#### Date

# MINUTES OF THE SENATE NATURAL RESOURCES COMMITTEE

The meeting was called to order by Chairman Carolyn McGinn at 8:30 a.m. on February 5, 2009, in Room 446-N of the Capitol.

All members were present.

#### Committee staff present:

Jason Thompson, Revisor of Statutes Office Corey Carnahan, Kansas Legislative Research Department Raney Gilliland, Kansas Legislative Research Department Alissa Vogel, Committee Assistant

# Conferees appearing before the committee:

Darrell Dorsey, Manager of Electric Supply, Board of Public Utilities, Kansas City, Kansas Wayne Penrod, Executive Manager of Environment, Sunflower Electric Corporation Woody Moses, Kansas Cement Council Herb Graves, Kansas Association of Watersheds (written only)

## Others attending:

See attached list.

The meeting began with a continuation of the Air Quality Improvement Update Report on: Mercury, Nitrogen Oxide (NOx) and Sulfur Oxides (SOx). Senator McGinn introduced Darrell Dorsey, Manager of Electric Supply of the Kansas City Board of Public Utilities (BPU). He provided the Committee with an introductory fact sheet that contained the 2008 Generation and Supply Data (Attachment 1) and a summary of the Air Quality Report. (Attachment 2)

BPU currently utilizes conventional generators, purchased power, wind power and renewable hydro power. Current BPU initiatives to reduce emissions include: landfill gas generation, energy efficiency and conservation, demand side management, climate protection partnership, building sustainable earth communities and continuous, long range planning.

Mr. Dorsey summarized BPU's history of air quality improvements and technology innovations, including a report on SOx and NOx emissions produced at the three coal-fired units.

Two main drivers behind BPU's initiatives are the ozone issues in the Kansas City area and the Regional Haze Rule (BART). As a result of new federal regulation and BART, BPU may install low NOx burners to two of its units, SCRs to reduce NOx emissions and scrubbers to reduce SOx emissions. BPU is considering the addition of air quality control equipment to all three units, retiring some existing units or replacing units with new facilities. This will have a significant financial impact on BPU, with estimates ranging from 35 to 550 million dollars.

Mr. Dorsey stood for questions.

Wayne Penrod, Executive Manager of Environmental Policy from Sunflower Electric Power Corporation, provided an air quality update report. (<u>Attachment 3</u>) In comparison with four large, new coal-fired facilities, the existing and proposed Holcomb plants rank the lowest for SOx emissions. However, the existing Holcomb plant reported the highest amount of NOx emissions. Sunflower Electric Power Corporation is continuing in its efforts to reduce NOx emissions. The proposed Holcomb plant would contain the low NOx burners.

Sunflower Electric Power Corporation collaborated with the Environmental Protection Agency (EPA) to monitor mercury emissions. In 2004, Sunflower Electric Power Corporation advanced a project to the Department of Energy that would evaluate potential control technology for mercury. The program was a success, and technologies to control mercury were identified. Current efforts to regulate mercury emissions have been hindered by the recent court ruling that overturned EPA mercury rules and the difficulty of installation and function of mercury monitors.

Mr. Penrod stood for questions.

#### **CONTINUATION SHEET**

Minutes of the Senate Natural Resources Committee at 8:30 a.m. on February 5, 2009, in Room 446-N of the Capitol.

The Kansas Department of Health and Environment (KDHE) provided Committee members with estimates of SO2, NOx, carbon dioxide and mercury emission trends for Kansas coal-fired power plants. (Attachment 4)

Woody Moses, representing the Kansas Cement Council, provided an air quality update report for the Kansas cement industry. (Attachment 5) Strategies the Kansas cement industry has used to reduce SOx and NOx emissions include: overall reduction of industry energy use by 30% over the last 30 years, installation of a new preheater and precalciner kiln in Chanute, substitution of hazardous waste for coal, installation of continuous emission monitors and installation of high temperature membrane fabric filter bags and clinker cooler baghouses.

The goal is to further reduce emissions 12% by 2012, through the use of the Strategy for Emission Reduction. This plan strives for increases in efficiency within the manufacturing process and supports research in the application of new pavilion technology and on-line x-ray analyzers for raw material.

Mr. Moses noted that all improvements were privately financed as a result of the revenues derived from the last Comprehensive Transportation Program.

He stood for questions.

Discussion was held on SB 64 - Water appropriation act amendments.

Senator Lee suggested removing the striking of "voluntary" and adding the amendment proposed by Farm Bureau, originally intended for <u>SB 65 - Eminent domain; water rights</u>, to the language of <u>SB 64</u>. (<u>Attachment 6</u>)

Senator Francisco suggested changing the word "disposal" to "transfer," to better describe the nature of a deed, lease or mortgage. Senator Francisco also stated that if "voluntary" was left in the language, then the wording should be modified in line 12 to "such water right only passes."

Senator Taddikan suggested deleting the word "other" rather than "voluntary."

Senator McGinn stated that language in line 16 should be modified to say "a new appropriation" and the italicized language in lines 26-29 is unnecessary.

Senator Francisco suggested that the proposal to add the 14 Beneficial Uses of Water to  $\underline{SB\ 64}$  be revisited at another time.

Discussion on SB 64 will continue at a date to be determined.

Herb Graves, representing the Kansas Association of Watersheds, submitted written testimony in a neutral position to <u>SB 65</u>. (Attachment 7)

The next meeting is scheduled for February 6, 2009.

The meeting was adjourned at 9:30 a.m.

# SENATE NATURAL RESOURCES COMMITTEE

# **Guest Roster**

 $\frac{2/5/09}{\sqrt{\text{(Date)}}}$ 

) (D	ate)
CV Cotsovadis	KO A
BILL EASTMAN	WESTAR
Woedy MOD	Ke lement Council
LANG LETOURNEAU	KDA/DWR
Herb Covaries	SPRW
Ryan Freezen	CAPITOR LOBBY GRP, UC
leah bennett	KC BPU
manari Jossel	BDU
Jan Dich	KUBPU
Meghanivalsh	Francisco Intern
Gree Shipe	KRVG
Pat hehman	KRWA
Rick Brundti	KPITE
Tom Gross	(C171+ E
Steve Swaffer	KFB
Kerin Berne	K2UG-
SEAN MILLER	CARITOR STRANGER
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# **Introductory Fact Sheet**

Largest Municipal Power Utility in Kansas serving the community since 1908

Publicly Owned, Administrative Agency

6 Member elected Governing Board

Over \$30,000,000 in annual community contributions

A+ Bond Rating

65,000 Electric Customers & 51,000 Water Customers

127 Sq. Miles in Wyandotte County Service Territory

Three Power Stations, 612 Mw Net Generation Capacity

Three Coal-fired Generators, 4 Combustion Turbines

Wind and Hydro Power Renewable Supplies

Balancing Authority and Market Participant in the Southwest Power Pool

Wholesale Contracts with KMEA and Columbia

29 Substations, 3,000 Miles of Electric lines

Transmission owner with 69/161 kV Transmission system

Interconnected with Westar and KCPL

529 Mw Historical Peak KCK Demand

Darrell Dorsey
Senate Natural Resources
February 5, 2009
Attachment 1

# Board of Public Utilities Kansas City, Kansas

2008 Generation and Supply Data

Resource	Capacity Net MW	Net 2008 Mwhr	Coal Burned Tons
Nearman 1	235	1,520,661	1,059,987
Quindaro 1	72	542,683	348,383
Quindaro 2	111	525,991	319,611
Combustion Turbine 1	12	-305	· · · · · · · · · · · · · · · · · · ·
Combustion Turbine 2	56	-81	
Combustion Turbine 3	51	-82	
Combustion Turbine 4	75	12,226	
Generation subtotal	612	2,601,093	
SWPA Hydro	39	154,291	
WAPA Hydro	5	14,911	
Smokey Hills Wind	25		
Renewable subtotal	69	249,896	•
	09	249,090	
Purchased Power Market		415,672	

Serving KCK in 2008			Mwhrs
Net BPU Generation			2,601,093
Nearman Generation for KME	A & Columbia	_	398,063
<b>BPU Generation for KCK Load</b>	ds		2,203,030
KCK System Demand		2	2,513,100
BPU Generation Deficit		•	-310,070
BPU Renewables - Hydro and	l Wind		249,896
KCK Deficit Supplied by Purch	nased Power M	1arket	-60,174
2008 Peak	492	4-Aug	
2008 Minimum Demand	185	11-Nov	



