MINUTES

JOINT COMMITTEE ON ENERGY AND ENVIRONMENTAL POLICY

September 9, 2010
Room 152-S—Statehouse

Members Present

Senator Carolyn McGinn, Chairperson
Representative Carl Holmes, Vice-chairperson
Senator Janis Lee
Senator Roger Rietz
Senator Mark Taddiken
Representative Mitch Holmes
Representative Forrest Knox
Representative Tom Sloan
Representative Vince Wetta

Staff Present

Cindy Lash, Kansas Legislative Research Department
Raney Gilliland, Kansas Legislative Research Department
Heather O'Hara, Kansas Legislative Research Department
Matt Sterling, Office of the Revisor of Statutes
Renae Hansen, Committee Assistant

Others Attending

See attached list.

The meeting was called to order by Chairperson McGinn at 9:00 a.m.

Overview of the Environmental Protection Agency (EPA) Tailoring Rule and Transport Rule

Karl Brooks, EPA Region 7 Administrator (Attachment 1), spoke to the Committee on the EPA's air quality rules. He stated that Congress intended for the individual states to take responsibility for the environmental protection of the land and the air. He commended Senator McGinn for the invitation that was extended to him to speak about the burning of pasture in areas close to urban environments and noted that Kansas always has excelled in enacting the Good Neighbor Rule.

Mr. Brooks stated that EPA regulations are a direct result of the US Supreme Court's rulings on environmental protection issues in the United States. He stated that none of the EPA's rules require regulation of cattle or farm dust. Mr. Brooks noted that Kansas is known for having strong debates to clarify what the correct responses are to legal mandates. He suggested that one should

look at the decision made in May 2010 by EPA Administrator Lisa Jackson. Administrator Jackson summarized the basic science of the Tailoring Rule and concluded that the nation's top scientists have established the connection between greenhouse gases (GHGs) and dangerous levels of air pollution that are changing the earth's atmosphere including the American environment.

Mr. Brooks reiterated that farms and small businesses are not part of the Tailoring Rule. He stated the EPA has followed the law and science to address greenhouse gases by tailoring the Clean Air Act permitting requirements to focus on the right sources at the right time and in a manageable way. Negative health effects and air quality problems are part of the issues that need to be addressed due to emissions in the air.

Questions were asked and comments made by Committee members. In response to questions, Mr. Brooks noted that the baseline figure that the EPA is working from for small emissions is 100,000 tons of emissions or less. He commented that the US Supreme Court directed the EPA to look at the clear science and then generate an endangerment finding. It was clear in the past that to do nothing would have been a violation of the court's order. He noted that Kansas will not be able to issue permits fast enough, based on engineers and science findings, to meet the needs of the national goals issued by Congress. Mr. Brooks commented that the Agency needs to work closely with state environmental agencies on monitoring the air pollutants created in Kansas and those that enter across other state borders. He noted that the Agency has no idea what pollutants are coming from other countries. In addition, he noted that EPA is involved with the US Department of Energy to deal with current and future issues that demand research and funding for that research.

Mark Smith, EPA Region 7 (Attachment 2), also spoke to the Committee on rules that the EPA has enacted to match the legal requirements of the evolving scientific findings. He noted that the Clean Air Act has been a remarkable success. The principal pollutants regulated by the Clean Air Act experienced a reduction of 41 percent. He began by speaking about the Tailoring Rule, which is EPA's approach to regulate greenhouse gas emissions from the largest industrial sources, while shielding millions of businesses that make up the majority of the US economy. He noted that Kansas might not meet the Clean Air Act requirements because its programs currently may not cover greenhouse gas emissions. The EPA believes that the states are best qualified to grant permits based on federal regulations. The next rule Mr. Smith spoke to was the Transport Rule.

Questions were asked and comments made by various Committee members.

In response to questions, Mr. Smith commented that the EPA would send information on the data that is available concerning how Americans' exposure to fine particles and ozone contribute to one out of 20 premature deaths a year and other requests made by members of the Committee. He noted the best available control technology is a case-by-case comparison of the permit and the current control technology available for each industry. The permit is given based on the best available technology when the permit is issued, not when the permit request is submitted. Mr. Smith said the EPA works with the emitting entity from the time of submission to the time of issuing the permit to constantly update the technology and control for the project in question for the permit.

Mr. Brooks noted that the cause of global climate change is due to the human contributions both here and in the rest of world. The EPA representatives stated the agency is in support of keeping jobs in America and that the EPA is forward thinking in making changes now instead of in the future. He believes that international action needs to be taken but in the meantime, the EPA has to uphold the laws that are currently set before them by Congress.

Testimony to the Committee includes letters drafted to the EPA from Kansas (Attachment 3), Iowa (Attachment 4), and Texas (Attachment 5).

Miles Stotts, Environmental Scientist, Kansas Department of Health and Environment (KDHE), Bureau of Air (Attachment 6), spoke to the Committee on the EPA's Greenhouse Gas

Tailoring Rule and how it affects and applies to Kansas. Mr. Stotts gave an overview, listed the previous thresholds for the Clean Air Act, and compared them to the new Tailoring Rule thresholds. He commented on the validity of the previous thresholds for the Clean Air Act. The new thresholds would not require any additional KDHE staff to process the number of permits that would be affected. He presented a timetable of events to take place in order for Kansas to meet the Tailoring Rule time constraints. Mr. Stotts then spoke to the permitting phase-in of different entities, and how they would comply with the requirements of obtaining a permit. He noted that Kansas is on the "A" list for this compliance because of the way the state adopts its laws in reference to a date certain to the federal law. Kansas does not have the authority to issue permits until its laws are changed. The Tailoring Rule allows for 67 percent of the sources to be covered compared to the previous 78 percent, but reduces the sources affected from 6 million to 15,500 sources.

Questions were asked and comments made by several of the Committee members.

In response to questions, Mr. Stotts noted that Kansas will be adopting the Tailoring Rule, but KDHE is still unclear about what this exact rule eventually will look like. He commented that the EPA provides a large portion of the KDHE funding. He noted that Kansas, because of the volume of regulations, has taken great pause before deciding to move forward with adopting the EPA regulations. Mr. John Mitchell, Director of Environment, KDHE, commented that there is a benefit to the citizens of Kansas and the people that are regulated to work through the permitting process. He noted that when it comes to enforcement of the regulations, working through the infractions, and how to work with the individuals to correct the problems to meet the regulations, is a challenge. Mr. Mitchell commented that there is still some question regarding the regulation of emission from ethanol plants. Mr. Rick Brunetti, Director, Kansas Bureau of Air, spoke specifically to the Abengoa Bioenergy question and how the Kansas Bureau of Air will help it meet the permit regulations. KDHE officials are certain that Abengoa Bioenergy will exceed the emission regulations. Mr. Stotts will provide the Committee information on the economic impact results of the Tailoring Rule, with respect to emission thresholds for the various greenhouse gases.

Greg Krissek, Director of Government Affairs, ICM, Inc. (Attachment 7), presented testimony to the Committee on the effects of the Tailoring Rule on ethanol production from cellulosic and biomass feedstock. Attached with his testimony are comments on the Tailoring Rule by Growth Energy, an ethanol advocacy organization. He acknowledged the vast majority of ethanol plants vent CO_2 into the atmosphere and noted the growing opportunity for them to capture the CO_2 for use in oil recovery. Mr. Krissek believes that the Tailoring Rule thresholds will guarantee that the ethanol plants will be governed by this rule. He also noted that attached to his testimony is the EPA summary of a call for information. Individuals from the industry are hoping that the fact that ethanol in fuel helps reduce greenhouse gas emissions will give ethanol producers some reasonable recognition within the regulation.

Bill Eastman, Director of Environmental Services, Westar Energy, (joint response on behalf of Westar Energy, KCP&L, Empire District Electric Co., Sunflower Electric Cooperative, Kansas Electric Cooperatives, KEPCo, Midwest Energy, and Kansas Municipal Utilities) (Attachment 8), spoke to the Committee on the impact of the Tailoring Rule on energy companies in Kansas. Mr. Eastman noted that it is an important issue and that they have a number of concerns for the electric utilities.

Questions were asked and comments made by many of the members of the Committee.

In response to questions, Mr. Eastman stated he believes it will be a problem that applicants must present proposals for permits with no knowledge of the technology available for the ending point of the permit process. He noted that plant engineers live their lives trying to find the most efficient way to produce electricity with the least amount of fuel, thereby lowering emission of greenhouse gasses.

