

MINUTES OF THE HOUSE COMMITTEE ON ENVIRONMENT.

The meeting was called to order by Chairperson Representative Joann Freeborn at 3:30 p.m. on January 23, 2003 in Room 231-N of the Capitol.

All members were present except: Representative John Faber - excused
Representative Tom Sloan - excused

Committee staff present: Raney Gilliland, Legislative Research
Emalene Correll, Legislative Research
Mary Torrence, Revisor of Statutes
Mary Ann Graham, Secretary

Conferees appearing before the committee: Mary Jane Stattelman, Administrator, Kansas Agricultural Remediation Board, 816 SW Tyler, Topeka, KS 66612
Maurice Korphage, Director, Conservation Division, Kansas Corporation Commission, 130 S. Market Rm. 2078, Wichita, KS 67202
Bob Jenkins, Environmentalist Geologist, Conservation Division, Kansas Corporation Commission, 130 S. Market Rm. 2078, Wichita, KS 67202

Others attending: See attached sheet

Chairperson Joann Freeborn called the meeting to order at 3:30 p.m. She reviewed the committee agenda for Tuesday, January 28. Review of Annual Report to the Governor and the Legislature regarding Implementation of KSA 82a-2001 (Activities related to **Substitute for SB204**) by the Kansas Department of Health and Environment Staff; A review of Kansas Public Water Supply Loan Fund; and Review of Kansas Water Pollution Control Revolving Fund. Also bill introductions. Thursday, January 30, Professor James Wadley, Washburn University School of Law, will review Kansas Water Law. Also bill introductions.

The Chairperson asked if anyone had a bill request at this time. No one came forward.

The Chairperson welcomed Mary Jane Stattelman, Administrator, Kansas Agricultural Remediation Board, to the committee. She gave an overview of the history of the Remediation Board and annual report. The 2000 Legislature passed **SB501**, which was entitled the Agricultural and Specialty Chemical Remediation Act. This bill created the following programs and board; (1) Remediation Linked Deposit Loan Program. This program is to be administered by the state treasurer for the purpose of providing lower interest loans to eligible persons to pay the costs of corrective action approved or ordered by the Kansas Department of Health and Environment. (2) Remediation Reimbursement Program. This program is administered by the Kansas Agricultural Remediation Board (KARB). This program provides reimbursement to eligible persons for the costs of corrective actions approved by KDHE or taken in accordance with an order from KDHE. (3) Kansas Agricultural Remediation Board (KARB). Five members are appointed by the Governor and confirmed by the Senate and two ex officio members representing KDHE and KDA. These Board members will serve 4 year terms. The Board has the following authority and responsibility: Promulgate rules and regulations; Contract or hire an administrator; Provide an annual audit of the fund; Provide an annual report to the Governor, the Senate Energy and Natural Resources Committee and the House Environment Committee on or before February 1, of each year; and The Board and the Fund shall be subject to an annual audit by the legislative post audit committee. (See attachment 1) Committee questions and discussion followed.

Chairperson Freeborn thanked Ms. Stattelman for her presentation. She welcomed Maurice Korphage, Director, Conservation Division, Kansas Corporation Commission to the committee. He gave an overview on Abandoned Well and Site Remediation Fund Status Report. The fund was created during the 1996 legislative session with the passage of **House Substitute for SB755**. The purpose of the fund is to provide additional funding to the KCC, Conservation Division, with which to address the problem of both abandoned oil and gas wells and exploration and production related contamination sites. In addition to the creation of

CONTINUATION SHEET

MINUTES OF THE HOUSE COMMITTEE ON ENVIRONMENT at 3:30 p.m. on January 23, 2003 in Room 231-N of the Capitol.

the fund the legislation directed the Conservation Division to establish financial responsibility requirements for oil and gas operators within the state of Kansas. These requirements were in place by January, 1998. **SB321** passed during the 2001 legislative session, extends the original fund sunset date 7 years to June 30, 2009. Mr. Korphage, with overhead slides, reviewed the status of oil and gas fields in Kansas; average crude oil price vs. operator intents to drill; Kansas oil production FY1991-FY2002; Kansas gas production FY1991-FY2002; total abandoned wells plugged since inception of abandoned wells fund established by 1996 legislature.

Mr. Korphage introduced Bob Jenkins Environmentalist Geologist II, Conservation Division, Kansas Corporation Commission, to the committee. He reviewed, along with overhead slides, the Abandoned Well/Site Remediation Fund Status of the Abandoned Well Inventory. The KCC total abandoned well inventory (priority I and priority II) currently contains 13,711 wells, documented and verified. This represents an increase in the total inventory of 454 wells over that reported in January of 2002. Of this total, 23,840 wells are listed in the priority I inventory. Of these priority I wells, 7,496 still require plugging operations, which is 509 less than one year ago. (See attachment 2) Committee questions and discussion followed.

The Chairperson thanked Mr. Korphage and Mr. Jenkins for their presentation.

The meeting adjourned at 4:45 p.m. The next meeting is scheduled for Tuesday, January 28, 2003.

HOUSE ENVIRONMENT COMMITTEE GUEST LIST

DATE: January 23, 2003

NAME	REPRESENTING
Jim Bruno	EKOLA
Diane Coe	KWO
Pam Hopper	KS Water Assoc
Steve Swaffar	Ks Farm Bureau
Doug Smith	SWKROA



Kansas Agricultural Remediation Board

Board Members:

CHAIR
Agricultural Producer
LINDA PETERSON
Burdick

VICE CHAIR
Specialty Chemical
Distributor
LARRY SHIVERS
Van Diest Supply
Salina

Grain Processor
KAMYAR MANESH
Farmland Industries
Olathe

Agricultural Retailer
LAURA PEARL
J.B. Pearl Sales &
Service
St. Marys

Ag & Specialty
Chemical Registrant
ROGER LONG
Syngenta Crop Protection
Great Bend

Ex Officio Members:

RICK BEAN
Remediation Section Chief
KS Department of Health &
Environment, Topeka