# **Serving Wyandotte County**

# Wyandotte County, Kansas 1990 Census Tracts

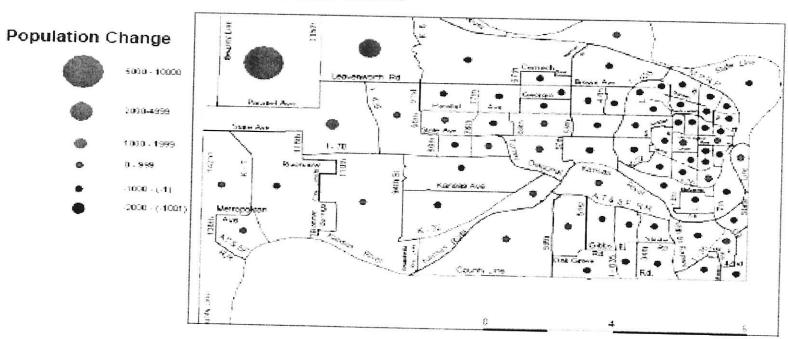


Figure 2-2 Projected Population Change in Wyandotte County 2000-2030



# **History of BPU Base Load Generation**

Kansas City Board of Public Utilities







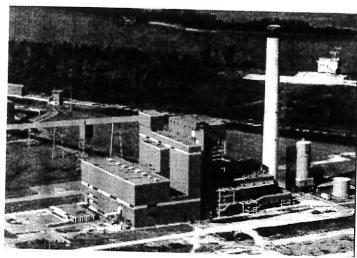




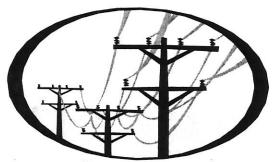




# **Resource Portfolio**



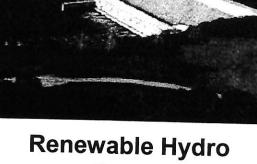
**Conventional Generators** 



**Purchased Power** 







**Power** 

**Energy Efficiency** 





# **Other Initiatives**

- Landfill Gas Generation
- Energy Efficiency and Conservation
- Demand Side Management
- Climate Protection Partnership
- Building Sustainable Earth Communities
- Continuous, Iterative Long Range Planning



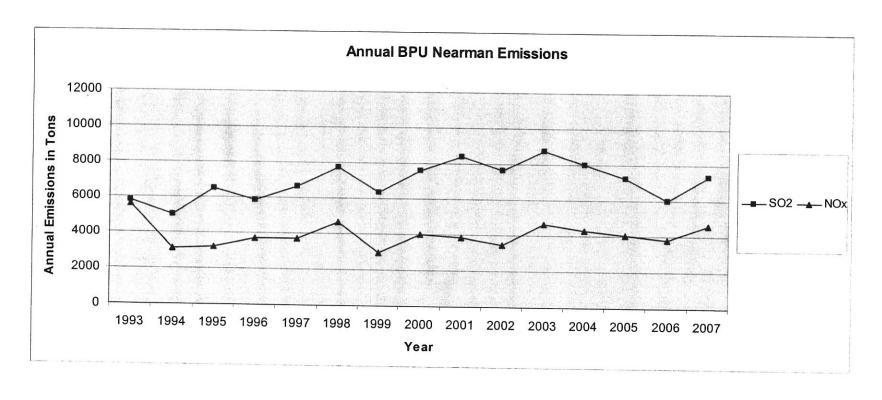


# Past Air Quality Improvements

- Precipitator Upgrades on Q1, Q2, N1
- Low NO x Burners on Quindaro 2
- Low Sulfur Coal Switch on Quindaro Units
- Early Election on Nearman NOx Lower Limit
- NOx Optimizer on Nearman
- Kaw Placed in Long Term Cold Storage
- New Low NOx Combustion Turbine

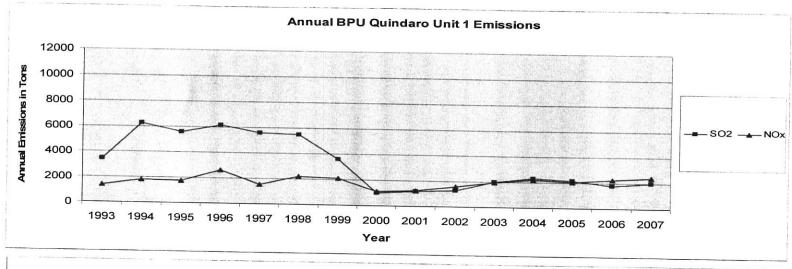


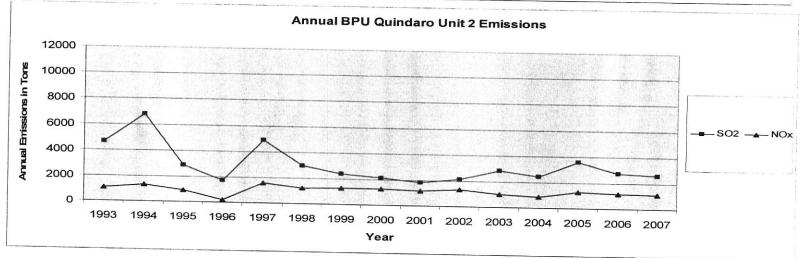
# **Nearman History**





# **Quindaro History**



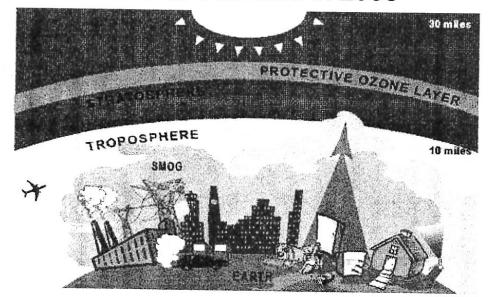


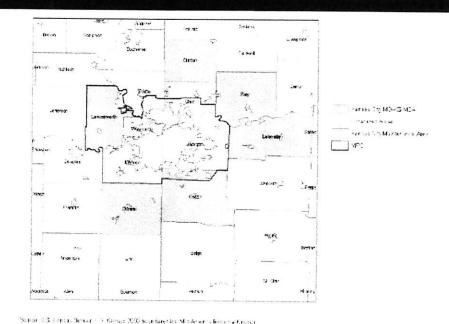


# **Ozone Air Quality**

Kansas City Board of Public Utilities

- Clean Air Act regulated air pollutant
- Ozone Air Quality Standard is 85 ppb
- In 2006, KC reached 83 ppb
- KC exceeded standard in 2007
- New Federal Standard in 2008





# **Potential Impact to BPU**

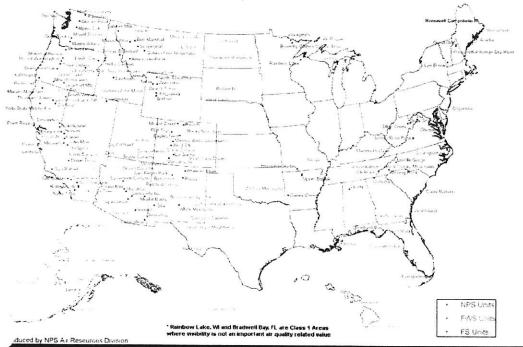
- Nearman Unit 1
  - Low NOx Burners
  - Over Fire Air ++
- Quindaro Unit 2
  - Low NOx Burners
  - Over fire Air
- Installed in 2010



# Regional Haze Rule (BART)

- Air Quality Rule to improve visibility at National Parks
- Targets NOx, SO2 and PM emissions from existing sources

Mandatory Class I Areas



# **Potential Impact to BPU**

- Future NO x Controls
  - SCRs
- Future SO x Controls
  - Scrubbers



# Impacts of Ozone Programs and BART

- Impact of Ozone and BART on existing units increases total revenue requirements
- Potential Impacts range from \$35-550,000,000
- We consider three possibilities for responding to Ozone and BART:
  - Add AQC equipment to Nearman 1, Quindaro 1 and / or Quindaro 2
  - Build Nearman 2 now and retire Quindaro 1 and / or Quindaro 2
  - Add combustion turbines and retire Quindaro 1