Charlie Sedlock, Division Manager, Hamm Waste Services (Attachment 9), gave information on greenhouse gas emissions with respect to waste management service. He noted that his company would move from a voluntary market in regard to methane gas collection, to a non-voluntary market organization when the Tailoring Rule goes into effect. He commented that it ultimately would result in higher costs for the consumer for the services his company provides. Mr. Sedlock also noted that it might trigger new permitting requirements at closed Kansas landfill facilities. He believes that waste management facilities need timely and clear guidance from the EPA.

Woody Moses, Kansas Cement Council (Attachment 10), spoke to the Committee on the effects the Tailoring Rule will have on the cement industry. He gave a brief overview of the process of creating cement. He noted that the new regulation would put CO_2 into the framework of the Clean Air Act and would consider CO_2 a pollutant, which is a position that has never occurred before. Mr. Moses commented that cement is a demographic product in terms of the market. He noted that when the population increases anywhere in the world, more cement is necessary to support the additional demand. If the U.S. cement industry does not produce it, someone else in the world will.

Chris Cardinal, Legislative Director, Sierra Club Kansas Chapter (Attachment 11), reiterated the finding of the Tailoring Rule and stated the Sierra Club's support of decision. He gave examples of climate change that would affect Kansans through the emission of harmful gases that have been shown to change the climate, according to science relied upon by the EPA.

Questions were asked and comments made by members of the Committee.

In response to questions, Mr. Cardinal commented that he would look into whether the Sierra Club has a position on the outsourcing of jobs to other countries that do not have environmental regulations and the subsequent use of energy to transport the items produced back to the United States. He also will provide studies to show that CO_2 causes harm to human health.

Written testimony was presented from the Portland Cement Association (Attachment 12) and Kansas Municipal Utilities (Attachment 13).

EPA Transport Rule Regarding Ozone and Fine Particles

Miles Stotts, Kansas Department of Health and Environment Bureau of Air (Attachment 14), spoke to the Committee on the EPA's proposed Clean Air Transport Rule (CATR), also known as the Transport Rule. Mr. Stotts provided background information on the history of the Transport Rule as well as an overview of what the proposed rule will do to the current law. The proposed rule would set emissions budgets for NO_x and SO_2 for 31 states and the District of Columbia, and would require a reduction of emissions from power plants. There are caps for each gas for 2012, with further reductions by 2014. Three implementation options for the proposed rule are being considered: allow intrastate trading and limited interstate trading of allowances but assure each state will meet its budget; allow only interstate trading; and set emission limits for each power plant and allow averaging of emission rates. The EPA proposed the first option, and is taking comments on the other two. Kansas is one of 31 states included in the Transport Rule because it slightly exceeds the ozone threshold under the Rule, and moderately exceeds the fine particulate matter ($PM_{2.5}$) threshold. Mr. Stotts noted KDHE has questions about whether Kansas should be subject to the proposed rule, since it is based on older emissions data and Kansas has reduced emissions since the data was collected, and because Kansas plants already have agreements with EPA to further reduce emission. Finally, Mr. Stotts talked about the next steps KDHE will take regarding the proposed Transport Rule.

In response to questions, Mr. Stotts, commented that the Transport Rule is being pushed forward at about the same rate as other new proposed changes.

Bill Eastman, Director of Environmental Services, Westar Energy, (joint response on behalf of Westar, KCP&L, Empire District Electric Co., Sunflower Electric Cooperative, Kansas Electric Cooperatives, KEPCo, Midwest Energy, and Kansas Municipal Utilities), (Attachment 8), slides 4 - 10 addressed the impact of the Transport Rule and concerns it raises for the electric utilities. The most important issue is with the modeling used to project the transport of noxious gases across borders. Electric utility representatives believe that due to inaccurate modeling assumptions, the Transport Rule will require new emission control technology on Kansas plants prior to 2014. The utilities already have spent more than $1 billion on new equipment; under the Transport Rule they would spend over $1 billion more. Mr. Eastman also noted that the Reciprocating Internal Combustion Engine (RICE) Rule is important for energy producers in the state. The new National Ambient Air Quality Standards (NAAQS) for ozone may affect Westar Energy significantly, depending on how much the standard is reduced from current levels.

In response to questions, Mr. Eastman commented that he does not know what kind of costs will be incurred to meet the regulations that will be implemented in the next 7 years. He will provide the Committee with an estimated cost to consumers for the industry to comply with the changes. Mr. Eastman noted Kansas is about in the middle of the pack compared to other states affected by the Transport Rule. Some of the eastern states already have made improvements. Mr. Eastman does not know whether the machinery that will be needed to meet the new requirements is made in the U.S. or produced overseas.

Chris Cardinal, Legislative Director, Sierra Club Kansas Chapter, (Attachment 15), offered testimony regarding the health benefits of implementing the Transport Rule, sometimes called the Good Neighbor Rule.

In response to questions, Mr. Cardinal said he would provide the Committee members additional information about the cause of asthma and the effects on asthma of reductions in pollution.

Kansas Flint Hills Smoke Management Plan

Rick Brunetti, Director, Bureau of Air, Kansas Department of Health and Environment, (Attachment 16); spoke to the Committee about the Task Force for the Kansas Flint Hills Smoke Management Plan. He provided information on the history of the issue, Kansas legislative action concerning burning, and Kansas' request that the EPA exclude certain air quality monitoring results when emissions standards are exceeded during prairie burning. He noted that Greenwood, Chase and Butler counties burn the most acreage in Kansas. Mr. Brunetti discussed a chart showing the main health effects from ozone and particulate matter, and discussed the impact of Flint Hills burning on ozone levels as well as the impact of being designated a "nonattainment area" by the EPA. He talked about the smoke management plan requirements and what the Task Force has considered thus far.

In response to questions, Mr. Brunetti noted that not many events in Kansas are "flagged" (removed from the air quality monitoring data), primarily because Kansas does not have that many events. Nationwide, events that qualify for data flagging tend to be such things as a forest fire or a volcanic eruption. He commented that when the levels get in the 90's you begin to see a significant spike in the number of asthma attacks and visits to the hospital because of breathing issues.

Amanda Graor, Senior Air Quality Planner, Mid-America Regional Council, (Attachment 17) spoke to the Committee about ozone levels resulting from prairie burning and the impact on the Kansas City area. She noted there are more than 90,000 individuals living in Wyandotte and Johnson counties that deal with breathing issues on a regular basis.

In response to questions, Ms. Graor said the Kansas City area is currently not a non-attainment area, but it was in the past and has been in maintenance for about the last 12 years.

She will provide the Committee with information summarizing the differences its air quality management efforts have made to the metro area and a list of rules and policies it has enacted. Ms. Graor noted that high temperatures are a major factor in affecting ozone levels. The high temperatures typically occur from June 15 through September 15. She noted that manufacturing companies that move to the area are encouraged to use the most current technology available to control the emissions.

Chris Cardinal, Legislative Director, Sierra Club Kansas Chapter (Attachment 18), offered testimony that does not support wholesale burning of the rangeland in the Flint Hills. The Sierra Club believes that the Smoke Management Plan must address the scale and frequency of the burning in a manner that eliminates destruction of grassland bird habitat.

Dr. Clenton Owensby, Professor of Range Management, Kansas State University (Attachment 19), provided information about the importance of burning in the Flint Hills on a regular basis. He noted that burning in the late spring produces the highest forage yield, the highest livestock weight gain and the best woody plant control. He said without fire, the Flint Hills would not be grasslands. Dr. Owensby said burning in the Flint Hills has an economic impact of $30-45 million annually due to increased livestock gain and weed and brush control. He noted the state has few rules related to burning, and counties have additional rules.

In response to questions, Dr. Owensby commented that fire and grazing helped maintain the tall grass prairie in its historic state. He noted that most of the burning occurs in April in the Flint Hills, with the earliest burning occurring in the southern part of the state and moving northward.

Michael Collinge, Rancher (Attachment 20), spoke to the Committee on the reasons why farmers and ranchers have to burn the grass. He also talked about the restrictions (weather, direction of wind, consideration of neighbors) they have when burning grassland. Jeff Davidson, KSU Extension, Butler County, provided supporting written testimony. (Attachment 21)

Kay Johnson and Dale Goter, Environmental Services, City of Wichita, (Attachment 22) offered testimony on the impacts to the city on the burning of the grasslands.

In response to questions about the effects if Wichita is designated a "non-attainment" zone for ozone, Mr. Goter noted that any industry in the area that produces emissions would have to contain those emissions, including the aircraft industry. City officials estimate the cost of responding to non-attainment status would be $10 million.