GARY MEYER
Fertilizer & Pesticide
Program Director
KS Department of Agriculture,
Topeka

Program Administrator

MARY JANE STATTELMAN
Topeka

ANNUAL REPORT

KANSAS AGRICULTURAL REMEDIATION BOARD

HOUSE ENVIRONMENT COMMITTEE

PRESENTED BY:

MARY JANE STATTELMAN

JANUARY 23, 2003

The Genesis

The 2000 Legislature passed SB 501, which was entitled the Agricultural and Specialty Chemical Remediation Act. This bill created the following programs and board:

1. Remediation Linked Deposit Loan Program - This program is to be administered by the state treasurer for the purpose of providing lower interest loans to eligible persons to pay the costs of corrective action approved or ordered by the Kansas Department of Health and Environment.
 - The costs must also be approved by the Kansas Agricultural Remediation Board (KARB).
 - The total amount of linked deposit loans for any one site cannot exceed \$300,000.
 - The total amount of money in the linked deposit program shall not exceed \$5 million.
 - This provision will sunset in 10 years.

2. Remediation Reimbursement Program - This program is administered by the Kansas Agricultural Remediation Board (KARB). This program provides reimbursement to eligible persons for the costs of corrective actions approved by KDHE or taken in accordance with an order from KDHE.
 - If an eligible person is assessed a fee then that person can receive 90% of the total costs greater than \$1,000 and less than \$100,000 **plus** 80% of the total eligible corrective action costs greater than \$100,000 and less than \$200,000.
 - If a person does not pay an assessment or a pesticide dealer that sells less than \$2500 of pesticides annually, then the person is eligible to receive 100% of their costs greater than \$1,000 and less than or equal to \$10,000.
 - This provision sunsets in 10 years.

3. Kansas Agricultural Remediation Board (KARB) – 5 members are appointed by the Governor and confirmed by the Senate and two ex officio members representing KDHE and KDA. These Board members will serve 4 year terms. The Board has the following authority and responsibility:
 - Promulgate rules and regulations;
 - Contract or hire an administrator;
 - Provide an annual audit of the fund;
 - Provide an annual report to the Governor, the Senate Energy and Natural Resources Committee and the House Environment Committee on or before February 1, of each year;
 - The Board and the Fund shall be subject to an annual audit by the legislative post audit committee.

Kansas Agricultural Remediation Board (KARB)

The following individuals were confirmed by the Senate:

Linda Peterson, Chair

Representing agricultural producers

Term expires: 2003

Larry Shivers, Vice Chair

Representing specialty chemical distributors

Term expires: 2004

Kamyar Manesch

Representing grain processors

Term expires: 2003

Laura Pearl

Representing agricultural retailers

Term expires: 2006

Roger Long

Representing agriculture and specialty chemical registrants

Term expires: 2006

Rick Bean, ex-officio member

Representing the Kansas Department of Health and Environment

Gary Meyer, ex-officio member

Representing the Kansas Department of Agriculture

FY 2002 Receipts

Who Pays	Due date	Amount to KARB	Total Amount to KARB
Pesticide Product	Jan. 1 st	\$60	387,750.00
Grain Storage	August 31 st or upon license renewal	\$.0005 per bushel	406,493.48
Pesticide Business Dealer License	July 1 st	\$80	99,560.00
Fertilizer Products	July 1 st	\$20	66,960.00
Custom Fertilizer Blenders	Jan. 1 st	\$100	42,400.00
Total			1,046,425.42

FY 2003 Projected Revenues

Who Pays	Due date	Amount to KARB	Total Amount to KARB
Pesticide Product	Jan. 1 st	\$60	372,000.00
Grain Storage	August 31 st or upon license renewal	\$.0005 per bushel	392,500.00
Pesticide Business Dealer License*	July 1 st	\$80	88,000.00
Fertilizer Products	July 1 st	\$20	68,000.00
Custom Fertilizer Blenders	Jan. 1 st	\$100	41,000.00
Total			997,004.00

KARB Meetings

The Board met 5 times during calendar year 2002. These meetings occurred on January 14, 2002, January 24, 2002, March 19, 2002, July 9, 2002, and October 8, 2002. During these meetings, the Board accomplished the following tasks:

- Sent out application forms and brochures to every person or entity that is currently participating in either KDHE's voluntary cleanup program or the state cooperative program;
- Renewed the administrative contract with Kansas Grain and Feed Association;
- Renewed the contract with Berberich, Trahan and Company P.A. to perform the audit of the remediation fund;
- Reviewed and made determinations on applications.

Remediation Reimbursement

During calendar year 2002, the KARB members approved 20 applications in the amount of \$939,108.97, with the average reimbursement amount being \$46,955.45. The following is a breakdown of the type of facility that has been reimbursed and the type of contamination that has been addressed and where the sites are located within the state.

2002 KARB Reimbursement Chart

Type of Business	Contamination	Reimbursement
Ag retailer	High nitrate in water supply	\$ 36,697.78
Ag retailer	Pesticides and nitrates	\$ 39,593.62
Ag retailer	Pesticides and nitrates in water supply	\$170,000.00
Grain elevator	Carbon tet	\$ 74,159.21
Grain elevator	Nitrate in the public wells	\$ 86,578.65
Grain elevator	Nitrate in domestic wells	\$ 21,395.86
Grain elevator	Nitrate in soil and groundwater	\$ 20,189.44
Grain elevator	Carbon tet impacting public and private water supply	\$ 12,865.19
Ag retailer	Nitrate in the soil and groundwater	\$ 13,131.91