# **Future Air Quality Issues**

- Low NO x Burner Installations at N1 and Q2
- Future Participation in BART
- CO2, Mercury, New Federal Ozone Standards
- New Generation Additions, Old Unit Retirements
- Various Programs are not Cross Coordinated
- Complex Planning, Great Uncertainty
- Escalated Risks, Difficulties with Funding/Rates

A Touchstone Energy Cooperative

#### January 30, 2009

#### **Before the Senate Natural Resources Committee**

# Regarding Sulfur Dioxide, Nitrogen Oxide and Mercury Emissions Control Technology

Conferee: Wayne Penrod, Executive Manager, Environmental Policy

- **SUMMARY:** Sunflower's Holcomb Station was placed in commercial service in August 1983 and, as a result of the Clean Air Act Amendments of 1977 was required to have strict emission limitations in its Prevention of Significant Deterioration (PSD) construction permit.
  - o First public notice of intent to construct: May 2, 1977
  - o Permit application submitted: May 19, 1978
  - o Permit to Construct issued: May 19, 1980
  - Commenced construction: May 1980
  - Commercial operation date: August 16, 1983
- Holcomb Station and the Clean Air Act Requirements One of the most significant provisions in the Clean Air Act (CAA) require new industrial sources to conform to minimum standards, called New Source Performance Standards (NSPS). Further a new source must confirm that they will not contribute to the "significant deterioration" of air quality in the area in which they are to be constructed. Sunflower's Holcomb project was among the first to have to conform to this rigorous analysis in Kansas.

The regional air quality around Holcomb meets the "attainment" requirements established by EPA, meaning that the ambient air quality in the region satisfies all of the science-based health criteria determined by a scientific panel, as required by the CAA. The pollutants, which were known to affect human health, came to be known as "criteria pollutants". A proposed new stationary source cannot, under the CAA, emit these "criteria pollutants" in an amount that will cause a violation of the ambient air standards.

New sources in an attainment area that have the potential to emit over 100 tons (250 tons for certain industrial sectors) – total - of "criteria pollutants" are called major sources. They must evaluate the control technologies that are commercially available to reduce the "criteria pollutants" that are emitted from the new source in quantities that are above a specified threshold level. The analysis leads to the identification of appropriate emission limitations that are

Senate Natural Resources NR 2/5/09 established for the control technologies that are deployed – and these are called best available control technology limits (BACT).

Sunflower and the designers of Holcomb 1 performed all of the required activities, and 26-years later, the generating unit continues to meet all of these requirements.

• Clean Air Act Extension of 1977 required that new coal-fired generating units, even those that were burning low-sulfur coal, incorporate scrubber technology that would reduce sulfur dioxide by at least 70% and install burner technology to reduce nitrogen oxides by 40%. As a result the Holcomb unit design incorporated three new control technologies. The 3-chamber sulfur dioxide scrubber was called a lime-spray-dry-absorber or a "dry scrubber". At the time of construction these chambers were the largest ever built of their type in the world. The unit also incorporated two large fabric filters – baghouses - to control the emission of particulate matter. Those at Holcomb were also among the very largest in the world. Finally the boiler design incorporated new Lo-NO<sub>X</sub> burner technology to limit the amount of nitrogen oxides generated during the combustion process. Though new, all of these control technologies were available commercially and they were constructed and found to operate as designed.

As an indicator of the success achieved in this endeavor, the Holcomb unit was selected by Power Magazine as a prestigious "Pacemaker" plant in 1984. The major accomplishments included all of the air pollution control technology and the zero-discharge water cleanup and recycling systems.

• Clean Air Act Amendments of 1990 added requirements that identified a national goal of reducing sulfur dioxide (SO<sub>2</sub>) emissions from coal-fired power plants to 8.9 million tons per year. These so-called "acid rain" provisions were intended to remedy problems with highly acidic water bodies, primarily in the NE parts of the U. S. The landmark "cap and trade" program envisioned by the EPA and mandated by Congress was the means to achieve this national SO<sub>2</sub> goal. Holcomb must hold allowances and surrender an amount of them equal to the annual emissions from the generating unit. New units must purchase allowances to satisfy this requirement.

Also added to the CAA was a stringent requirement that federal land managers address the impact of air pollution on scenic vistas such as national parks. This impact was called regional haze, which refers to the deteriorating visibility in the parks. EPA was required to implement rules to restore the visibility in these parks to pre-industrial levels over a 60-year period. While these rules have not yet required Holcomb to install additional equipment, other major coal-fired utilities in Kansas have done so. It is possible that future actions undertaken to improve visibility may result in additional nitrogen oxide control technology being deployed on Holcomb 1.

Finally these amendments imposed new requirements on sources that release what are referenced in the CAA as hazardous air pollutants (HAPs). The CAA defines major sources for HAPs and identified a specific period of time in which EPA was to determine those industrial and commercial sectors that were major emitters of HAPs and then to issue rules that required these major sources to install control technology that achieves maximum reductions in HAP emissions. The resulting permit limits are called the maximum achievable control technology (MACT) limits.

Power plants were placed in a special category by the CAA. Congress identified two special reports that EPA has presented to Congress in which the specific HAPs emitted from power plants were identified and their impact on human health evaluated. In these reports mercury was identified as the major pollutant of concern from coal-fired power plants, and EPA established the Clean Air Mercury Rule (CAMR) to begin the process of reducing mercury emissions.

Sunflower, and the other Kansas utilities, sought to identify the measures that might be utilized to reduce mercury emissions by conducting an extensive DOE sponsored test program at Holcomb in 2004. The results of that program, subsequently confirmed to a lesser efficiency in 2005 and 2006 at similar facilities, indicated that reductions of about 80% could be achieved by injecting powdered activated carbon into the flue gas stream.

Subsequent rulemaking by EPA implemented emission monitoring for mercury beginning in 2009, and established numeric emission limitations and a cap and trade program to begin in 2010 for both new and existing sources. Both of these requirements were challenged and the DC Circuit Court of Appeals has overturned both rules, which decision has been appealed to the Supreme Court. At the current time there are no mercury monitoring requirements or limitations for existing sources. EPA will go back to rulemaking unless the Supreme Court rules in their favor. In the meantime, construction permits for a new major source of HAPs are required to perform a case-by-case MACT analysis as part of their requirements. Holcomb 1 is not, nor is the proposed Holcomb expansion project, a major source of HAPs.

• The purpose remains the same, but the requirements and standards have changed in the intervening 40-plus years since the CAA was passed by Congress. The results are at least significant. While the economy, as measured by GDP, has increased over 120%, all measures of the emission of criteria pollutants, specifically SO<sub>2</sub> and NO<sub>X</sub>, and mercury have been substantially reduced. The accompanying page illustrates the relative improvements in total emissions.

Scientists have also learned more about the impact of air pollutants on human health. In cases where warranted the ambient air standards have changed. The NSPS standards have changed to reflect what new minimum requirements should be. By every objective measure the process is dynamic and has yielded results about which each of us can be proud. Further, in every case Sunflower

has helped to lead the way in identifying those cost-effective measures that we can responsibly take to reduce the impact our operations have on human health and the environment. Sunflower was successful in 1983 in championing the state-of-the-art scrubber technology, fabric filter technology, and burner technology for Holcomb 1. Sunflower was further successful in 2004 in demonstrating mercury control technology. Sunflower, along with DOE, also sought to improve the burner technology on Holcomb in 2002; the research project did not meet with the success we had anticipated.

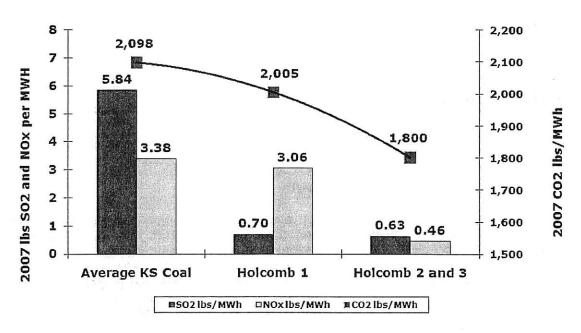
## So what does all this mean in terms of actual results – how clean were we in 2007?