Written testimony was presented by Dr. John Neuberger, KU Medical Center (Attachment 23) on the health effects of burning.

The Committee also was provided with written testimony submitted by KDHE during the 2010 Legislative Session regarding health effects of air pollution. (Attachment 24)

Mr. Stotts and Mr. Brunetti answered another series of questions regarding the ozone levels in Kansas in the summer. Additionally, they explained the change in types of gasoline used during the summer in urban areas to help reduce ozone levels.

Committee Discussion and Recommendations

Committee members agreed to delay discussion and recommendations until a later meeting.

Senator McGinn made closing comments and noted the next meeting is scheduled for October 7-8, 2010. That meeting will focus on water supply issues in Kansas and the impact on Kansas and its citizens.

The meeting was adjourned at 4:06 p.m.

Prepared by Renae Hansen
Edited by Heather O'Hara and Cindy Lash

Approved by Committee on:

October 15, 2010
(Date)

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Energy + Environmental Policy

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Mark Schreiber	Westar
Bill Eastman	Westar
Clare Burton	Sunflower
PAUL M. LING	KCP&L
Matt Hickam	KCPL
Shari Albrecht	KDHE
Rick Brunetti	KDHE
John Mitchell	KDHE
Dale Gotter	Wichita
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Jeremy Ruis	KDHE
D. Ray Johnson	Wichita
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PHIL WAGES	KEPCO
Mick Urban	ONEOK
MICHAEL LOEFFLER	Northern Natural Gas
Lon Stanton	NNG
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Michael Wales	KLRD
Mike Jay	EPA
Charlie Sedlock	Haborlan
Woody Moses	KCC
BRAD HARRELSON	KFB
Steve Swaffar	KFB
SEAN MILLER	Capitol Strategies
Susan Kannarr	KDHE
Sarah Sexton-Bowser	KS Assn of Ethanol Process
Greg Krissek	ICM
Leslie Kaufman	Ks Co-op Council
Chris Cardinal	Sierra Club

Stephanie Cole	Sierra Club
Scott Allegrucci	Great Plains Alliance for Clean Energy
Derek Hein	Hein Law Firm
Wayne Penrod	Sunflower Electric
Bill Downing	Midwest Energy
Earl Lewis	KS Water Office
Ken Peterson	KS Petroleum Council
John Donley	Kansas Livestock Assn.

Testimony by Karl Brooks, EPA Region 7 Administrator
Joint Committee on Energy and Environmental Policy
Room 152-S — Statehouse, Topeka, Kansas
September 9, 2010

Introduction

Thanks for your invitation to come and speak here today. It is important that EPA in this region communicate frequently and timely with the state of Kansas. My staff and I talk dozens of times each week with KDHE at all levels including monthly senior staff conf calls with John Mitchell and his staff. These are all good ways to foster federal-state cooperation. But as a former state legislator, I know the value of also exchanging views and information with legislative branch.

One of my boss Lisa Jackson's principles is strengthening EPA's partnerships with the states. Of course, the U.S. Constitution's architecture requires states to be active vital partners with federal government in tackling complex problems about air and water. But Congress also directed EPA over 40 years ago to respect states' important work on hard issues like air and water permitting. As I have told my KU law students for over a decade, states and their citizens helped invent American environmental law, so it was obvious – and right – for Congress to delegate key administrative and

lawmaking responsibilities to states when it enacted such keystone laws as the Clean Air Act.

This committee, like others in the Kansas legislature, has substantial responsibilities to make law and to exercise oversight of KDHE and other executive-branch agencies. Somewhere between the Commerce Clause, the Supremacy Clause, and the 10th amendment will Americans find the best environmental policy being made, improved, enforced, and analyzed. As a visitor to your committee, my suggestions are offered in the spirit of partnership, comity, and common purpose.

If this committee meets again later in the fall to discuss water and the federal-state environment scene, EPA would be honored to be asked to participate.

The principle of federal-state partnership was substantially advanced by Senator McGinn last session when she invited me to testify to the Senate Natural Resources Committee about ozone and pasture burning. I believe EPA's efforts to share science, law, and regulatory approaches with state legislators helped stimulate the creative, candid ongoing discussions about Flint Hills burning.

EPA's work on Flint Hills pasture burning and the problem of ozone pollution illustrates the value of moving past slogans to solutions. Some

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folks once tried to claim EPA intended to ban pasture burning. Others accused EPA of sacrificing the Kansas cattle industry to gratify a handful of environmentalists. And I sensed there was a general misunderstanding of the Agency's duties to safeguard over 1 million Kansans and their Missouri and Nebraska neighbors from dangerous levels of air pollution.

When I took office in February, I thought the level of acrimony and sloganeering was too high. The media, which always love a good state versus feds fight, were beginning to report on Flint Hills burning as a classic "city slickers versus cowboys" cultural clash. So I appreciated Senator McGinn's effort to actually find out what EPA was doing, and why.

My Senate testimony last spring outlined a couple of key points that should govern all our work for the people we serve: 1) since our acts have consequences, we should think of our neighbors as we make our own plans; 2) EPA's legal responsibilities to keep air pollutants from harming citizens have caused our larger urban areas to undertake expensive investments to better protect their air; and 3) managing necessary pasture-burning to serve both ranchowners' needs and their downwind neighbors' health requires some give and take, some factual knowledge, and some recognition that local-level solutions can work even in a legal setting where the goals are established by national law.

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The Flint Hills process illustrates what can be done when we work together. KDHE representatives will be telling you more about how addressing prairie burns in the Flint Hills has been a great exercise in cooperation.

Here's my take: Region 7 EPA is working directly with KDHE and the Kansas agriculture community to develop a path forward that combines efforts by rural and urban communities to find a solution. The plan takes advantage of work already being done and provides opportunities to test some concepts to improve the planning of burns that incorporate an understanding of air quality impacts.

The proposed changes are not radical. In fact, they reflect common sense, mostly home-grown, approaches to resolve complex problems. These best practices, many of them already in wide use across Kansas, should provide consistency and predictability to traditional Kansas ranching practices. As a community of neighbors, we can develop pasture-burning techniques for future generations that are compatible with public health and a standard of living that Kansans have come to appreciate.

Much good work has been done in the Flint Hills. This Legislature has played a constructive role. And I commend you for it.

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We all agree that the best plans to manage smoke impacts while ensuring that maintenance of the Kansas tall grass prairies will come from Kansans

Your predecessors in the Kansas Legislature enacted the fundamental Kansas Air Quality Act. You now have the constitutional authority to exercise legislative oversight authority by approving and amending proposed agency rules. There is real value in making sure Kansas legislators know what EPA is doing about air pollution in Kansas, why we are doing it, and to the extent I can predict the future, how our actions will interact with both state and regulated community choices in the near future.

Let me make some important preliminary observations. None of us can predict the future, and none of us can read the minds of judges. EPA and KDHE are almost always defendants somewhere in lawsuits brought by various plaintiffs – both from private industry and citizens in environmental advocacy groups. We know that the outcome of these decisions will shape EPA's actions because the agency is dedicated to the principle, as Lisa Jackson announced in March 2009, that the "rule of law" governs our actions.

Another important observation is that air quality protection requires us all to apply evolving science to both the dynamic natural world and a

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complex mix of economic, technological, cultural human actions. Administrator Jackson has said, "Science will drive regulation" at EPA. All of us - not scientists or engineers - may wish we could, at times, repeal various laws of science or make the calculations come out differently to suit our own value preferences or those of our constituents. But we can't and we shouldn't. Instead, let's follow the facts where they lead and strive always to make sure our political debates and legal actions are informed by the best available science.

My final preliminary observation is that EPA's dedication to follow law and science should engage the public, at all levels, constantly in what we are doing. Our EPA Administrator is dedicated to "transparency," which is one reason I'm so pleased to join you today.

Through your work, and via the media who are (or who should be) reporting your work and my words, the people of Kansas better understand the choices they must make and the consequences of the choices they have already made or will make tomorrow. Much of what we do in keeping Kansas air clean reflects the principle of responsibility. Our actions are not cost-free to regulated polluters. But as Mark Smith will detail later, the public health and environmental quality benefits of reducing air pollution outweigh the costs many times over.