	Grain elevator	Carbon tet in groundwater	\$170,000.00
	Grain elevator	Carbon tet	\$ 58,153.90
	Ag retailer	Atrazine	\$ 7,018.64
	Ag retailer and Elevator	Nitrate & Carbon Tet	\$59,488.89
	Ag retailer and elevator	Nitrate	\$ 1,883.69
	Ag retailer and elevator	Nitrates and pesticides	\$ 50,899.83
	Ag retailer	Pesticides and nitrates	\$ 9,088.43
	Ag retailer and elevator	Pesticides, nitrates and ammonia	\$ 67,456.38
	Ag retailer and elevator	Nitrate	\$ 17,776.67
	Ag retailer and elevator	Nitrate in public water supply	\$ 2,388.93
	Ag retailer and elevator	Carbon tet	\$ 20,341.95
			\$939,108.97

Type of site:

- 7 grain elevator/ag retailer sites
- 7 grain elevator sites
- 6 ag retailer

Type of contamination:

- 5 Carbon tet
- 14 Pesticide, nitrate, nitrite, atrazine
- 1 Combination

Breakdown based on the type of facility site:

- 7 Grain elevator/Ag retailer \$480,713.40
- 7 Grain elevator \$182,865.19
- 6 Ag retailer \$275,530.38

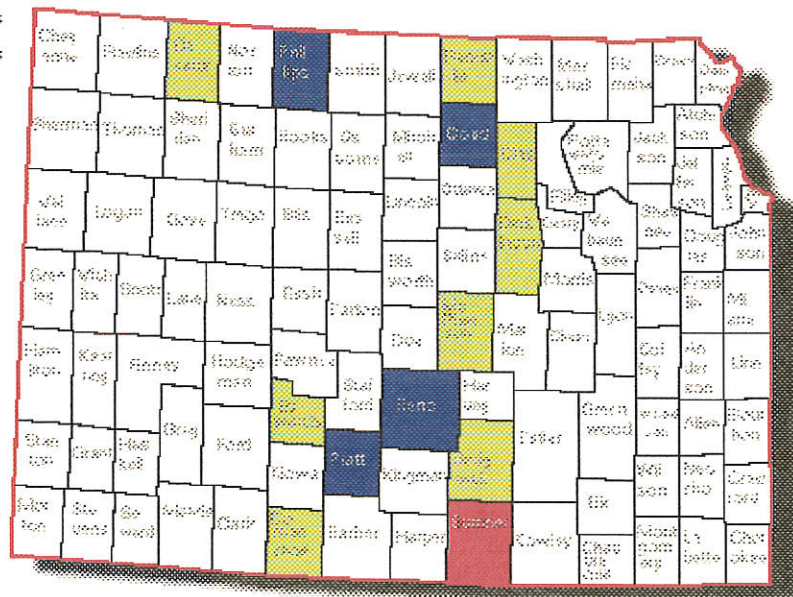
Breakdown based on type of contamination:

- 5 Carbon tet \$335,520.25
- 14 Pesticide, nitrate, herbicide \$544,099.83
- 1 Combination \$ 59,488.89

Average reimbursement amount: \$ 46,955.45

Kansas Agricultural Remediation Reimbursement Sites

- - 1 site
- - 2 sites
- - 4 sites



1-14-03

NOTES:

Yellow - Clay, Decatur, Republic, Dickinson, Comanche, McPherson, Sedgwick, Edwards
 Blue - Phillips, Cloud, Reno, Pratt
 Red - Sumner

**Abandoned Well and Site Remediation
Fund
Status Report
to the
2003 Legislature
Kansas Corporation Commission
Conservation Division**



*House Environment
1-23-03
Attachment 2*

**Abandoned Well and Site Remediation
Fund
Status Report
to the
2003 Legislature
Kansas Corporation Commission
Conservation Division**



Abandoned Well / Site Remediation Fund

- The fund was created during the 1996 legislative session with the passage of House substitute for S.B. 755.
- The purpose of the fund is to provide additional funding to the Kansas Corporation Commission, Conservation Division with which to address the problem of both abandoned oil and gas wells and exploration and production related contamination sites.
- In addition to the creation of the fund the legislation directed the Conservation Division to establish financial responsibility requirements for oil and gas operators within the state of Kansas. These requirements were in place by January, 1998.
- S. B. 321, passed during the 2001 legislative session, extends the original fund sunset date 7 years to June 30, 2009.

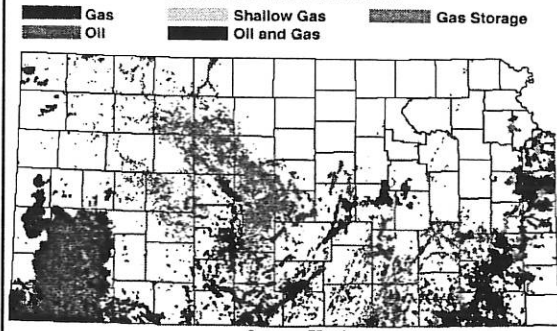
**Abandoned Well / Site Remediation Fund
Funding Sources**

Funding to this abandoned well plugging and site remediation program is provided through four funding sources:

- Increased assessments on crude oil and natural gas production through the conservation fee fund
- General fund monies
- 50% of monies received by the state through the federal mineral leasing program
- State water plan monies

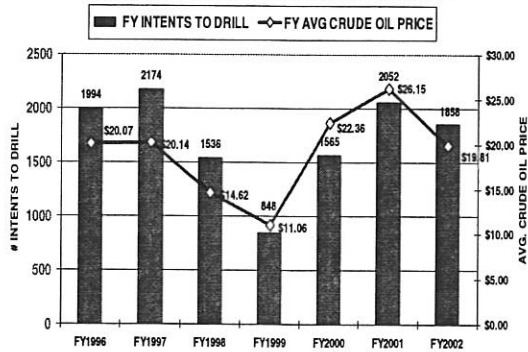
Total funding package is in the amount of \$1,600,000 / year.

