to further refine or upgrade existing minimum design standards, regulations, and policies regarding livestock waste management in regards to permitting and protection of the waters of Kansas.

The following letter addressed to Dr. Marc Johnson, Dean of Agriculture, KSU, requests assistance to pursue efforts to address Odor Management, Best Management Practices (BMP), and Best Available Technologies (BAT). The agency will continue to pursue the above mentioned effort for long-range solutions.

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KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT

BILL GRAVES, GOVERNOR Gary R. Mitchell, Secretary

December 7, 1998

Dr. Marc Johnson Dean of Agriculture Kansas State University 115 Waters Hall Manhattan, KS 66506-4008

Dear Dr. Johnson:

The Kansas Department of Health and Environment (KDHE) has been actively pursuing implementation efforts of House Bill 2950, which primarily addresses the swine industry in Kansas, and the management of waste and odors generated by large production facilities. One specific provision in the newly adopted law pertains to odor and development of technologies and management practices for the reduction and/or abatement of odors.

The KDHE requests your assistance in developing an odor management strategy for Kansas that will focus primarily on agricultural facilities. Goals of the strategy may include development of a Best Management Practice (BMP) catalog, a Best Available Technology (BAT) catalog, queries of existing research, definition of existing research needs, economic implications related to implementation of practices, and the list goes on. The KDHE would like to arrange a time in which we could meet with appropriate researchers from KSU to discuss several issues, i.e., Who should be involved in the development?; Is there a human health risk associated with odor?; Are industries/CAFO's emitting unacceptable levels of air borne odor contaminates?)

The KDHE is committed as a result of concerns expressed by citizens and the legislature to actively pursue odor abatement activities. We would like to work in partnership with Kansas State University to address these issues. Please respond if you, and appropriate staff, are interested in participating in a brainstorming session to potentially develop a "scope of work" for research needs to address this challenging issue. Thank you for your interest and cooperation.

y Ambhel Gary R. Mitchell

Secretary

cc:

Bill Graves, Governor

Allie Divine, Sec. of Agriculture

Ron Hammerschmidt, Director of Environment

Jan Sides, BAR

KDHE Swine Advisory Committee

1-19

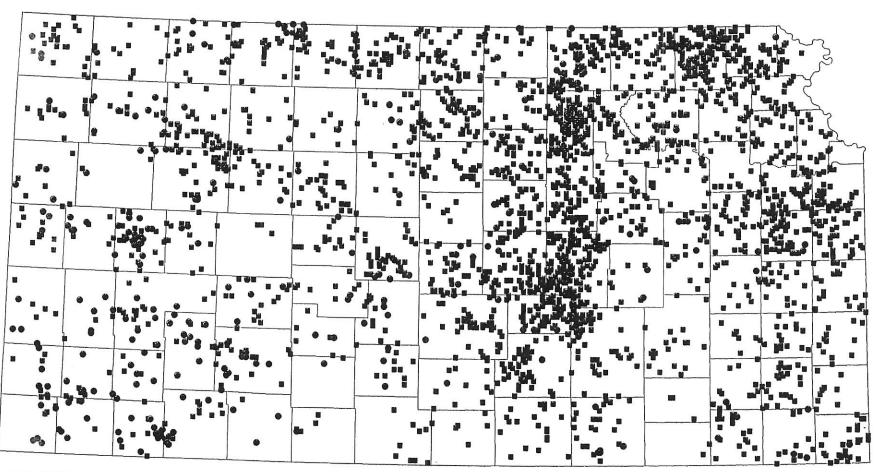
Evaluation:

KDHE staff will continually analyze program outcomes with the expectations of 100% compliance with Statutorily defined requirements and refocusing of administrative program priorities. Evaluation of the program accomplishments will take into account intense learning curves and deployment of data-system software. Multiple evaluation techniques were designed into the Livestock Waste Management Program database. Examples include computer automated notification of what facilities need to be inspected, when they need inspected, email notification when statutory timeline requirements are nearing, secondary notifications to supervisors prior to non-compliance dates, etc.