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A big part of my job the past seven months as Regional Administrator has been to engage stakeholders all over the state of Kansas and the four-state region about EPA's work and the challenges that nature, politics, economics, and individual choices pose to the agency. I have especially tried to be candid about some accusations and concerns I've heard, seen, and read about what EPA is doing and why. Some of those play into what my colleagues and I will talk about today. For example, I've talked a lot about the GHG tailoring rule's impacts on production agriculture because it has been suggested that somehow EPA is "at war with ag" or is trying to "shut down ag" through some kind of tax on cattle, or rules on combine dust. As I'll discuss in a minute, none of the rules EPA enforces to protect Kansans' air requires or even contemplates taxing cows, whether they're grazing peacefully in a Flint Hills pasture or being graded and sorted in a feed yard prior to shipment or slaughter. And none of the air quality rules I'll discuss in a minute – about GHG tailoring, transported pollutants, or Flint Hills ozone – regulate the dust that farm equipment stirs in the field or on the rock road going from farm to town.

Accusations about EPA sometimes make me wince. Sometimes they make me laugh. I don't expect every Kansas farm family to send me a Christmas card and a birthday present, nor do I expect their elected

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representatives to do the same. Political differences in this state for 145 years have sparked vigorous debates about the best ways of working with and conserving the natural world upon which all of our wealth is ultimately founded. But what I do hope to see and hear more of in the coming year is tough, vigorous, factual debates about air quality and agriculture, about ozone and pasture burning, about GHG and power plants. That serves all Kansans better, and accurately reflects the distinctive Kansas preference for tough but fair debate about principles and facts.

One issue I want to clarify right up front is that EPA's GHG tailoring rule is in no way being written and enforced as a means of delaying or even sidetracking the very large coal-fired power plant all of us have heard so much about in Finney County. "Sunflower," I think it's called. EPA wrote the GHG tailoring rule in response to an order from the highest court in the land. When the U.S. Supreme Court ruled in 2007 that the congressional authors of the 1970 Clean Air Act intended to limit the emissions of air pollutants created from the combustion of fossil fuels – such as carbon dioxide, methane, nitrous oxide and fluorinated gases – EPA's duty became to carry out that mandate. Across two presidencies and EPA administrators, this agency has striven to carry out that legal mandate and to make the congressional intent and judicial decision the law of this land.

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Fortunately, to carry out the Supreme Court mandate, EPA has had the benefit of evolving science of climate change, combustion chemistry, and power production. To those who say that EPA is regulating on the basis of weak or even no science, I simply suggest you re-read Administrator Jackson's decision in May 2010, where she summarized the science upon which the tailoring rule was based and concluded that the clear weight of this nation's top scientists established the connection between GHGs and dangerous levels of air pollution that is changing the earth's atmosphere and the American environment.

Climate change is real and there are signs of it all around us -- changes that we can measure, see and feel — and EPA finds that it is posing risks to both our health and the environment. The 2010 scientific assessments from the National Academy of Sciences and NOAA fully support the conclusion that climate change is real and poses significant risk to human and natural systems.

EPA's finding that climate change threatens public health and the environment is based on a firm and strengthening scientific foundation.

- EPA's process for reviewing the science supporting the endangerment finding was robust.

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- EPA gave careful consideration to all of the scientific and technical information in the record and relied primarily on published, well-vetted climate change assessment literature. EPA also considered and responded to nearly 400,000 public comments.

- EPA seriously evaluated petitions to reconsider the endangerment finding and spent four months carefully reviewing their claims that the science underlying the finding was flawed.

Climate change is real, and it is happening now. The global warming trend over the past 100 years is confirmed by three separate data sets of land and water temperature. These datasets are confirmed by satellite data. In addition, melting ice in the Arctic, melting glaciers around the world, increasing ocean temperatures, rising sea levels, shifted precipitation patterns, and changing ecosystems and wildlife habitats all confirm that our climate is changing.

I suspect none of the Supreme Court justices and none of the eminent scientists who interpreted the law and discovered the scientific principles had ever heard of Sunflower Power. And to the extent any new applicant for a construction permit that will emit pollutants is affected by the GHG tailoring rule, Sunflower would be in the exact same position as any other of the narrow category of large pollution emitters that will be affected.

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The Clean Air Act has worked because it grants EPA flexibility to take modest regulatory steps. Businesses have time to adapt and the market can determine which innovations will best meet health and environmental standards.

That is why – before EPA issued the Clean Air Act endangerment finding – The Agency began working on a rule that protects small businesses. Under what we call the "GHG Tailoring Rule," small sources would be exempted from regulations for the next six years. That should be more than enough time for Congress to pass a law with permanent exemptions.

EPA's common-sense approach focuses on greenhouse gas emissions from the largest industrial sources, while shielding millions of businesses that make up the majority of the U.S. economy. Let me reiterate:

- Farms and small businesses are not part of this rule
- EPA has followed the law and the science to address greenhouse gases by tailoring Clean Air Act permitting requirements to focus on the right sources at the right time and in a manageable way.

EPA's endangerment finding and emission standards for passenger vehicles, which will go into effect in January 2011, in turn will trigger Clean Air Act permitting requirements for stationary sources. These permits will

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cover nearly 70 percent of the of the greenhouse gas pollution from stationary sources that threaten Americans' health and welfare

Large industries already subject to Clean Air Act permitting – such as electric generating units, cement production facilities, and petroleum refineries – will be required to address increases in GHG emissions in their construction and operating permits

The Clean Air Act requires states to develop and follow state implementation plans that include requirements for issuing what are termed PSD permits. When federal permitting requirements change, as they did under the Tailoring Rule, states may need to modify these plans.

EPA recently proposed two actions to fill the gap for any state that cannot make the necessary changes to its permitting program by January 2011. Without these proposals industrial sources of GHGs in some states would not be able to begin construction as of January 2, 2011, the earliest GHG permitting requirements become effective.

Based on information and a letter from KDHE, EPA issued a proposed finding that PSD permitting regulations in Kansas may not meet Clean Air Act requirements because their programs currently may not cover GHG emissions and need revision. We are working with KDHE to avoid a gap in permitting authority causing a situation where either EPA is forced to

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be the permit issuer in Kansas, or entities wouldn't be able to receive a permit necessary for construction.

That said, EPA still believes that States are best-suited to issue permits to sources of GHG emissions. They have long-standing experience working together with industrial facilities under their jurisdiction to process PSD permit applications. EPA will continue to provide guidance and act as a resource for the states as they make the various required permitting decisions for GHG emissions.

Transport Rule

As many of you have already know, Kansas has been included as one of the 31 states in EPA's "Transport Rule." It's important to understand that this EPA rule is, in fact, a rule designed to meet state requirements that have been in existence since the Federal Clean Air Act Amendments of 1990.

These provisions under the CAA are called the "good neighbor provisions" and require that **each state** reduce its significant contribution to downwind air quality pollution in other states. The goal is to ensure that downwind states can achieve and maintain healthy air quality without interference from upwind state's air pollution. It relies on EPA, states, and local governments all playing important roles in reaching clean air goals.

1-13

The rule ensures that states reduce their fair share of the pollution problem of their downwind neighbors.

Our analysis shows that this rule is highly cost effective with benefits far exceeding costs. The nationwide monetary benefits alone are expected to between $120-290 billion with the cost of implementation at $2.8 billion. The figures show how much impact air pollution can have on our society and in fact, that human health and economic productivity go hand in hand. They are not mutually exclusive.

We also realize it's important to "keep the lights on" and maintain affordable and reliable electricity. We believe the energy price will show a nominal increase of less than 2 percent for electricity and 1 percent for natural gas with a reduction of coal usage.

With the Transport Rule, the Agency is renewing its commitment to assist states in fulfilling their statutory "good neighbor" provisions under the Clean Air Act, and setting in place a new EPA approach, which can be updated as needed, to help solve the problems caused by air pollution crossing state borders.

Each time the national air quality standards are re-evaluated, EPA will evaluate whether new emission reductions will be required from upwind states. In this way, EPA will address interstate transport of air pollution with

1-14

the exact same urgency that we and our state partners address their local nonattainment obligations.

EPA intends to finalize this proposed rule as soon as possible to provide certainty for sources and states that emissions reductions will continue and additional needed reductions will occur in the future. The proposed rule would require sulfur dioxide and nitrogen dioxide emission reductions starting in 2012 and additional sulfur dioxide emission reductions in 2014.

Although this rule gets larger emission reductions more quickly than the previous Clean Air Interstate Rule required, additional emissions reductions will be needed to help states attain current and future air quality standards. EPA has begun the work necessary to apply today's proposed template to the upcoming 2010 ozone standard. The Agency plans to propose a transport rule to address that standard in 2011 and finalize it in 2012.