Oil and Gas Fields in Kansas

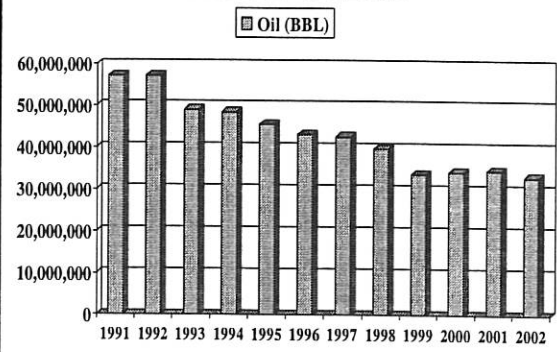


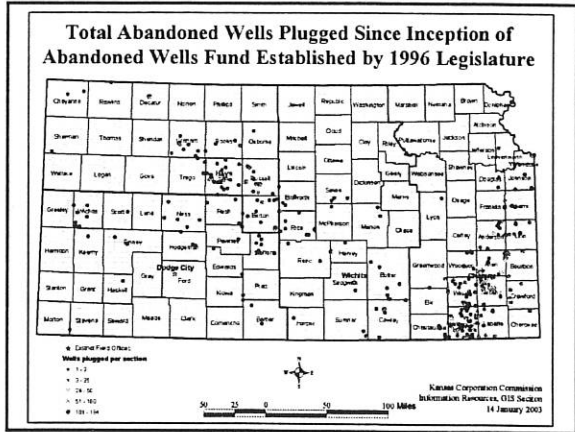
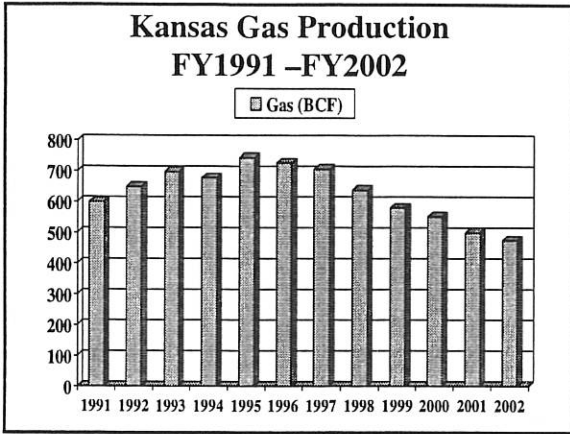
KGS

AVERAGE CRUDE OIL PRICE VS. OPERATOR INTENTS TO DRILL



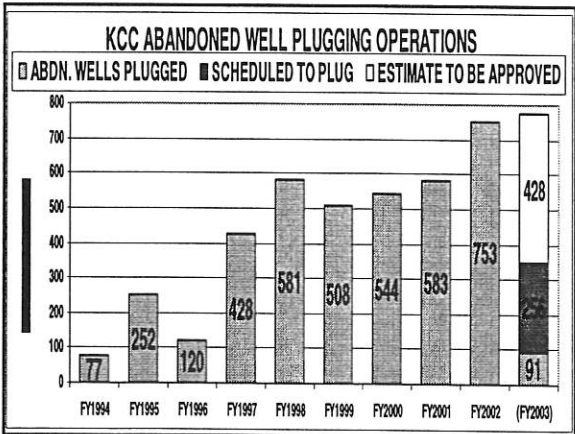
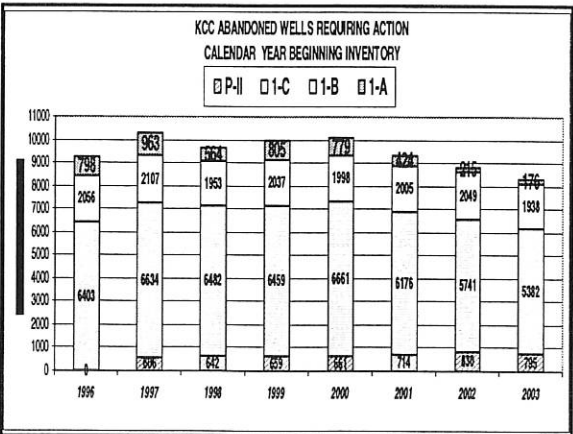
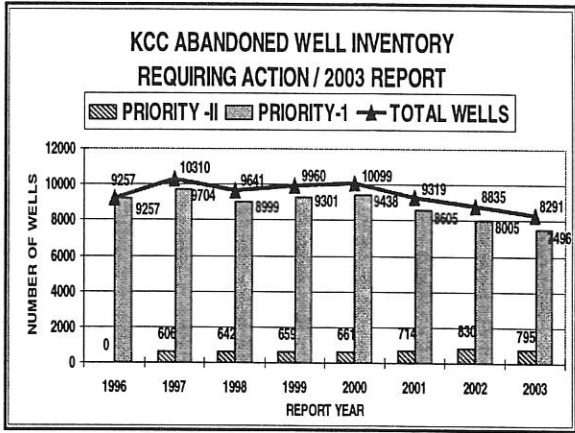
**Kansas Oil Production
FY1991- FY2002**