The first four rows of the table below summarize the 2007 performance of the four recent large new coal-fired facilities that have commenced operation. [Weston 4 data covers only 7 months of operation in 2008.] You have no doubt heard about many of them. The fifth row shows the performance of the reconstructed Hawthorn 5 unit operated by Kansas City Power and Light. The sixth row is the Holcomb 1 unit. It is interesting to note that none of these units performed better in reducing  $SO_2$  in 2007 than Holcomb 1. Only in the  $NO_X$  emission rate category does Holcomb perform less than favorably than the new sources. This is because two additional generations of Lo- $NO_X$  burner technology have matured since 1983. These new newer burners have since been augmented with selective catalytic reactor technology, technology which has been, or will be deployed on all of the other units shown in the table.

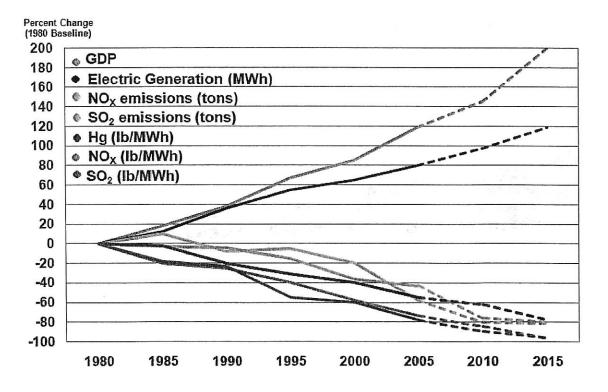
Lines 7 and 8 show the performance parameters for  $SO_2$  and  $NO_X$  as described in two different construction permits; granted for Iatan, and denied for Holcomb. The carbon dioxide ( $CO_2$ ) emission rates reflect the inherently better efficiency, thus lower  $CO_2$  emission rates for supercritical units.

Plant	Unit	Size (MW)	Commercial Online Date	Super- critical (Y/N)	2007 SO <sub>2</sub> Emission Rate (lb/mmBtu)	2007 NO <sub>x</sub> Emission Rate (lb/mmBtu)	2007 CO <sub>2</sub> Emission Rate (lb/MWh)
Walter Scott	ST4	790	6/30/07	Y	0.08	0.04	1,910
Cross	3	600	1/1/07	N I	0.08	0.14	1,975
Springerville	ST3	450	7/28/06	N	0.10	0.08	2,099
Weston	7 4 4 W	500	6/2/08	ranciy tan	0.07	0.07	1910
Hawthorn	5	565	7/1/2001	N	0.09	0.07	2,275
Holcomb 1	1111	360	8/1/83	N	0.07	0.31	2,106
Holcomb Exp.	2&3	2x700	TBD	Y	0.065	0.05	1,905
Iatan	2	850	6/1/10	Y	0.090	0,08	1,900

#### 2007 Emission Information - Kansas Coal Plants



#### **Improvements in Emissions Technology Since 1980**



Source: EIA, EPA, and Clear Skies Act of 2005



http://www.epa.gov/air/airtrends/sulfur.html Last updated on Thursday, September 4th, 2008.

You are here: EPA Home Air & Radiation Air Trends Sulfur Dioxide

# **Sulfur Dioxide**

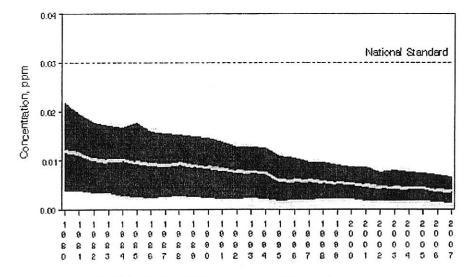
National Trends in Sulfur Dioxide Levels Local Trends in Sulfur Dioxide Levels

#### National Trends in Sulfur Dioxide Levels

Using a nationwide network of monitoring sites, EPA has developed ambient air quality trends for sulfur dioxide (SO2). Trends from 1980-2007 and from 1990-2007 are shown here. Under the Clean Air Act, EPA sets and reviews national air quality standards for SO2. Air quality monitors measure concentrations of SO2 throughout the country. EPA, state, tribal and local agencies use that data to ensure that SO2 in the air is at levels that protect public health and the environment. Nationally, average SO2 concentrations have decreased substantially over the years. For information on SO2 standards, sources, health effects, and programs to reduce SO2, please see <a href="https://www.epa.gov/air/urbanair/so2">www.epa.gov/air/urbanair/so2</a>.

## SO2 Air Quality, 1980 — 2007

(Based on Annual Arithmetic Average)
National Trend based on 147 Sites



1980 to 2007: 68% decrease in National Average



http://www.epa.gov/air/airtrends/nitrogen.html Last updated on Thursday, September 4th, 2008.

You are here: EPA Home Air & Radiation Air Trends Nitrogen Dioxide

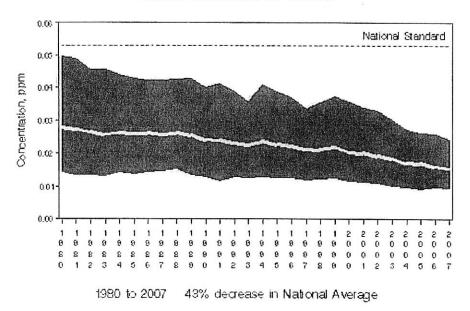
# Nitrogen Dioxide

National Trends in Nitrogen Dioxide Levels Local Trends in Nitrogen Dioxide Levels

#### National Trends in Nitrogen Dioxide Levels

Using a nationwide network of monitoring sites, EPA has developed ambient air quality trends for nitrogen dioxide (NO2). Trends from 1980-2007 and from 1990-2007 are shown here. Under the Clean Air Act, EPA sets and reviews national air quality standards for NO2. Air quality monitors measure concentrations of NO2 throughout the country. EPA, state, tribal and local agencies use that data to ensure that NO2 in the air is at levels that protect public health and the environment. Nationally, average NO2 concentrations have decreased substantially over the years. For information on NO2 standards, sources, health effects, and programs to reduce NO2, please see <a href="https://www.epa.gov/air/urbanair/nox">www.epa.gov/air/urbanair/nox</a>.

### NO2 Air Quality, 1980 — 2007 (Based on Annual Arithmetic Average) National Trend based on 81 Sites





http://www.epa.gov/air/airtrends/pm.html#pmnat Last updated on Thursday, September 4th, 2008.

You are here: EPA Home Air & Radiation Air Trends Particulate Matter

## **Particulate Matter**

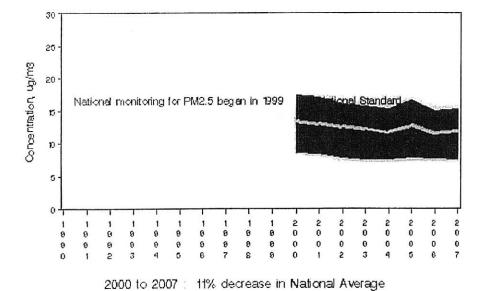
National Trends in Particulate Matter Levels Local Trends in Particulate Matter Levels

#### National Trends in Particulate Matter Levels

Using a nationwide network of monitoring sites, EPA has developed ambient air quality trends for particle pollution, also called Particulate Matter (PM). Trends from 1990-2007 are shown here for PM2.5 and PM10. Under the Clean Air Act, EPA sets and reviews national air quality standards for PM. Air quality monitors measure concentrations of PM throughout the country. EPA, state, tribal and local agencies use that data to ensure that PM in the air is at levels that protect public health and the environment. Nationally, average PM concentrations have decreased over the years. For information on PM standards, sources, health effects, and programs to reduce PM, please see <a href="https://www.epa.gov/air/particlepollution">www.epa.gov/air/particlepollution</a>.

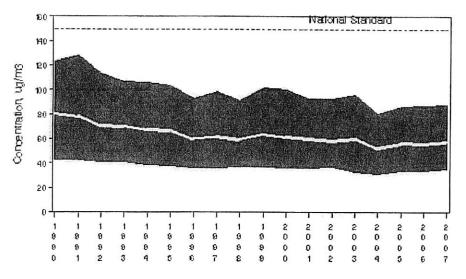
#### PM2.5 Air Quality, 2000 — 2007

(Based on Seasonally—Weighted Annual Average)
National Trend based on 778 Sites



## PM10 Air Quality, 1990 - 2007

(Based on Annual 2nd Maximum 24—Hour Average) National Trend based on 360 Sites



1990 to 2007: 28% decrease in National Average

How to Interpret the Graphs

View the chart data in Microsoft Excel (Download Excel Viewer) [EXIT Disclaime()]

View the chart data in HTML (New window opens)

#### Local Trends in Particulate Matter Levels

Air quality trends can vary from one area to another. Local trends are available at individual monitoring locations with an adequate record of historical data.