EPA remains committed to protecting public health from the dangers of ground-level ozone, a key component of smog but the Agency has delayed announcing the final ozone National Ambient Air Quality Standard. We are continuing to carefully consider the proposed options and the information we received during the public comment period on the January 2010 proposal. There will be a slight delay in finalizing our decision on any new

1-15

ozone standards. We expect to finalize the standards about the end of October 2010.

Air pollution can travel hundreds of miles and cause multiple human health and environmental problems, such as asthma, bronchitis, acid rain, visibility degradation, and damage to sensitive ecosystems. This rule will reduce millions of Americans exposure to fine particles and ozone.

EPA's mission is to protect our citizens and our environment. We do this work guided by scientific integrity, the rule of law, and public transparency. The urgency of meeting this challenge comes from EPA's duty to set health based standards that adequately protect public health, guided by law and based on sound science. When these standards become more stringent, we find that more areas require assistance to meet the standards and more businesses, industry and communities are called upon to do their share to protect air quality. However, I know Kansans are up to the challenge.

1-16

Testimony by Mark A. Smith, U.S. EPA Region 7

Joint Committee on Energy and Environmental Policy

Room 152-S — Statehouse, Topeka, Kansas
September 9, 2010

Clean Air Act Success

Thank you for the opportunity to speak with you this morning and discuss important topics such as climate change and air pollution. We are on the cusp of regulating greenhouse gas (GHG) pollutants via the Clean Air Act (CAA). It was over 3 years ago that EPA received the mandate from the Supreme Court that greenhouse gasses could be regulated under the CAA. Administrator Jackson believes climate change is better addressed through comprehensive legislation. However, if Congress fails to act, then EPA is obligated to regulate GHGs through existing requirements under the CAA. EPA has deliberately and thoughtfully crafted regulations to do just that.

The Clean Air Act has been a remarkable success. Over the course of the last 20 years, while gross domestic product went up 64%, vehicles miles traveled increased 36%, energy consumption grew by 19%, population increased 22%, and emissions of carbon dioxide went up 20%, the principal pollutants regulated by the CAA (the so called criteria pollutants like ozone and particulate matter) were reduced by 41%!

That said, one may ask why there are so many different CAA rules issued by EPA recently? The answer is many of the recent regulatory actions are already "baked in" from existing mandates within the 1990 CAA. Many more are the result of court-ordered deadlines where EPA has no choice but to promulgate a regulation. Finally, the CAA requires periodic

reviews of existing standards like National Ambient Air Quality Standards (NAAQS) to match our legal requirements with the evolving state of science.

Tailoring Rule

The first rule you invite us to speak about is the so-called "tailoring rule," EPA's common-sense approach to regulate greenhouse gas emissions from the largest industrial sources, while shielding millions of businesses that make up the majority of the U.S. economy. EPA finalized the endangerment finding and emission standards for passenger vehicles, which will go into effect in January 2011 triggering Clean Air Act permitting requirements for stationary sources.

After taking over 400,000 public comments, we raised the permitting threshold to 100,000 tons per year (tpy) of carbon dioxide equivalents (CO2eq) which is 4 times our proposed threshold. Just for comparison, 100,000 tpy of CO2eq is roughly equal to 750 rail cars of coal, the energy use of 9,000 homes, or the GHG emissions from 18,000 passenger vehicles. Clearly, we are using a common sense approach to regulate only the largest and the most manageable number of sources under the air permitting regulations. Even at the high thresholds, these regulations will cover sources responsible for nearly 70% of total national stationary source GHG emissions. Large industries still subject to Clean Air Act permitting – such as electric generating units, cement production facilities, and petroleum refineries – will be required to address increases in GHG emissions in their construction and operating permits.

For the very large sources that are subject to GHG permitting requirements, what does that mean? For some it means installing Best Available Control Technology (BACT). We will

2-2

soon issue guidance on different GHG control technology and scenarios with performance and cost data for the largest sectors affected by these regulations. We will publish this guidance in the Federal Register next month and we will conduct training and webinars for permit authorities and industry.

The CAA requires states to develop and follow state implementation plans (SIPs) that include requirements for issuing air permits. When federal permitting requirements change, as they did under the Tailoring Rule, states may need to modify these plans.

EPA recently proposed two actions to fill the gap for any state that cannot make the necessary changes to its permitting program by January 2011. Without these proposals industrial sources of GHGs in some states would not be able to begin construction as of January 2, 2011, the earliest GHG permitting requirements become effective.

Based on information and a letter from KDHE, EPA issued a proposed finding that permitting regulations in Kansas may not meet Clean Air Act requirements because their programs currently may not cover GHG emissions. EPA proposes a "SIP call," which would require states like Kansas to revise their SIPs to ensure that their air permit programs cover GHG emissions. If Kansas submits a revision to their SIP by December 1, 2010, to address this issue, then EPA will not finalize the SIP action. However, if Kansas does not submit a SIP revision by the specified deadline of their choice (either as early as December 22, 2010, or as late as December 1, 2011), then EPA may issue a federal implementation plan (FIP) that would apply federal rules to GHGs.

2-3

If we are compelled to issue a FIP for GHGs, we invite Kansas to accept a delegation of authority to implement the FIP, so that it will still be the state that processes the permit applications, albeit operating under federal law. The FIP would assure that air permitting for GHGs can continue until the state's required SIP revision is complete.

As Karl Brooks just mentioned, we believe States are best-suited to issue permits to sources of GHG emissions. They have long-standing experience working together with industrial facilities under their jurisdiction to process permit applications. Indeed, the success of the CAA is largely the result state action, not federal. EPA will continue to provide guidance and act as a resource for the states as they make the various required permitting decisions for GHG emissions.

Transport Rule

At this point, I'd like to build on Karl Brook's comments and provide you a little more detail on our proposed Transport Rule.

Kansas' inclusion in the proposal is based on the State's downwind impact on the 1997 Ozone, and 1997 and 2006 Particulate Matter National Ambient Air Quality Standard (NAAQS). In particular, our proposed analysis indicates that Kansas has a significant impact on the 24-hour fine particle standard in the Milwaukee, Wisconsin area, and the Dallas area for ozone.

Please keep in mind, as Karl indicated, the current ozone standard is under review and expected by the end of October, so once it is finalized, we will undergo an additional analysis to assess State impacts on the new standard.

2-4

In addition to the technical analysis that determines State impacts on other States, the proposed Transport provides a rule framework to address each State's individual impacts by requiring reductions of power plant emissions of nitrogen oxides (NOx) and sulfur dioxide (SO2). In our proposal, we detail our preferred approach which would ensure states meet their obligations through establishment of state emission limits that allow for limited allowance trading among power plants in other states. Our first alternative is to set state specific budgets and allow for trading allowances among sources within the state. Our second alternative is to set a pollution limit for each state and specify the allowable emissions limit for each power plant, with no trading allowed (direct control).

And if you could allow me to take a moment to briefly expand on Karl's comments on the beneficial impacts of this rule. The emissions of NOx and S02 pollution can travel hundreds of miles and cause multiple human health and environmental problems, such as asthma, bronchitis, acid rain, visibility degradation, and damage to sensitive ecosystems. This rule will reduce millions of Americans exposure to fine particles and ozone that are currently contributing to 1 out of 20 premature deaths a year. Indeed, this proposed rule has huge societal benefits. It's important to remember that even at the conservative end, benefits outweigh costs by 43 times.

You will hear testimony later from other affected parties about the immediate impact of this rule on Kansas electrical utilities, but based on our preliminary analysis, it appears Kansas may be meeting the potential state emission limits in the proposed rule as a result of relatively recent installation of controls on some of the high emitting facilities in Kansas.

2-5

Of course, this is a proposal and we would be remiss if we didn't encourage public comment. The comment period closes October 1, 2010 and the comment period for the newly released IPM (power plant emissions model) analysis has been extended to October 15, 2010. It's our understanding that many states and affected parties, including Kansas, are preparing to comment on the many aspects of our technical analysis supporting this proposal. We absolutely welcome these comments, as our obligation to utilize the best available science is greatly dependant on them.

Finally, I'd like to conclude my remarks by again going back to the success of the CAA. For us to continue to achieve the CAA's remarkable success, we will need to continue on the paths that brought us here. Cooperation, coordination, innovation and action by industry, states, and federal governments will bring us improved air quality and health benefits we all deserve.