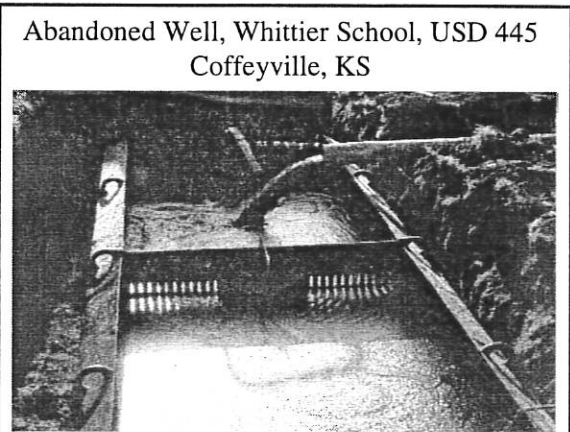
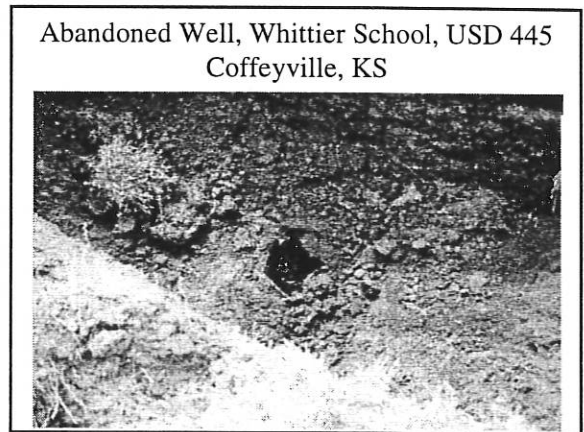
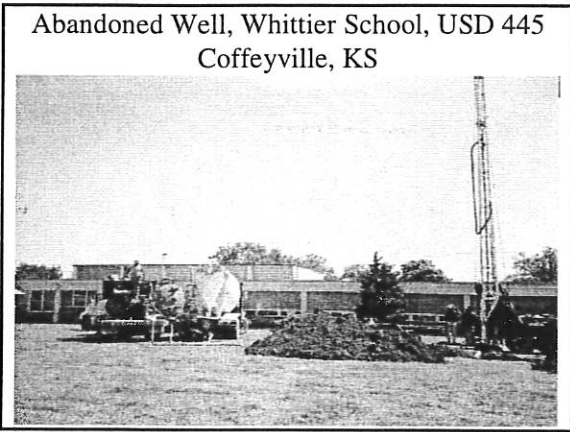
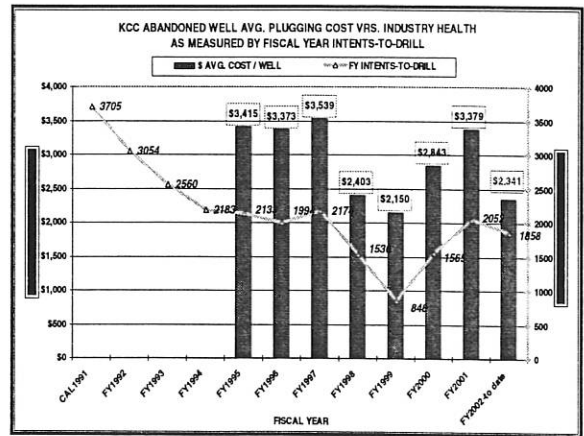
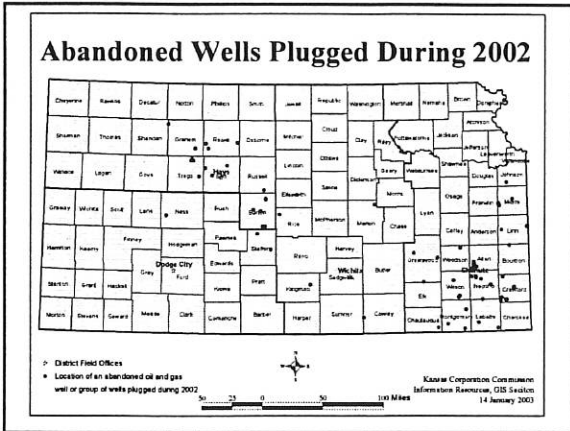




Abandoned Well / Site Remediation Fund Status of the Abandoned Well Inventory

- The Kansas Corporation Commission total abandoned well inventory (priority I and priority II) currently contains 13,711 wells, documented and verified. This represents an increase in the total inventory of 454 wells over that reported in January of 2002. Of this total, 12,840 wells are listed in the priority I inventory. Of these priority I wells, 7,496 still require plugging operations, which is 509 less than one year ago.
- Expenditures for fiscal year 2002 resulted in the plugging of 753 abandoned wells. 730 wells have been paid to date at a cost of \$1,708,847, which is \$2,341 per well including restoration costs. For the first 7 months of fiscal year 2003, 347 wells have been authorized to be plugged or have been plugged with monies from the fund.
- Distribution of remaining priority I wells requiring plugging operations are by action level: level A = 176 wells (2%), level B = 1938 wells (26%), level C = 5382 wells (72%).

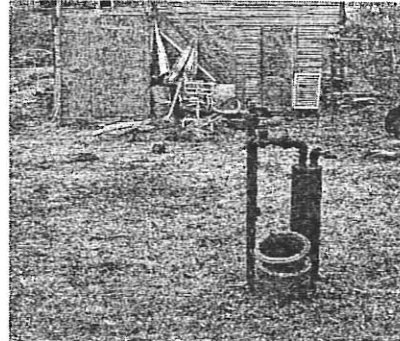




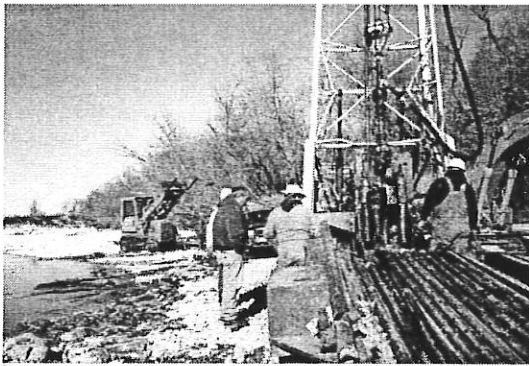
Leaking Oil Well, Crawford Co.
108 Well Plugging Project



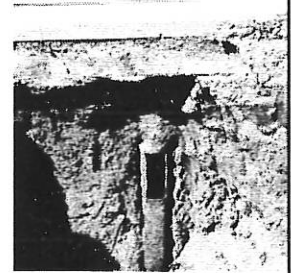
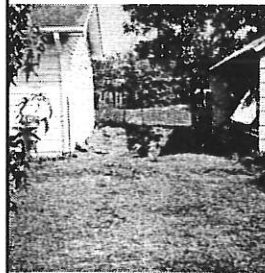
Abandoned Well, Fairfax Area,
Kansas City, KS