#### PM2.5

Choose a state or territory from the list or the map below. Alabama

GO



http://www.epa.gov/air/airtrends/lead.html Last updated on Friday, November 21st, 2008.

You are here: EPA Home Air & Radiation Air Trends Lead

## Lead

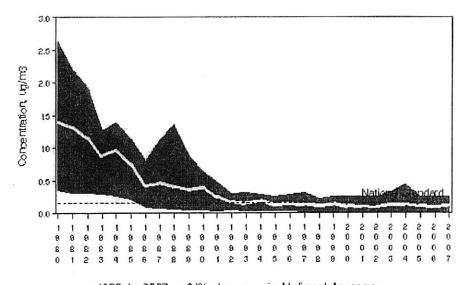
National Trends in Lead Levels Local Trends in Lead Levels

#### National Trends in Lead Levels

Under the Clean Air Act, EPA sets and reviews national air quality standards for lead. Air quality monitors measure concentrations of lead throughout the country. EPA, state, tribal and local agencies use those data to ensure that lead is at levels that protect public health and the environment. EPA has tracked air quality trends for lead using data from this network of monitors. Trends from 1980-2007 and from 1990-2007 are shown here. Nationally, average lead concentrations decreased dramatically after EPA's regulations reduced the lead content in gasoline. For information on lead standards, sources, health effects, and programs to reduce lead, please see <a href="https://www.epa.gov/air/lead">www.epa.gov/air/lead</a>.

# Lead Air Quality, 1980 — 2007

(Based on Annual Maximum 3—Month Average)
National Trend based on 22 Sites



1980 to 2007: 91% decrease in National Average



http://www.epa.gov/air/airtrends/carbon html Last updated on Thursday, September 4th, 2008

You are here: EPA Home Air & Radiation Air Trends Carbon Monoxide

# **Carbon Monoxide**

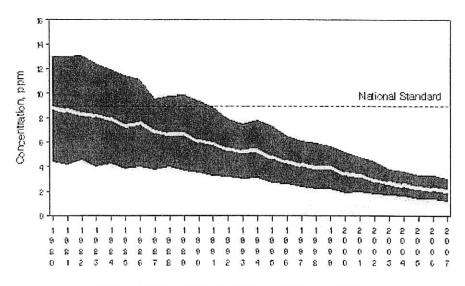
National Trends in CO Levels Local Trends in CO Levels

#### National Trends in CO Levels

Using a nationwide network of monitoring sites, EPA has developed ambient air quality trends for carbon monoxide (CO). Trends from 1980-2007 and from 1990-2007 are shown here. Under the Clean Air Act, EPA sets and reviews national air quality standards for CO. Air quality monitors measure concentrations of CO throughout the country. EPA, state, tribal and local agencies use that data to ensure that CO remains at levels that protect public health and the environment. Nationally, average CO concentrations have decreased substantially over the years. For information on CO standards, sources, health effects, and programs to reduce CO, please see <a href="https://www.epa.gov/air/urbanair/co">www.epa.gov/air/urbanair/co</a>.

## CO Air Quality, 1980 — 2007

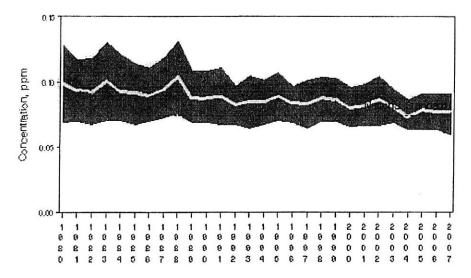
(Based on Annual 2nd Maximum 8—hour Average)
National Trend based on 136 Sites



1980 to 2007 76% decrease in National Average

Ozone Air Quality, 1980 - 2007

(Based on Annual 4th Maximum 8—Hour Average)
National Trend based on 269 Sites

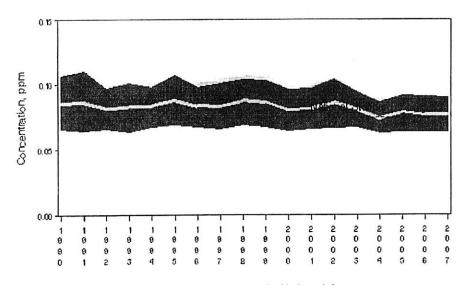


1980 to 2007: 21% decrease in National Average

How to Interpret the Graphs
View the chart data in Microsoft Excel (Download Excel Viewer) [EXIT Disclaimer]
View the chart data in HTML (New window opens)

# Ozone Air Quality, 1990 — 2007

(Based on Annual 4th Maximum 8—Hour Average)
National Trend based on 568 Sites



1990 to 2007: 9% decrease in National Average

How to Interpret the Graphs

Ambient Air Quality Standards and Statistics - EPA 2007

	State/County	2000 Population	co hr	8- (ppm)	Pb Qmax (µg/m²)	NO <sub>2</sub> AM (ppm)	O <sub>3</sub> 8-hr (ppm)	PM 10 24-hr (µg/m²)	PM <sub>2.5</sub> Wtd AM (µg/m³)	PM <sub>2 5</sub> 24-hr (µg/m²)	SO, AM (ppm)	50 <sub>2</sub> 24-hr (ppm)
Current Sta	ndards			9	1.50	0.053	0.075	150	15.0	35	0.030	0.140
	County											
KS	Jahnson County	451086		ND	ND	ND	0.071	ND	10	24	ND	ND
KS	Leavenworth County	68691		ND	ND	ND	j.,	ND	ND	MD	ND	ND
KS	Linn County	9570		ND	ND	0.003	0.07	ND	10.3	24	0.001	0.003
KS	Montgomery County	36252		ND	ND	ND	ND	91	ND	ND	0.002	0.008
KS	Neosho County	16997		ND	ND	ND	ND	85	ND	ND	ND	ND
KS	Sedgwick County	452869		3	ND	0.01	0.06	58	10.3	23	ND	ND
KS	Shawnee County	169871		ND	ND	ND	0.073	47	11.2	29	ND	ND
KS	Sherman County	6760		ND	ND	ND	ND	45	ND	ND	ND	ND
KS	Sumner County	25946		ND	ND	0.004	0.07	ND	9.9	24	0.002	0.003
KS	Trego County	3319		ND	ND	ND	0.068	ND	ND	ND	0.002	0.003
KS	Wyandotte County	157882		2	ND	0.013	0.073	76	11.6	24	0.004	0.013
	Metropolitan Area					(8)						
MO-KS	Kansas City, MO-KS MSA	1776062		2	ND	0.018	0.089	76	12.3	27	0.004	0.061

CO - Highest second maximum non-overlapping 8-hour concentration (applicable NAAOS is 9 ppm)

Pb - Hignest quarterly maximum concentration (applicable NAAQS is 1.5 µg/m²)

NO: Highest arithmetic mean concentration (applicable NAAQS is 0.053 ppm)

03 (8-hour) - Hignest fourth daily maximum 8-hour concentration (applicable NAAQS is 0.075 ppm)

PM . + Highest second maximum 24-nour concentration (applicable NAAQS is 150 µg/m3).

PM . Highest weighted annual mean concentration (applicable NAAOS is 15 µg/m³)

Highest 98<sup>th</sup> percentile 24-hour concentration (applicable NAAOS is 35 µg/m²)

SO. Highest annual mean concentration (applicable NAAOS is 0.03 opm)

Highest second maaximum 24-hour concentration (applicable NAAOS is 0.14 ppm)

ND - indicates data not available

IN - indicates insufficient data to calculate summary statistic

Wtd - Weighted

AM - Annual mean

Omax - Quarterly maximum

µg·m<sup>2</sup> · Units are micrograms per cubic meter

ppm Units are parts per million

according to their air quality. The monitoring data represent the quality of air in the vicinity of the monitoring site and, for some pollutants, may not necessarily represent urban-wide air quality.