Conclusion:

Calendar year 1998 has brought about many new challenges to the KDHE. The department is pleased to report that the Kansas Administrative Regulations, as required by statute, were developed and adopted December 11, 1998. Funding was appropriated on June 18, 1998 to provide for new program staffing assistance for implementation of HB 2950. A strategic plan was developed to address the requirements of the HB 2950 along with an enhanced roadmap for program delivery. Position descriptions were developed in June and July of 1998 and were followed by vacancy announcements, interviews and hiring. After completion of those tasks, related staff were acquired and are currently in place or have been offered. The computer data-system evolved from a conceptual plan in early May through engineering, development, testing, and trouble-shooting to a final district level deployment in early January of 1999. KDHE has worked with Kansas Department of Agriculture providing access and links to the newly developed database and on coordination issues in relation to joint responsibilities for swine facilities. Training will continue to occur for internal staff as well as outreach efforts to the regulated agricultural industries as an essential component of program implementation.

ALL FACILITIES WITH A LIVESTOCK WASTE MANAGEMENT PERMIT



DATA SOURCES:

Livestock Waste Management Facilities : KDHE 12/98

Political Boundaries: KCDB/KGS

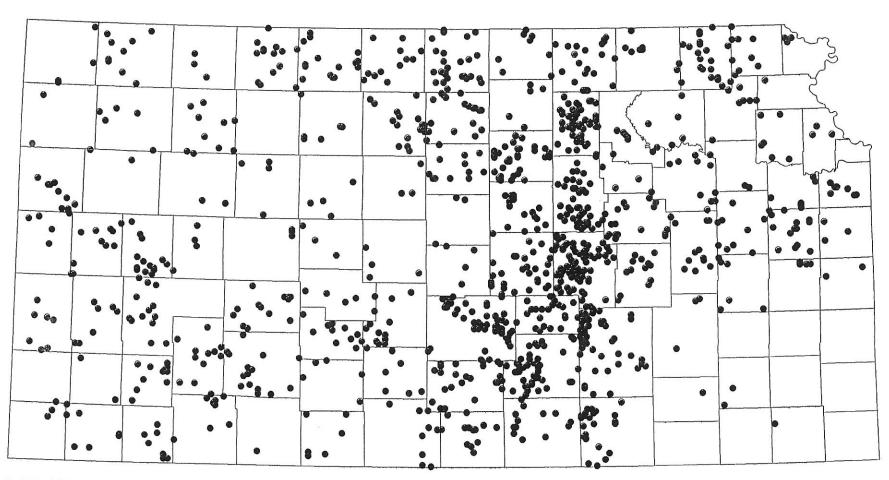
KDHE BOW/OIS Dec. 1998 DRAFT



Animal Units (3002 Facilities)

- **0** to 1000
- >1000
 - County Boundaries

REGISTERED LIVESTOCK WASTE MANAGEMENT FACILITIES



DATA SOURCES:

Livestock Waste Management Facilities : KDHE 12/98

Political Boundaries: KCDB/KGS

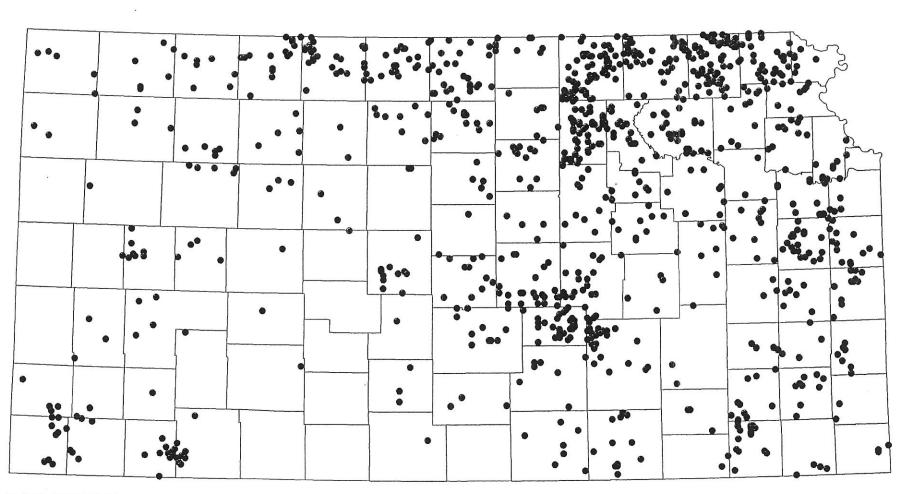
KDHE BOW/OIS Dec. 1998 DRAFT



Registered Livestock Waste Management Facilities (Count - 1165)

County Boundaries

ALL SWINE FACILITIES WITH A LIVESTOCK WASTE MANAGEMENT PERMIT



DATA SOURCES:

Livestock Waste Management Facilities : KDHE 12/98

Political Boundaries: KCDB/KGS

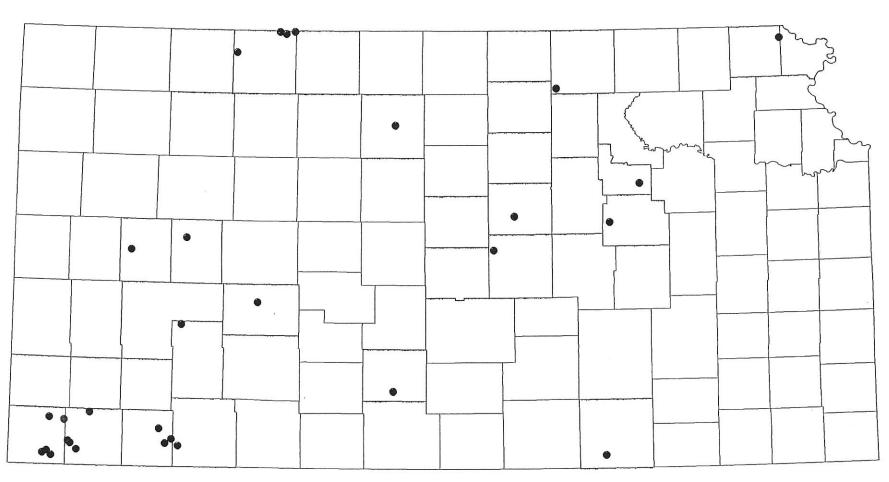
KDHE BOW/OIS Dec. 1998 DRAFT



Animal Units (981 Facilities)

- < 1000
- 1000 3724
- > 3724
- County Boundaries

PERMITTED SWINE FACILITIES GREATER THAN 3724 ANIMAL UNITS



DATA SOURCES:

Livestock Waste Management Facilities : KDHE 12/98

Political Boundaries: KCDB/KGS

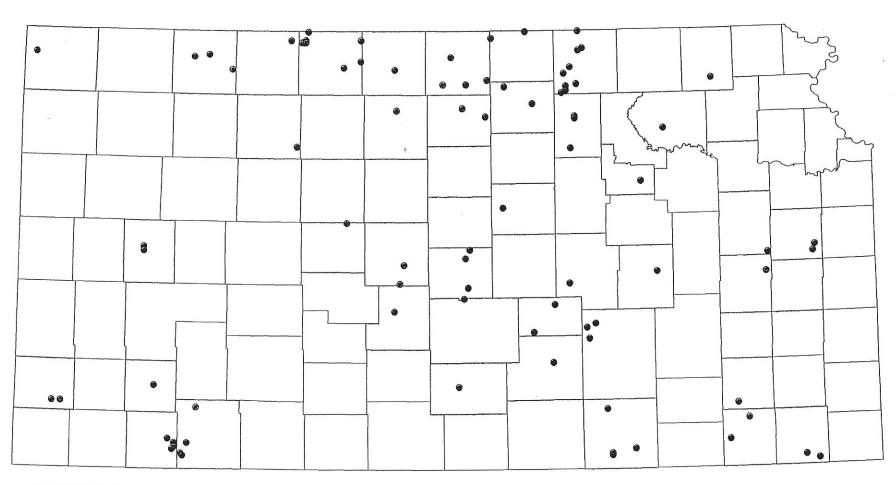
KDHE BOW/OIS Dec. 1998 DRAFT



Swine Facilities > 3724 AU (Count 31)

County Boundaries

PERMITTED SWINE FACILITES 1000 - 3724 ANIMAL UNITS



DATA SOURCES:

Livestock Waste Management Facilities :KDHE 12/98

Political Boundaries: KCDB/KGS

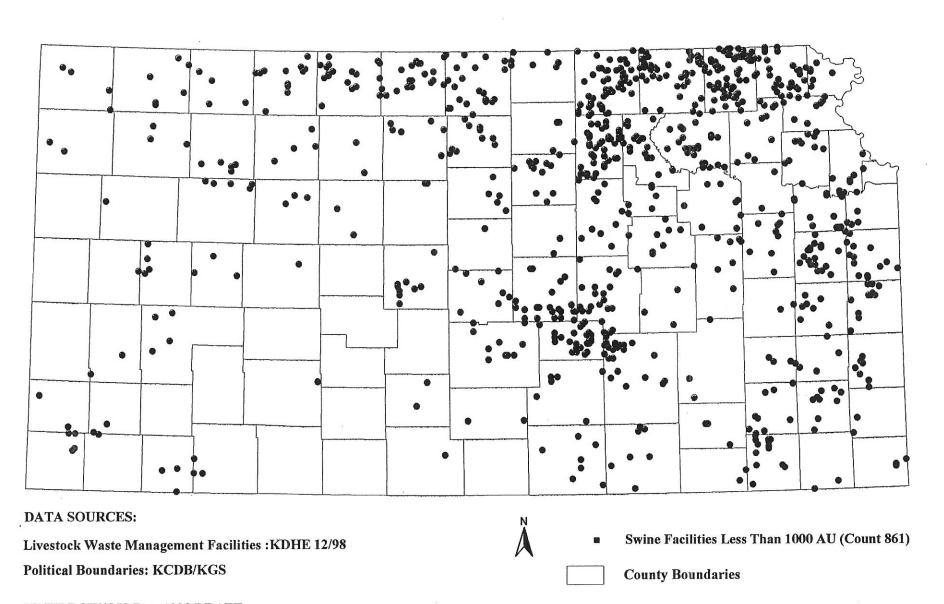
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Swine Facilities 1000 - 3724 AU (Count 89)

County Boundaries

PERMITTED SWINE FACILITIES LESS THAN 1000 ANIMAL UNITS



KDHE BOW/OIS Dec. 1998 DRAFT

Organization Chart

Central Office

Greg Foley Section Chief (reallocation)

David Freise Professional Env. Engineer II (new)

Jeff Clark Enviromental Scientist III (new)

Dena Endsley Office Specialist (new)

Larry Hess (P.E.E.)

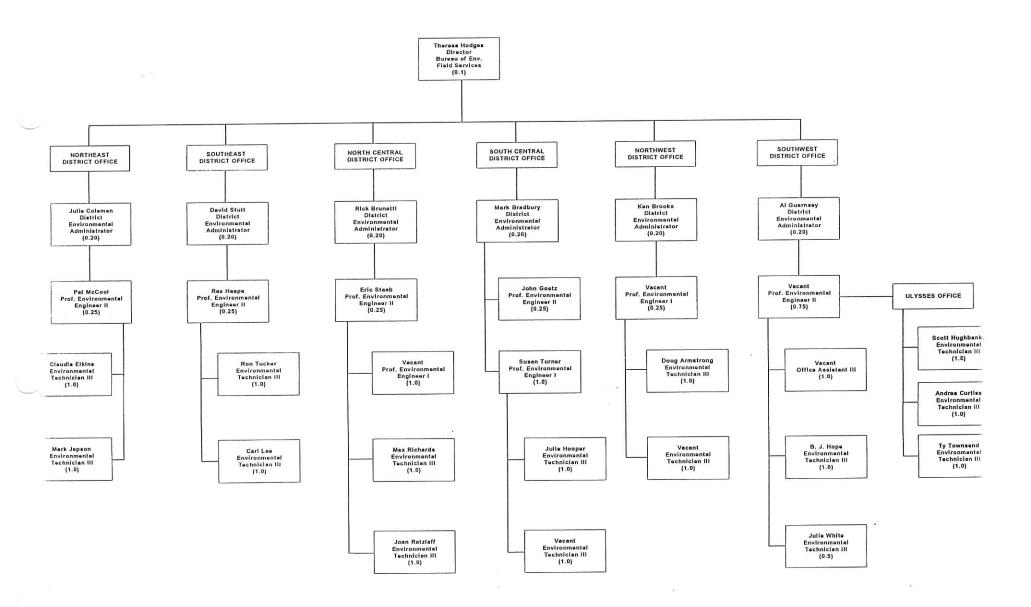
Bill Bicher P.E.E. I (reallocation) Jeff Lanterman Envr Geologist ((new)

Carl Lee Envr. Tech.IV John Harsh Envr. Tech. IV (new)

Vacant O.A. III (reallocation)



CAFO STAFFING IN DISTRICT OFFICES



March 25, 1999

TO:

Members of the Senate Energy and Natural Resources Co.

FROM:

Senator David Corbin

Attached are the minutes of the committee meeting of March 24. Please review and contact my office by noon, Friday, March 26, 1999 if you have corrections or additions.. If we do not hear otherwise we will consider them approved as presented.