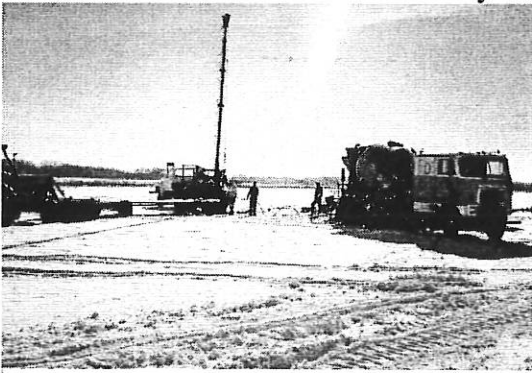
Abandoned Well, Neosho River



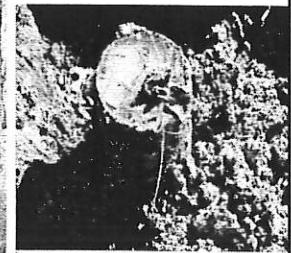
Abandoned Gas Well, Under
House Foundation, Neodesha, KS



Abandoned Well, Neosho County



Abandoned Gas Well, Wyandotte Co.
Venting Gas and Saltwater



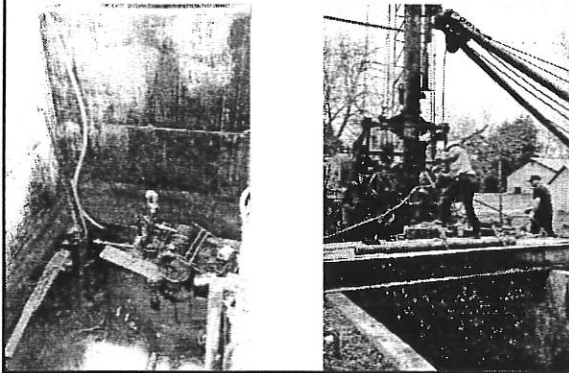
Abandoned Well, Coffeyville KS



Abandoned Well, Lindsborg KS



Abandoned Well, Lindsborg, KS



Abandoned Well in Schoolyard
Lost Springs, KS

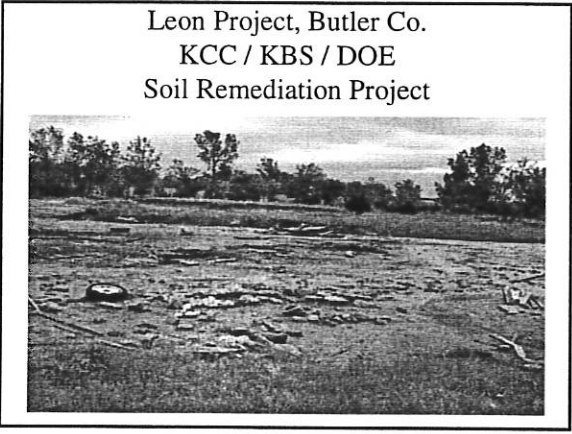
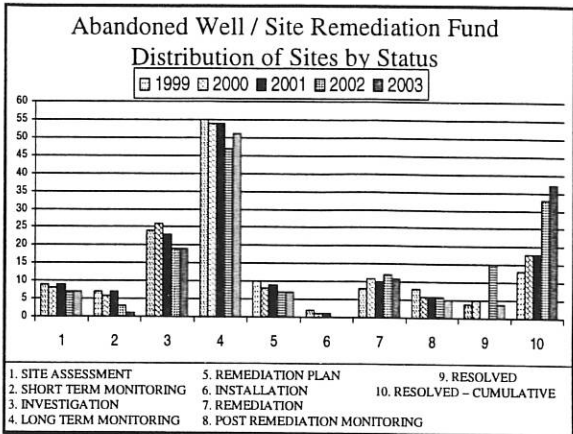
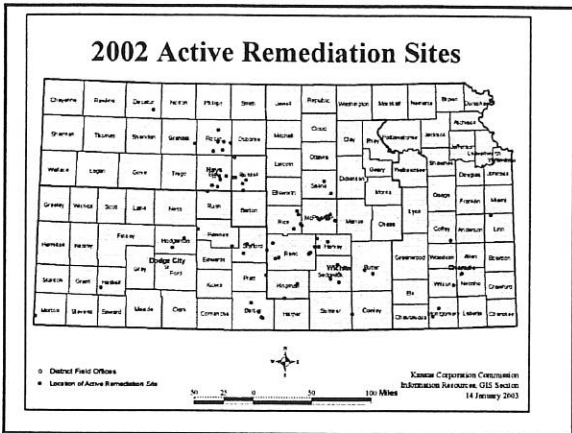


Abandoned Well in Schoolyard
Lost Springs, KS



Abandoned Well / Site Remediation Fund Status of the Site Remediation Inventory

- When the abandoned well / site remediation fund was first created the KCC carried a listing of 109 sites. During previous reporting periods (1997, 1998, & 1999) four sites were combined with other existing sites, nine sites were added and 21 sites were resolved. During more recent reporting periods (2000 & 2001), four sites were added and 20 sites were resolved. The current evaluation period, January 1, 2002 through December 31, 2002, resulted in the addition of three sites and the resolution of four sites, leaving a current total of 76 active remediation sites.
- Current distribution of sites with respect to immediacy level is: low & low to moderate = 53%, moderate = 17%, moderate to high & high = 16%, other (under remediation) = 14%.
- Authorizations for Expenditures against projects initiated in FY2002 and FY2003 to date stand at \$86,759. When combined with ongoing remediation projects, initiated in prior years, the total expenditure for this period rises to \$181,226. Indirect expenditures in KCC staff time to these projects are valued at \$89,895.