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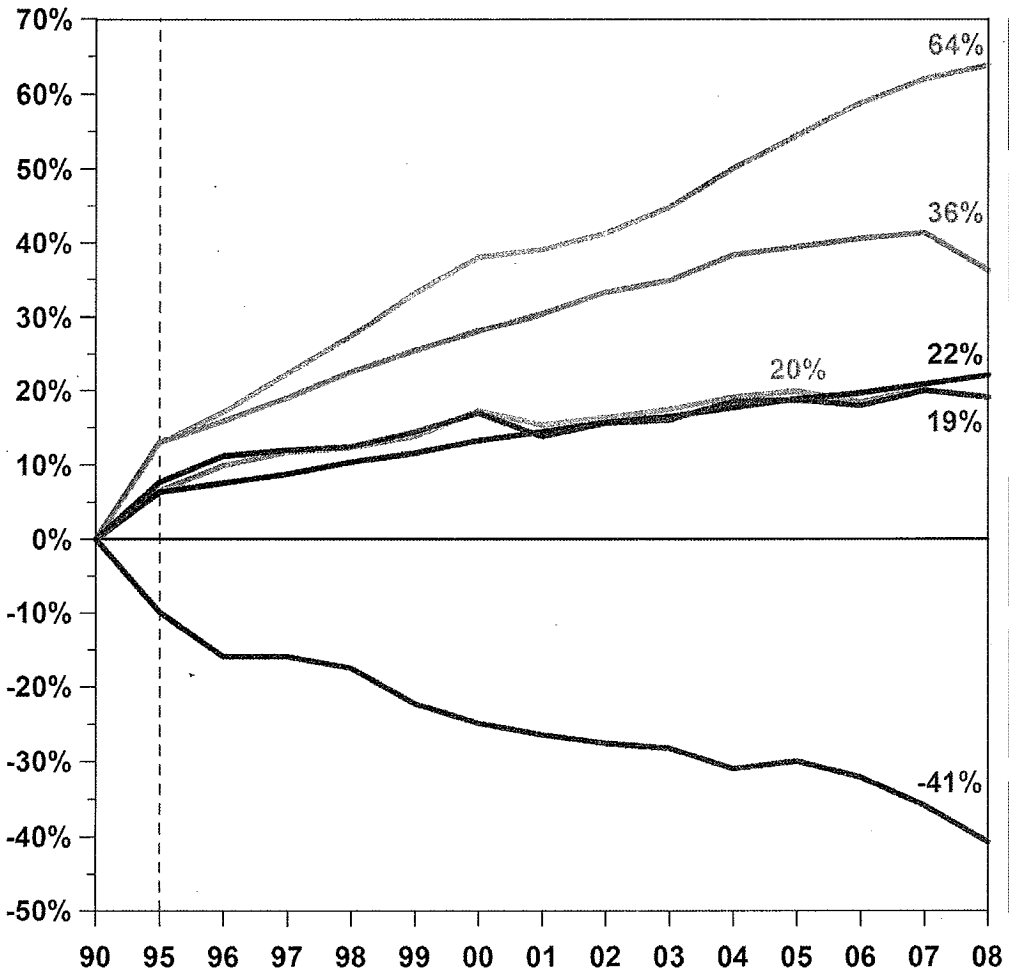

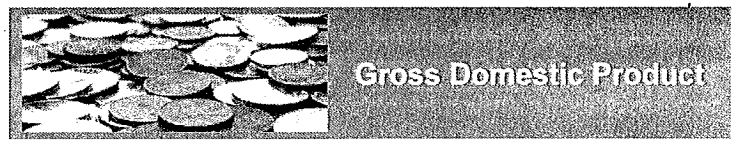

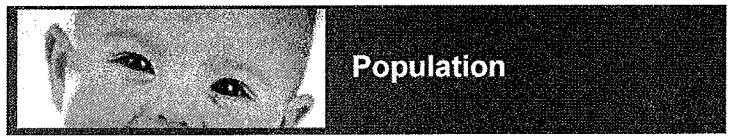

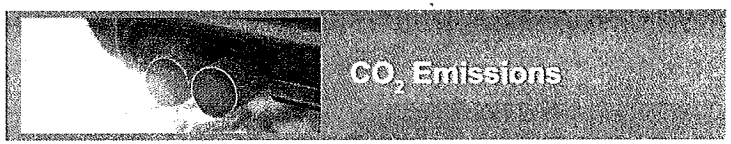

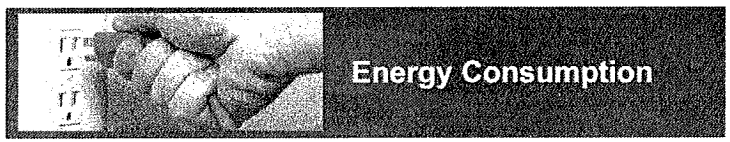

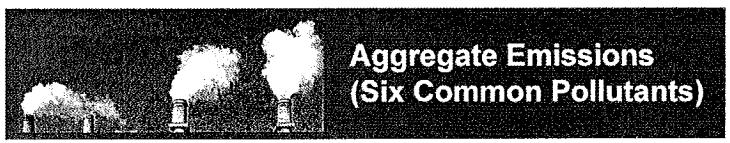

Source: EPA Air Trends - Our Nation's Air - Status and Trends through 2008

KANSAS

Mark Parkinson, Governor
Roderick L. Bremby, Secretary

DEPARTMENT OF HEALTH
AND ENVIRONMENT

www.kdheks.gov

Division of Environment

August 2, 2010

Mr. Karl Brooks
Regional Administrator
USEPA, Region VII
901 N. 5th Street
Kansas City, Kansas 66101

Dear Mr. Brooks:

On May 13, 2010, the U.S. Environmental Protection Agency (EPA) issued a final rule that adds thresholds for greenhouse gas (GHG) emissions to regulations that define when permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing sources of air pollution. The final rule "tailors" the requirements of these Clean Air Act (CAA) permitting programs to limit which facilities will be required to obtain PSD and Title V permits. The final rule was published in the Federal Register on June 3, 2010, (75 FR 31514) with an effective date of August 2, 2010.

The final rule requests that states submit information outlining their intentions regarding the tailoring rule to EPA by August 2, 2010. This information is needed to determine whether it is necessary to finalize EPA's proposed limited approvals for any SIP-approved PSD and part 70 Title V state programs. This letter is intended to fulfill EPA's request. Kansas must revise its regulations to implement the Tailoring Rule; the following is a summary of the proposed regulatory action and an estimated timeframe.

Currently there are no statutes, definitional or other, making up the Kansas air quality act (Kansas Statutes Annotated (K.S.A.) 65-3001 et seq.), which prevent the Kansas Department of Health and Environment (KDHE) from adopting the federal Tailoring Rule. Specifically, KDHE is proposing to incorporate the modified definition of "major source" and the new definition for "subject to regulation" in a new K.A.R. 28-19-200a and to update the adoption by reference of 40 C.F.R. §52.21 and 40 C.F.R. Part 51 Subpart I in the existing K.A.R. 28-19-350.

Title V: KDHE's Title V permitting regulations' (K.A.R. 28-19-500 et seq.) applicability is triggered by the definition of "major source" as defined at K.A.R. 28-19-200(kk). Currently the definition does not rely on the phrase "subject to regulation," therefore we cannot simply depend on an interpretation of the term to implement the Tailoring Rule. Further, the final Tailoring Rule amends the existing definition of "major source" to incorporate the phrase "subject to regulation" to implement the part 1 and 2 thresholds for greenhouse gases (GHGs).

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Voice 785-296-1535 Fax 785-296-8464

KDHE is proposing to add a new K.A.R. 28-19-200a to the Kansas Ambient Air Quality Standards and Air Pollution Control Regulations (Kansas Administrative Regulation (K.A.R.) 28-19-1 et seq.) specifically to update the Tailoring Rule amended definition of "major source" and addition of the new definition "subject to regulation" to align the Title V permitting definitions with the federal regulations.

Prevention of Significant Deterioration: Kansas implements the New Source Review (NSR) program for major stationary sources in attainment areas under the requirements of 40 C.F.R. §52.21 as adopted by reference in K.A.R. 28-19-350. NSR in attainment areas is commonly called Prevention of Significant Deterioration (PSD). To implement the final Tailoring Rule, KDHE must simply update the adoption by reference of 40 C.F.R. §52.21 and 40 C.F.R. Part 51 Subpart I to include the adoption of the *Federal Register* publication of the Tailoring Rule and amendments to §52.21.