# **Emission Trends for Kansas Coal Fired Power Plants**

SO <sub>2</sub> Emissions (tons)									
	2003	2004	2005	2006	2007				
Westar Energy - Jeffrey	67,611	59,981	69,564	64,482	65,774				
KCP&L - La Cygne	31,853	27,189	27,624	22,421	23,055				
Kansas City BPU - Nearman	8,727	8,024	7,242	6,020	7,156				
Westar Energy - Lawrence	6,502	4,026	3,761	2,612	2,538				
Westar Energy - Tecumseh	6,393	5,212	5,223	4,126	4,402				
Kansas City BPU - Quindaro	4,878	4,785	5,777	4,584	4,607				
Empire District Electric - Riverton	3,301	3,374	4,357	5,814	6,987				
Sunflower Electric - Holcomb	2,228	2,131	1,772	1,154	1,076				

Source: Kansas Emissions Inventory

NO <sub>x</sub> Emissions (tons)									
	2003	2004	2005	2006	2007				
KCP&L - La Cygne	38,034	39,178	30,304	33,512	18,226				
Westar Energy - Jeffrey	30,706	28,246	32,574	22,648	26,857				
Westar Energy - Lawrence	5,639	5,871	5,152	4,671	4,646				
Kansas City BPU - Nearman	4,629	4,316	4,137	3,829	4,421				
Sunflower Electric - Holcomb	4,036	4,384	4,533	3,926	4,704				
Kansas City BPU - Quindaro	2,920	3,087	3,392	3,485	3,534				
Westar Energy - Tecumseh	2,819	2,852	3,354	3,194	3,174				
Empire District Electric - Riverton	1,240	1,476	1,442	1,593	1,424				

Source: Kansas Emissions Inventory

Mercury Emissions (lbs)									
	2003	2004	2005	2006	2007				
Westar Energy - Jeffrey	1,197	682	757	695	737				
KCP&L - La Cygne	400	366	826	999	486				
Sunflower Electric - Holcomb	251	316	327	282	320				
Westar Energy - Lawrence	197	191	174	169	184				
Kansas City BPU - Quindaro	1	102	104	95	108				
Kansas City BPU - Nearman	0	101	134	61	75				
Westar Energy - Tecumseh	67	64	67	57	68				
Empire District Electric - Riverton	13	16	31	59	38				

Source: EPA Toxic Release Inventory

Kansa's Department of Health and Environment Senate Natural Resources February 5, 2009 Attachment #4

CO <sub>2</sub> Emissions (tons)										
	2003	2004	2005	2006	2007					
Westar Energy - Jeffrey	18,129,747	16,445,255	18,123,590	16,239,425	16,845,936					
KCP&L - La Cygne	11,862,601	12,062,446	10,244,307	10,275,075	11,159,641					
Westar Energy - Lawrence	5,191,461	5,295,313	4,636,793	.4,181,452	4,320,499					
Sunflower Electric - Holcomb	2,777,928	2,760,615	2,801,875	2,534,424	3,081,538					
Kansas City BPU - Nearman	2,311,658	2,104,007	1,936,160	1,712,018	2,150,505					
Westar Energy - Tecumseh	1,808,422	1,730,478	1,772,920	1,601,838	1,819,229					
Kansas City BPU - Quindaro	1,195,605	1,164,585	1,353,641	1,427,432	1,457,132					
Empire District - Riverton	573,554	686,307	693,649	766,094	724,512					

Source: EPA Acid Rain Database

KDHE - BAR February 2009

## Current and Projected NO<sub>x</sub> and SO<sub>2</sub> Emissions Rates for Kansas Coal-Fired EGUs

		NO <sub>x</sub> emission	rate (Ibs/MMBtu)	SO <sub>2</sub> emission	rate (Ibs/MMBtu)	
Facility	Unit	Current permitted <sup>2</sup>	Under Regional Haze Agreement <sup>1,3</sup>	Current permitted	Under Regional Haze Agreement <sup>1,3</sup>	
	1	0.37	0.15	1.2	0.15	
Westar Energy - Jeffrey	2	0.36	0.15	1.2	0.15	
	3	0.39	0.15	1.2	0.15	
	3	0.42	0.18	3.0	n/a	
Westar Energy - Lawrence	4	0.47	0.18	3.0	0.15	
	5	0.42	0.15	3.0	0.15	
Master Francis Teams of	7	0.50	0.18	3.0	n/a	
Westar Energy - Tecumseh	8	0.46	0.18	3.0	n/a	
KCP&L - La Cygne	1	0.15 <sup>4</sup>	0.13 <sup>5</sup>	3.0	0.10 <sup>5</sup>	
KGPaL - La Gygne	2	0.31	0.13	1.2	7 0.10	
Kansas City BPU - Nearman	1	0.46	n/a	1.2	n/a	
Kanana Cita PRU Cuindana	1	none	n/a	4.6 <sup>6</sup>	n/a	
Kansas City BPU - Quindaro	2	0.50	n/a	4.0 <sup>6</sup>	n/a	
Sunflower Electric - Holcomb	1	0.46	n/a	0.48	n/a	
Empire District Floatrie - Diverten	7	0.46	n/a	3.0	n/a	
Empire District Electric - Riverton	8	0.4	n/a	3.0	n/a	

		Proposed <sup>3</sup>	Proposed <sup>3,7</sup>
Sunflower Electric - Holcomb	2	 0.05	 0.085/0.065
(proposed units)	3	 0.05	 0.085/0.065

<sup>&</sup>lt;sup>1</sup> Regional haze emission limits will be phased in over a five year period from 2010 through 2015 with varying dates for different units

<sup>&</sup>lt;sup>2</sup> Based on annual average, with averaging between units allowed at facilities with more than one Acid Rain unit

<sup>&</sup>lt;sup>3</sup> Based on a 30-day rolling average

<sup>&</sup>lt;sup>4</sup> Based on a 12-month rolling average, recalculated monthly

 $<sup>^{5}</sup>$  Based on a weighted average of Units 1 and 2

<sup>&</sup>lt;sup>6</sup> Actual limit in terms of lbs/hr; this value derived from dividing permitted rate by boiler's heat input rate in MMBtu/hr

 $<sup>^7</sup>$  0.085 lbs/MMBtu when scrubber inlet SO $_2$   $\geq$  0.9 lbs/MMBtu, 0.065 lbs/MMBtu when scrubber inlet SO $_2$  < 0.9 lbs/MMBtu

# **Kansas Coal Fired Power Plants**

Unit / Operation Date	NO <sub>x</sub> Control Equipment or Technology	Date Installed/ Modified	NO <sub>x</sub> Limit/ Source	SO <sub>x</sub> Control Equipment or Technology	Date Installed/ Modified	SO <sub>2</sub> Limit/ Source
			Westar Ene	ergy		
Jeffrey Unit 1 1978	Low NOx Burners	1978	0.37 lb/mmBtu Acid Rain Permit 0.15 lb/mmBtu	Wet Scrubber, Low Sulfur Coal	1978	1.2 lb/mmBtu Fed. Regulation: 40CFR 60.43(a)(2) NSPS D
1970	Ultra Low NOx Burners	2008	Regional Haze Agreement	Scrubber Upgrade	2008	0.15 lb/mmBtu Regional Haze Agreement
Jeffrey Unit 2 1980	Low NOx Burners	1980	0.36 lb/mmBtu Acid Rain Permit, 0.15 lb/mmBtu Regional Haze Agreement	Wet Scrubber Low Sulfur Coal	1980	1.2 lb/mmBtu 1971 Fed. Regulation: 40CFR 60.43(a)(2) NSPS D  0.15 lb/mmBtu Regional Haze Agreement
Jeffrey Unit 3 1983	Low NOx Burners	1983	0.39 lb/mmBtu Acid Rain Permit 0.15 lb/mmBtu	Wet Scrubber Low Sulfur Coal	1983	1.2 lb/mmBtu 1971 Fed. Regulation: 40CFR 60.43(a)(2) NSPS D
	Ultra Low NOx Burners	2008	Regional Haze Agreement	Scrubber Upgrade	2008	0.15 lb/mmBtu Regional Haze Agreement
Tecumseh Unit 9 1957	Ultra Low NOx Burners	2008	0.5 lb/mmBtu Acid Rain Permit 0.18 lb/mmBtu Regional Haze Agreement	Low Sulfur Coal	NA	3.0 lb/mmBtu K.A.R. 28-19-31( c)
Tecumseh Unit 10 1962	None	NA	0.46 lb/mmBtu Acid Rain Permit 0.18 lb/mmBtu Regional Haze Agreement	Low Sulfur Coal	NA	3.0 lb/mmBtu K.A.R. 28-19-31(c)