Kansas Corporation Commission
Site Specific Remediation Planner

Remediation of soil salt scars from the production of oil can be achieved through the following 5 steps:


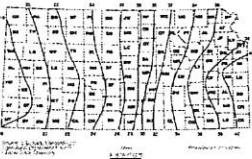
1. **Soil Characterization**—Lab analyses of 5 to 10 composite soil samples per acre of "Salt-Alkali"
2. **Soil Amendments**—Use soil chemical data from #1 to compute necessary soil additives
3. **Revegetation**—Plant appropriate seeds and transplants
4. **Irrigation**—Supply ample water to the scar to grow plants and leach salts
5. **Follow-up Monitoring**—Re-sample and re-analyze soil after one growing season

Getting started: Soil should be sampled across the scarred area. Soil samples can be quickly and economically analyzed for Salt Alkali by the KSU Soil Lab, 2308 Throckmorton Hall, Manhattan, KS 66506. Once the sample has been analyzed, a plan can be created by clicking the button below.

[Click to Start the SSP Planner](#)

All Consulting
www.ACC-LLC.com

Kansas Corporation Commission
Site Specific Remediation Planner

Enter Average Annual Precipitation: (From Precipitation from Chart)

Enter County: (From County from Chart)

Calculate Size of Scar In Acres

Enter Length (Feet):

Enter Width (Feet):

Size of Scar in Acres:

Input Soil Samples

Sample ID	EC	CEC	CSP
S1	ED1	CEC1	CSP1
S2	ED2	CEC2	CSP2
S3	ED3	CEC3	CSP3
So	ED0	CEC0	CSP0
Count	9	17	20
Average			

Display Remediation Plan | Clear to Start Over

Kansas Corporation Commission
Site Specific Remediation Planner

Instructions for Soil Remediation
 Moderate Impact from Produced Brines

Average Soil Parameters

	EC	CEC	CSP
AVG	9	17	20

Recommended Remediation Plan

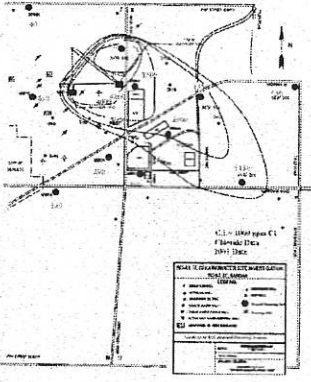
County: | Soil Size (Avg): | 22.24

Options: | Planting: Transplants are optional | Irrigation: 16 to 20 inches per season

It is recommended that the site be treated as moderately impacted. It is expected to respond to soil amendments and in time will support revegetation. The following are the recommended steps for the remediation process:

1. Spread agricultural gypsum at the rate of approximately 16,000 lbs per acre.
2. Spread colored iron, ferrous, or other organic matter onto the surface.
3. Till in the gypsum and organic matter to a depth of approximately 12 inches.
4. Certain very salt-tolerant plant species (see list incorporated in the Soil Plan). These would include: Ditchable species (broad leafed), Sparabobus arvensis (Abundant variety), Pasture (and bluegrass), and Cynodon dactylon (Bermuda grass hybrid Tuffalo™ or similar). These species may vary with local soil conditions.
5. Spread a top dressing of gypsum at approximately 500 lbs/acre.
6. If there is any indication of drainage or erosion on the soil, check key holes or water-beds across the drainage to reduce the velocity of runoff.
7. Average irrigation in the form of water carriage, the system, or delivery by water truck. Irrigation should total at least 16 inches of water during the growing season.
8. Seed level: Increase the surface and ground the soil to get an accurate picture of the soil content. If it is estimated that the soil EC will average approximately 9 after the first season, making it more amenable to re-vegetation.
9. Re-assess surface and chemical data to create new recommendations.
10. If soil conditions are continue, implement salt-tolerant species such as: Ditchable species (broad leafed), Sparabobus arvensis (Abundant variety), Pasture (and bluegrass), and Cynodon dactylon (Bermuda grass hybrid Tuffalo™) on the soil content.
11. If soil conditions are continue, broadcast of soluble phosphate (rate of approximately 10 lbs/acre). The soil should contain some of the following nutrients: Phosphorus (superior), Sulphur (Ammonium sulfate), Nitrogen (superior), Iron (superior), Potassium (superior), Boron (superior), Manganese (superior), Zinc (superior), Copper (superior), and Magnesium (superior).
12. Continue irrigation in the form of water carriage, the system, or delivery by water truck. Irrigation should total at least 16 inches of water during the growing season.

Schulte KS Remediation Site

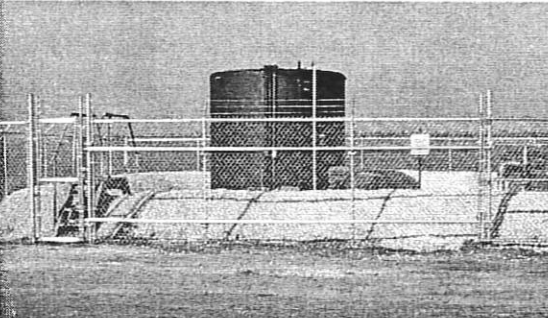


Map of High Chloride Plume

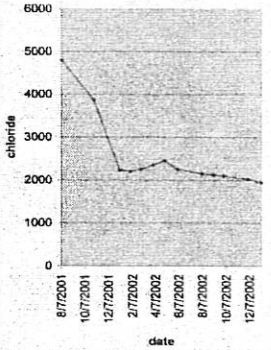
Schulte, KS Remediation Site
East Recovery Well