Rulemaking Timeframe: Kansas' rulemaking process requires approval of the Secretary of Administration and the Attorney General before a new or amended rule may be proposed. This process is independent of KDHE and could potentially delay the final adoption and implementation of the Tailoring Rule. KDHE intends to expedite the process by solely adopting by reference the *Federal Register* publication of the final Tailoring Rule and not adopting all of the changes made to the respective parts made since the last date of adoption. Specifically, for K.A.R. 28-19-350 the last date of adoption for the code of federal regulation (C.F.R.) §52.21 is currently as revised on July 1, 2007. Proposed amendments to this rule to incorporate the Tailoring Rule would retain this date with the addition of language to specifically pick up only those changes to §52.21 and 40 C.F.R. Part 51 Subpart I which are made in the Tailoring Rule rulemaking publication.

Kansas will work with EPA to incorporate the rule changes needed to implement both step 1 and 2 of the Tailoring Rule as expeditiously as practicable. We project that the changes necessary to implement both the Title V and PSD requirements will be completed by April 1, 2011.

Please feel free to contact me, or Tom Gross at 785-296-1692, if you have any questions regarding the proposed actions or timeframe.

Sincerely yours,

John W. Mitchell
Director of the Division of Environment

MM: sdb
Enclosures
cc: Roderick L. Bremby, Secretary, KDHE
Rick Brunetti, Director, Bureau of Air

3-2

Fields of Opportunities

STATE OF IOWA

CHESTER J. CULVER, GOVERNOR
PATTY JUDGE, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
RICHARD A. LEOPOLD, DIRECTOR

July 20, 2010

Karl Brooks
Regional Administrator
U.S. Environmental Protection Agency, Region VII
901 North 5th Street
Kansas City, KS 66101

Dear Administrator Brooks:

The Iowa Department of Natural Resources (Department) is informing you of its intentions to adopt the provisions of the federal PSD and Title V Greenhouse Gas Tailoring Rule (Tailoring Rule), published in the Federal Register on June 3, 2010.

The Department is proceeding with an administrative rulemaking to amend the state's air quality rules for the Prevention of Significant Deterioration (PSD) and Title V programs for greenhouse gases (GHG). The proposed amendments match the applicability thresholds and effective dates specified in Phase 1 and Phase 2 of the federal Tailoring Rule. Specifically, the Department's proposed rule changes for Title V amend the definition of "major stationary source" and add a new definition for "subject to regulation." The proposed rule changes for PSD amend the definition of "regulated NSR pollutant" and add a new definition for "subject to regulation."

The Department provided EPA Region VII (EPA) with a copy of the Notice of Intended Action for the proposed rulemaking. EPA indicated in an e-mail to the Department on July 14, 2010, that EPA did not plan to provide formal comments on the proposed rulemaking.

Today, the Environmental Protection Commission (EPC), the Department's citizen governing body, approved publication of the Notice for public comment. The Department will hold a public hearing on the proposed amendments on September 13, 2010, and will accept written comments through September 14.

If the rulemaking proceeds according to the Department's anticipated schedule, final rules to adopt the amendments will be presented to the EPC on October 19, 2010. If approved, the adopted rules will be published in the Iowa Administrative Code (IAC) on November 17, 2010, and will become effective on December 22, 2010. The Department expects to send a request to EPA to revise Iowa's State Implementation Plan (SIP) to include the adopted amendments by December 28, 2010.

7900 Hickman Road, Suite 1 / Windsor Heights, Iowa 50324
515-242-5100 FAX 515-242-5094 http://www.iowacleanair.com/

If you have any questions, please contact Christine Paulson of my staff by phone at (515) 242-5154 or by e-mail at christine.paulson@dnr.iowa.gov.

Sincerely,

Catharine Fitzsimmons, Chief
Air Quality Bureau
(515) 281-8034

4-2

August 2, 2010

Hon. Lisa Jackson
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460
Mail Code: 1101A

By fax (202.501.1450),
email (jackson.lisa@epa.gov),
U.S. mail, and hand delivery

Dr. Alfredo "Al" Armendariz
Regional Administrator
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202
Mail Code: 6RA

By fax (214.665.7113),
email (armendariz.al@epa.gov),
U.S. mail, and hand delivery

Dear Administrators Jackson and Armendariz:

In order to deter challenges to your plan for centralized control of industrial development through the issuance of permits for greenhouse gases, you have called upon each state to declare its allegiance to the Environmental Protection Agency's recently enacted greenhouse gas regulations—regulations that are plainly contrary to United States law. 75 Fed. Reg. 31,514, 31,525 & 31,582 (June 3, 2010) (hereinafter, the "Tailoring Rule"). To encourage acquiescence with your unsupported findings you threaten to usurp state enforcement authority and to federalize the permitting program of any state that fails to pledge their fealty to the Environmental Protection Agency (EPA).

On behalf of the State of Texas, we write to inform you that Texas has neither the authority nor the intention of interpreting, ignoring, or amending its laws in order to compel the permitting of greenhouse gas emissions.

You have declared that EPA's decision to enact automobile tailpipe emission limits for greenhouse gases pursuant to Title II of the federal Clean Air Act renders such gases immediately "subject to regulation" for all purposes under that Act, including the

Title I Prevention of Significant Deterioration (PSD) preconstruction permitting program and the Title V operating permit program. Simultaneously, however, you recognize that permitting greenhouse gases under the Act is "absurd." In the Tailoring Rule, EPA states: "Here, we have determined, through analysis of burden and emissions data as well as consideration of extensive public comment, that the costs to sources and administrative burdens to permitting authorities that would result from application of the PSD and title V programs for GHG emissions at the statutory levels as of January 2, 2011 should be considered 'absurd results.'" 75 Fed. Reg. at 31,517. We agree.

In order to avoid the absurd results of EPA's own creation, you have developed a "tailoring rule" in which you have substituted your own judgment for Congress's as to how deep and wide to spread the permitting burden. Notably absent from your rules is any evidence that they would achieve specific results; in fact, you assiduously (and correctly) avoid ascribing what environmental benefit may be achieved by mandating permits to emit a uniformly distributed, trace constituent of clean air, vital to all life, that is emitted by all productive activities on Earth.

Instead of acknowledging that congressionally set emission limits preclude the regulation of greenhouse gases, you instead re-write those statutorily-established limits stating, "For our authority to take this action, we rely in part on the 'absurd results' doctrine, because applying the PSD and title V requirements literally (as previously interpreted narrowly by EPA) would not only be inconsistent with congressional intent concerning the applicability of the PSD and title V programs, but in fact would severely undermine congressional purpose for those programs. We also rely on the 'administrative necessity' doctrine, which applies because construing the PSD and title V requirements literally (as previously interpreted narrowly by EPA) would render it impossible for permitting authorities to administer the PSD provisions." 75 Fed. Reg. at 31,541-42.

Because of your view that greenhouse gases become "subject to regulation" on the first day it becomes illegal to manufacture a car not meeting the new tailpipe emission limits for greenhouse gases (on January 2, 2011), you insist that states may not issue permits after that date without considering greenhouse gas emissions. Your view is not enough. Applicable law provides to the contrary.

Texas' stationary source permitting program encompasses all "federally regulated new source review pollutants," including, "any pollutant that otherwise is subject to regulation under the [federal Clean Air Act]." 30 TEX. ADMIN. CODE § 116.12(14)(D). The rules of the Texas Commission on Environmental Quality (TCEQ), like the EPA's rules, do not define the phrase "subject to regulation." In its Tailoring Rule, however, the EPA promulgated—without notice—a definition of the previously undefined term, "subject to regulation." This new definition (attached hereto) specifically relates to the regulation of greenhouse gases, spans several *Federal Register* columns, and is over 600 words in length. Specifically, in the EPA's first phase of greenhouse gas regulation, this new definition raises the PSD permitting threshold for new and modified "major" sources of other pollutants from 100 tons per year to 75,000 tons per year (tpy) of CO_2 equivalent (CO_2e) emissions.

5-2

In the Tailoring Rule you have asked TCEQ to report to you by August 2, 2010, whether it would "interpret" the undefined phrase "subject to regulation" in TCEQ Rule 116.12 consistent with the newly promulgated definition in EPA Rule 51.166, in all its specifics and particulars. That is, you have effectively requested that Texas agree to regulate greenhouse gases in the exact manner and method proscribed by the EPA.