Quindaro Unit 1 1965	None	NA	None 0.86 lbs/mmBtu	Low Sulfur Coal	NA	3,577.8 lb/hr 1993 permit
AND THE RESERVE OF THE PARTY OF	The state of the s	K	ansas City Board of F	Public Utilities		Name of the American State of the American S
La Cygne Unit 2 1977	Low NOx burners	1977	0.13 lb/mmBtu Regional Haze Agreement	Low Sulfur Coal	NA	0.10 lb/mmBtu Regional Haze Agreement
			0.31 lb/mmBtu Acid Rain Permit,	,		1.2 lb/mmBtu 40CFR 60.43(a)(2) NSPS [
La Cygne Unit 1 1973	Selective Catalytic Reduction	2007	Permit, 2005  0.13 lb/mmBtu Regional Haze Agreement	Wet Scrubber Low Sulfur Coal	1973	K.A.R. 28-19-31(c)  0.10 lb/mmBtu  Regional Haze Agreement
			0.15 lb/mmBtu	and Light		3.0 lb/mmBtu
A CONTRACTOR OF THE PROPERTY O	Company of the second of the s		Regional Haze Agreement Kansas City Power	and Limbs		0.15 lb/mmBtu Regional Haze Agreement
Lawrence Unit 5 1971	Low NOx Burners	1987	0.42 lb/mmBtu Acid Rain Permit  0.15 lb/mmBtu	Wet Scrubber Low Sulfur Coal	1971	3.0 lb/mmBtu K.A.R. 28-19-31(c)
Lawrence Unit 4 1960	None	NA	Acid Rain Permit  0.18 lb/mmBtu  Regional Haze  Agreement	Wet Scrubber Low Sulfur Coal	1968	K.A.R. 28-19-31(c)  0.15 lb/mmBtu  Regional Haze Agreement
1954			Agreement 0.47 lb/mmBtu			3.0 lb/mmBtu
			0.18 lb/mmBtu Regional Haze	Low Guilar Godi	IVA	N.A.N. 20-19-51(c)
Lawrence Unit 3	None	NA	0.42 lb/mmBtu Acid Rain Permit	Low Sulfur Coal	NA	3.0 lb/mmBtu K.A.R. 28-19-31(c)

Quindaro Unit 2 1971	Low NOx burners	1992	0.5 lb/mmBtu Acid Rain Permit	Low Sulfur Coal	NA	5,514.6 lb/hr 1993 permit
Nearman Unit 1 1981	Low NOx burners	1981	0.46 lb/ mmBtu Acid Rain Permit	Low Sulfur Coal	NA	. 1.2 lb/mmBtu NSPS, Subpart D
			Sunflower Ele	ctric		
Holcomb Unit 1 1983	Low NOx Burners	1983	0.50 lb/mmBtu Permit 0.46 lb/mmBtu Acid Rain Permit	Dry Scrubber Low Sulfur Coal	1983	0.48 lb/mmBtu PSD Permit
Sand Sage, 2003 Not constructed	Low NOx Burners	NA	0.08 lb/mmBtu Permt	Dry Scrubber Low Sulfur Coal	NA	0.12 lb/mmBtu Permit
Holcomb Units 2 & 3 Permit Denied, 2007	Low NOx Burners  Selective Catalytic  Reduction	NA	0.05 lb/mmBtu Draft Permit, 2007	<i>Dry Scrubber</i> Low Sulfur Coal	NA	0.065 / 0.085 lb/mmBtu, depending on sulfur Draft Permit
			Empire District I	Electric		
Riverton Unit 39 1950	None	NA	0.46 lb/mmBtu Acid Rain Permit	Low Sulfur Coal	NA	3 lb/mmBtu K.A.R. 28-19-31(c)
Riverton Unit 40 1954	None	NA	0.40 lb/mmBtu Acid Rain Permit	Low Sulfur Coal	NA	3 lb/mmBtu K.A.R. 28-19-31(c)

Kansas City BPU Kaw Units 1, 2 and 3 have not operated in 5 years and are being held in cold standby Sunflower Sand Sage and Holcomb Units 2 and 3 have not been constructed Regional Haze limits will be phased in over five years starting in 2010

KDHE-BAR February 2009

## KANSAS CEMENT COUNCIL

800 SW Jackson – 1408 Topeka, Kansas 66612 785-235-1188

#### **COMMENTS**

Date:

February 5, 2009

Before:

Senate Natural Resources Committee

By:

Woody Moses, Kansas Cement Council

Regarding:

Air Quality Improvement Update

Good Morning Madam Chair and Members of the Committee:

My name is Woody Moses, representing the Kansas Cement Council. The Kansas Cement Council is composed of the three cement mills operating in Southeast Kansas. I appreciate the opportunity to appear before you today to give you an Air Quality Update with respect to the Kansas cement industry.

The Kansas cement industry has been aggressively seeking to reduce our  $SO_2$ ,  $NO_x$  and other particulate emissions for the last 30 years through the implementation of the following strategies:

- > Overall reduction of industry energy use by 30% over the last 30 years. Less energy usage results in less emissions.
- ➤ Since 2000, Ash Grove Cement has invested more than \$175 million to modernize its Chanute, Kansas plant. A new kiln system was installed and began operation in 2001. Installing a new preheater/precalciner kiln reduced fuel consumption per ton of clinker by more than 40 percent. The plant is now among the most energy efficient cement plants in the country and has achieved EPA's Energy Star certification for the past three years. Currently 25% to 30% of kiln energy is derived from hazardous waste treatment reducing SO2 & NOx emissions as it is unnecessary to burn coal.
- ➤ Since 2000 Monarch Cement has invested over \$60 million converting pre-heater kilns to precalciner kilns (Kiln 5 – 2001, Kiln 4- 2006), increasing efficiency while decreasing energy consumption. Other improvements include the decommissioning of Kiln 3 in 2002 (Kiln 3 emitted much higher levels of SOx, because the process did not incorporate an in-line roller mill), Installation of high temperature membrane fabric filter bags in the kiln and clinker cooler baghouses and installation of continuous emission monitors for Sulfur Dioxides, Carbon Monoxide and Nitrous Oxides
- > Lafarge North America, Fredonia; has reduced emissions through the substitution of hazardous waste for coal since the early 90's. Currently 80% to 100% of Lafarge's energy is derived from

hazardous waste treatment reducing SO<sub>2</sub> & NO<sub>x</sub> emissions as it is unnecessary to burn coal. Lafarge has also spent over \$16 million on the installation of high temperature membrane fabric filter bags in the kiln and clinker cooler baghouses and installation of continuous emission monitors for Sulfur Dioxides, Carbon Monoxide and Nitrous Oxides

In addition to these current and ongoing efforts the industry has also committed to a goal of further reducing emissions by 12% by 2012. Through the adoption and implementation of the following strategy:

#### Strategy for Emission Reduction

- 1. Strive for increases in efficiency within the manufacturing process
  - a. Increases in the quality and effectiveness of Preventive Maintenance
  - b. Continue to focus on employee education
    - i. good combustion practices
    - ii. emission indicators and trend recognition
  - c. Enhance methods of communication and documentation
- 2. Research and apply new technologies
  - a. Pavilion Technology
    - i. model predictive control for Kiln optimization
  - b. On-line X-ray Analyzer for Raw Material
    - i. increased feed consistency, which promotes Kiln stability and decreases fuel consumption

Please note all of these improvements were privately financed as a result of the revenues derived from the last Comprehensive Transportation Program. Once again, thank you for the opportunity to give you this update and I will happy to respond to any questions at this time.