Schulte KS Remediation Site
Saltwater Disposal Well



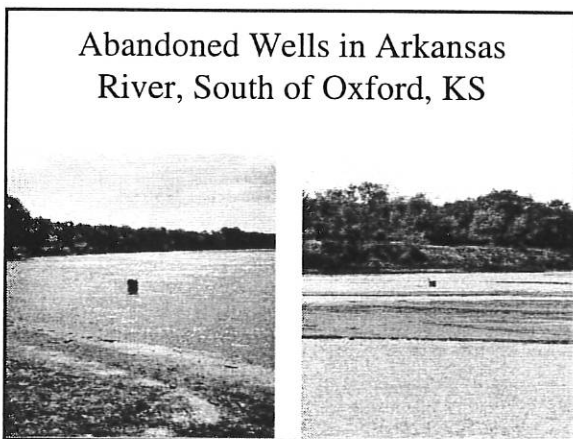
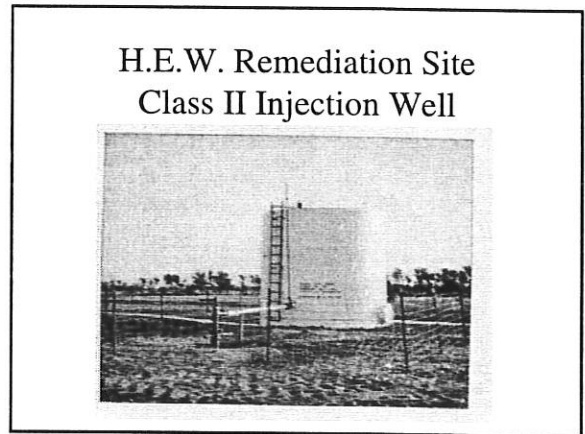
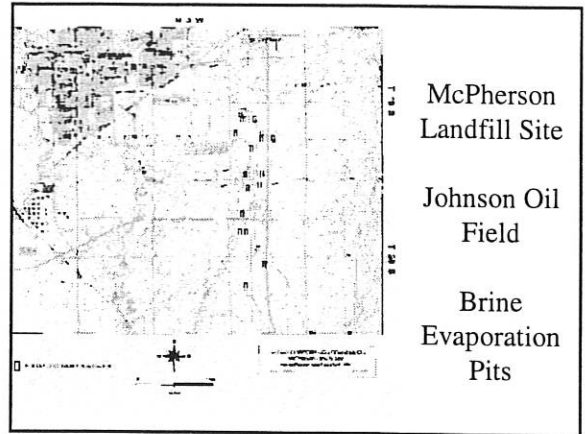
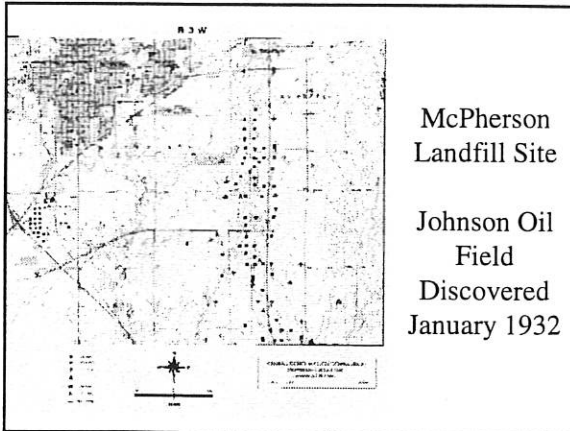
Schulte East Historical



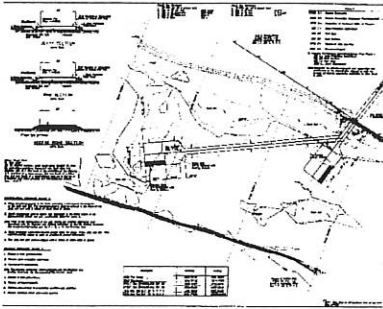
Schulte Remediation Site
 East Recovery Well

Decline in Chloride Content (Salinity) of Groundwater from 8/01 to 12/02 (measured in p.p.m.)

Date	Chloride (p.p.m.)
8/7/2001	4800
10/7/2001	3800
12/7/2001	2200
2/7/2002	2400
4/7/2002	2200
6/7/2002	2100
8/7/2002	2000
10/7/2002	1900
12/7/2002	1800



Plan for Access Pad Construction Arkansas River Wells



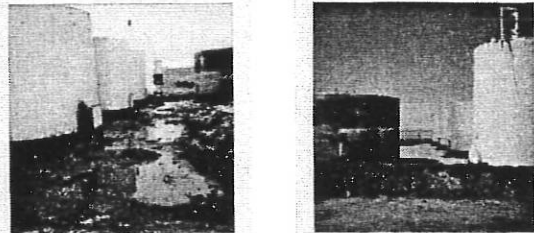
Abandoned Well / Site Remediation Fund Operator Financial Responsibility Requirements

- Operators having an acceptable record of compliance with KCC rules and regulations over the proceeding 36 months may pay a \$50 nonrefundable fee.
- Operators that have not been licensed for at least the proceeding 36 months or have not met the acceptable record of compliance requirement must furnish one of the following on an annual basis:
 1. A performance bond or letter of credit in the amount equal to \$.75 x the aggregate depth of all wells under his control.
 2. A blanket bond or letter of credit between \$5000 and \$30,000 based on the depth and number of wells operated.
 3. A fee equal to 3% of the blanket bond required under #2.
 4. A first lien on equipment equal to the bond requirement.
 5. Other financial assurance approved by the commission.

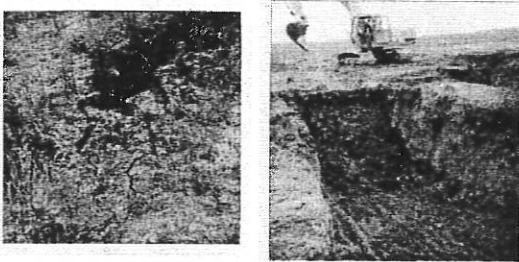
Financial Assurance Posted in 2002

Method of Assurance	Number of Licenses	Revenue	Assurance
\$50 Fee	1,670	\$83,500	\$83,500 (Compliance)
Cash Bond To KCC	291	\$103,319	\$103,319
Surety Bond	38		\$905,000
CD / Letter of Credit	50		\$798,956
Total	2,049	\$186,819	\$1,890,775

Oil Spill From Tank Battery, Ellis Co. Clean-up By Operator Via Compliance With KCC Regulations



1930's Sludge Pit, Barton Co. KS Clean-up by Operator Via Compliance With KCC Regulations



1930's Sludge Pit, Barton Co. KS Site Filled With Clean Topsoil by Operator and Replanted to Crops