Session of 2009

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#### SENATE BILL No. 64

By Special Committee on Eminent Domain in Condemnation of Water Rights

1 - 21

AN ACT concerning the Kansas water appropriation act; amending K.S.A. 82a-705 and 82a-707 and K.S.A. 2008 Supp. 82a-701 and re-10 and 82a-710 (1I) 12 pealing the existing sections. 13 14 Be it enacted by the Legislature of the State of Kansas:

Section 1. K.S.A. 2008 Supp. 82a-701 is hereby amended to read as follows: 82a-701. When used in this act, unless the context indicates otherwise, the following words shall have the following meanings:

(a) "Person" shall mean and include a natural person, a partnership, an organization, a corporation, a municipality and any agency of the state or federal government.

"Chief engineer" means the chief engineer of the division of water resources of the Kansas department of agriculture.

"Domestic uses" means the use of water by any person or by a family unit or household for household purposes, or for the watering of livestock, poultry, farm and domestic animals used in operating a farm, and for the irrigation of lands not exceeding a total of two acres in area for the growing of gardens, orchards and lawns.

"Vested right" means the right of a person under a common law or statutory claim to continue the use of water having actually been applied to any beneficial use, including domestic use, on or before June 28, 1945, to the extent of the maximum quantity and rate of diversion for the beneficial use made thereof, and shall include the right to take and use water for beneficial purposes where a person is engaged in the construction of works for the actual application of water to a beneficial use on June 28, 1945, provided such works shall be completed and water is actually applied for such use within a reasonable time thereafter by such person, such person's heirs, successors or assigns. Such a right does not include, however, those common law claims under which a person has not applied water to any beneficial use within the periods of time set out in this subsection.

(e) "Appropriator" means and includes a person who has an appropriation right that has been perfected in conformity with article 7 of chapter 82a of the Kansas Statutes Annotated and amendments thereto.

> Senator Lee Farm Bureau Senate Natural Resources

February 5, 2009 AHachmert 6

(f) "Appropriation right" is a right, acquired under the provisions of article 7 of chapter 82a of the Kansas Statutes Annotated and amendments thereto, to divert from a definite water supply a specific quantity of water at a specific rate of diversion, provided such water is available in excess of the requirements of all vested rights that relate to such supply and all appropriation rights of earlier date that relate to such supply, and to apply such water to a specific beneficial use or uses in preference to all appropriations right of later date.

(g) "Water right" means any vested right or appropriation right under which a person may lawfully divert and use water. It is a real property right appurtenant to and severable from the land on or in connection with which the water is used and such water right passes as an appurtenance with a conveyance of the land by deed, lease, mortgage, will, or other

voluntary disposal, or by inheritance.

Sec. 2. K.S.A. 82a-705 is hereby amended to read as follows: 82a-705. No person shall have the power or authority to acquire an a new appropriation right to the use of water for other than domestic use without first obtaining the approval of the chief engineer, and no water rights of any kind may be acquired hereafter solely by adverse use, adverse possession, or by estoppel.

Sec. 3. K.S.A. 82a-707 is hereby amended to read as follows: 82a-707. (a) Surface or groundwaters of the state may be appropriated as herein provided. Such appropriation shall not constitute ownership of such water, and appropriation rights shall remain subject to the principle

of beneficial use.

- (b) The date of priority of every water right of every kind, and not the purpose of use, determines the right to divert and use water at any time when the supply is not sufficient to satisfy all water rights. Where lawful uses of water for different purposes conflict have the same priority, such uses shall conform to have priority in the following order of preference: Domestic, municipal, irrigation, industrial, recreational and water power uses. However, the date of priority of an appropriation right, and not the purpose of use, determines the right to divert and use water at any time when the supply is not sufficient to satisfy all water rights that attach to it. The holder of a water right for an inferior beneficial use of water shall not be deprived of the use of the water either temporarily or permanently as long as such holder is making proper use of it under the terms and conditions of such holder's water right and the laws of this state, other than through condemnation.
- (c) As between persons with appropriation rights, the first in time is the first in right. The priority of the appropriation right to use water for any beneficial purpose except domestic purposes shall date from the time of the filing of the application therefor in the office of the chief engineer.

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The priority of the appropriation right to use water for domestic purposes shall date from the time of the filing of the application therefor in the office of the chief engineer or from the time the user makes actual use of water for domestic purposes, whichever is earlier.

(d) Any water right returned to the state under the provisions of K.S.A. 2-1915, and amendments thereto, shall be placed in the custodial care of the state. While in the custodial care of the state, the priority of the water right shall remain in effect and water available under the terms and conditions of the water right shall not be considered available for further appropriation. Any surface water right held in the custodial care of the state shall neither directly benefit nor impair any other surface water right within the stream reach designated for recovery. Any water right donated to the state shall be placed in the custodial care of the state or retired at the discretion of the chief engineer.

(e) Appropriation rights in excess of the reasonable needs of the appropriators shall not be allowed.

Sec. 4. K.S.A. 82a-705 and K.S.A. 2008 Supp. 82a-701 are hereby repealed.

Sec. 5. This act shall take effect and be in force from and after its publication in the statute book.

> After line 16, insert K.S.A. 82a-710 and renumber remaining sections

and 82a-710

K.S.A.

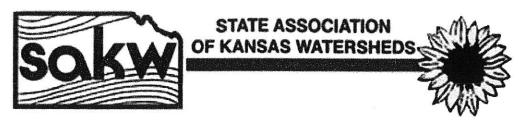
82a-710. Same; return for correction or completion; maps, plats, plans and drawings; default in refiling. Upon receipt of the application it shall be the duty of the chief engineer to endorse thereon the date of its receipt and assign a number to the same. If upon examination the application is found to be defective, inadequate or insufficient to enable such official to determine the nature and amount of the proposed appropriation, it shall be returned for correction or completion or for other required information. No application shall lose its priority of filing on account of such defects, provided acceptable data, proofs, maps, plats, plans and drawings are filed in the office of the chief engineer within thirty days following the date of the posting of the return of such application or such further time not exceeding one year as may be given by the chief engineer.

All maps, plats, plans and drawings shall conform to prescribed uniform standard as to materials, size, coloring and scale, and shall show: (a) The source from which the proposed appropriation is to be taken, (b) all proposed dams, dikes, reservoirs, canals, pipe lines, power houses and other structures for the purpose of storing, conveying or using water for the purpose approved and their positions or courses in connection with the boundary lines and corners of the lands which they occupy. Land listed for irrigation shall be shown in government subdivisions or fractions thereof. Default in the refiling of any application within the time limit specified shall constitute a forfeiture of priority date and the dismissal of the application.

History: L. 1945, ch. 390, § 10; June 28.

(New 91)

Before any application may be considered for approval by the chief engineer, the applicant shall provide proof of legal access to the proposed point of diversion by a showing of: (a) Legal control of the property where the proposed point of diversion is located; or (b) consent, in writing, of the owner of such property, or the owner's designated representative. If the required proof of legal access is not provided to the chief engineer within 30 days after receipt of the application, then the chief engineer shall dismiss the application and the application shall lose its priority of filing.



Chairperson McGinn and members of the Senate Committee on Natural Resources, I am Herbert R. Graves Jr., Executive Director of the State Association of Kansas Watersheds (SAKW). SAKW represents the 85 watershed districts in Kansas.

SAKW opposes amending the Watershed District Act as suggested by SB65. SAKW and the watershed districts of Kansas hold the integrity of the Watershed District Law very seriously.

The water right that watershed districts have the authority to secure is required by the state. A water appropriation permit is issued to watershed districts to permanently store water behind dams. This authorizes the district to manage any domestic use of the stored water as requested by landowners.

Other municipal, industrial, and agricultural water rights are not issued to watershed districts, but are issued by the state to the users of the water through proper program sponsorships, agreements, or applications.

Yes, the use of eminent domain by watershed districts is authorized to secure easements or to purchase land needed to construct, operate, and maintain watershed dams. This authorization also secures appropriate ingress and egress to the dam site. Negotiations with landowners for easements are upfront and necessary before any projects can advance from the planning stage to implementation.

Since landowners have given watershed districts the right to construct a dam and store permanent water on their land the need to condemn the same land to secure the water appropriation permit is rather redundant.

SAKW therefore suggests that watershed districts are not germane to this legislation and SB65 should be amended to exclude any provision that attempts to amend the Watershed District Law.

SAKW appreciates the opportunity to present our written comments on SB65.

Herbert R. Graves Jr.

SAKW Executive Director

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