In other words, you have asked Texas to agree that when it promulgated its air quality permitting program rules for pollutants "subject to regulation" in 1993, that Texas really meant to define the term "subject to regulation" as set forth in the dozens of paragraphs and subparagraphs of EPA Rule 51.166, first promulgated in 2010.

The State of Texas does not believe that EPA's "suggested" approach comports with the rule of law. The United States and Texas Constitutions, United States and Texas statutes, and EPA and TCEQ rules all preclude TCEQ from declaring itself ready to require permits for greenhouse gas emissions from stationary sources as you request.

We start with constitutional difficulties. As noted, Texas' stationary source permitting program encompasses all "federally regulated new source review pollutants," including "any pollutant that otherwise is subject to regulation under the [federal Clean Air Act]." 30 TEX. ADMIN. CODE § 116.12(14)(D). This delegation of legislative authority to the EPA is limited solely to those pollutants regulated when Texas Rule 116.12 was adopted (1993) and last amended (2006). As the Texas Supreme Court has explained, "The general rule is that when a statute is adopted by a specific descriptive reference, the adoption takes the statute as it exists at that time, and the subsequent amendment thereof would not be within the terms of the adopting act." *Trimmer v. Carlton*, 296 S.W. 1070 (1927). Thus, in order for Texas Rule 116.12 to pass constitutional muster, it must be limited to adopting by reference the definition of "subject to regulation" in existence when Rule 116.12 was last amended in 2006. In other words, Texas Rule 116.12 cannot delegate authority to the EPA to define "subject to regulation" in 2010 to include pollutants that were not "subject to regulation" in 2006.

For example, the Texas Solid Waste Disposal Act defines "hazardous waste" as "solid waste identified or listed as hazardous waste by the administrator of the Environmental Protection Agency under the federal Solid Waste Disposal Act." When this delegation of legislative authority was challenged, it was upheld by Texas' highest court, but only because the court found that "the reference to the federal act in section 361.003(15) adopts by reference the act and the regulations promulgated thereunder which were in effect on July 30, 1991, the date section 361.003(15) of the Texas Solid Waste Disposal Act was enacted . . ." *Ex parte Elliott*, 973 S.W.2d 737, 741 (Tex. App.—Austin 1998, pet. ref'd). As the *Elliott* court explained, "We acknowledge that section 361.003(15) may be read to say that the legislature has delegated to the EPA the power to define hazardous waste under the THSC [Texas Health & Safety Code] and that definition may change from time to time at the will of EPA without intervention or guidance from the legislature." The court noted, however, that "[s]uch a construction would in fact place in doubt the constitutionality of this provision," and therefore, the

court would "not construe, in this case, the adopting statute as attempting to adopt future laws, rules or regulations of the federal government." The same analysis applies here: TCEQ Rule 116.12 cannot delegate authority to the EPA to define "subject to regulation" in 2010 to include pollutants that were not "subject to regulation" in 2006.

In addition to constitutional limitations, the TCEQ is also precluded from adopting the EPA's newly promulgated definition of "subject to regulation" pursuant to the express terms of the Texas Government Code, which requires public notice of agency rulemaking. *See, e.g.,* TEX. GOV'T CODE § 2001.023 ("A state agency shall give at least 30 days' notice of its intention to adopt a rule before it adopts the rule."). Likewise, TCEQ rules mandate notice and an opportunity to be heard when substantive rules are enacted. *See, e.g.,* 30 TEX. ADMIN. CODE § 20.3. Like Texas law, federal law also requires notice and hearing before Texas can revise its State Implementation Plan (SIP). *See* Clean Air Act § 110(l); 42 U.S.C. § 7410(l) ("Each revision to an implementation plan submitted by a State under this chapter shall be adopted by such State after reasonable notice and public hearing."). When the TCEQ promulgated Rule 116.12 in 1993, or even when it last amended the rule in 2006, it had no intention of enacting a permitting program for greenhouse gases. Consequently, TCEQ had no reason to (nor did it) give public notice of any such intent. Obviously, Texans concerned with greenhouse gas permitting could not have known to participate and comment on the decision to require permits for pollutants "subject to regulation" in 2006, when the EPA first discovered greenhouse gases were "subject to regulation" in 2010. It should go without saying that the nearly infinite expansion of Texas' permitting programs to include greenhouse gases with no state-level rulemaking at all would not satisfy Texas or federal law requiring notice and an opportunity to be heard.

Perhaps more fundamentally, however, the EPA itself has not undertaken a proper rulemaking to require all SIPs to include the definition of "subject to regulation" it has just promulgated. This revision to EPA's Part 51 rules—which lay out the requirements for approvable SIPs—were preceded by no proposal whatsoever. Rather, this new requirement first appeared in the EPA's final notice announcing the "Tailoring Rule," and accordingly, has not been properly adopted. *See* Clean Air Act § 307(d)(1)(J); 42 U.S.C. § 7607(d)(1)(J) (requiring formal rulemaking procedures in order to establish any requirement under the PSD program).

And even if EPA provided proper notice and the opportunity to comment, EPA cannot lawfully adopt any rule that directly and immediately changes Texas' permit program in any respect—much less to expand the reach of the program so far as to be deemed "absurd." Clean Air Act Section 166(a) sets forth the SIP revision process for "other pollutants" under the PSD program. The only sensible interpretation of the Clean Air Act is one that requires the EPA to promulgate a National Ambient Air Quality Standard (NAAQS) for greenhouse gases before the EPA can require PSD permitting of greenhouse gases. Thereafter, pursuant to the express terms of the Clean Air Act, states are provided with 21 months after EPA undertakes a proper rulemaking to add that new pollutant to their SIP. Clean Air Act § 166(b), 42 U.S.C. § 7476(b) ("Within 21 months after such date of promulgation such plan revision shall be submitted to the

Administrator"). EPA, however, has not developed a NAAQS for greenhouse gases, has not undertaken a rulemaking to promulgate corresponding regulations, and has not allowed any time for a state response.

In addition to circumscribing the statutory 21-month review and implementation process afforded the states, EPA is also circumventing the statutory one-year review and revision process afforded Congress, which specifically states, "Regulations referred to in subsection [166](a) of this section shall become effective one year after the date of promulgation." The purpose of this one-year delay is to allow Congress the opportunity to review (and approve or revise) new rules for "other pollutants" before states are required to implement them. 72 Fed. Reg. 54,112, 54,118 (Sept. 21, 2007); *citing* H.R. Conf. 95-564, at 151 (1977), 1977 U.S.C.C.A.N. 1502, 1532. The path proposed by EPA painstakingly avoids such congressional oversight.

Even under normal SIP revision procedures (those not involving new pollutants), the EPA has failed to provide Texas a reasonable time to submit a plan revision. Clean Air Act Section 110 sets forth EPA's authority to direct the requirements for approvable SIPs. Section 110(k)(5) allows states up to 18 months after proper adoption of new SIP expectations before requiring their implementation by the states. *See* 42 U.S.C. § 7410(k) ("The Administrator shall notify the State of the inadequacies, and may establish reasonable deadlines (not to exceed 18 months after the date of such notice) for the submission of such plan revisions.").

Instead, EPA has demanded (in the absence of statutory authority) that Texas submit a schedule for the completion of statutory and rule revisions. But notwithstanding the above-referenced statutory requirements regarding SIP revisions, EPA has declared that it will "ensure" all sources of greenhouse gases will be permitted under the final Tailoring Rule on January 2, 2011, by moving "quickly to impose a Federal Implementation Plan (FIP) for PSD through 40 CFR 52.21." 75 Fed. Reg. at 31,526. The federal Clean Air Act, however, clearly does not authorize such bureaucratic nimbleness. To the contrary, before EPA can implement a FIP, Section 110(c)(1) specifically requires the EPA to first make a finding that a state has failed to make a required submission, such as a revision under Section 110(k)(5), and even then, a FIP is not effective until after the state is afforded additional time to correct the deficiency identified by EPA. EPA has shown no intention of following the Clean Air Act procedures or allowing states a reasonable opportunity to change their rules.

Each of these objections to EPA's demand for a loyalty oath from the State of Texas would suffice to justify our refusal to make one. Indeed, it is an affront to the congressionally-established judicial review process for EPA to force states to pledge allegiance to its rules (or forfeit their right to permit) on the final day by which states must exercise their statutory right to challenge those same rules. Texas will not facilitate EPA's apparent attempt to thwart these established procedures and ignore the law. In the event a court concludes EPA's actions comport with the law, Texas specifically reserves and does not waive any rights under the federal Clean Air Act or other law with respect to the issues raised herein.

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We object to adopting the EPA's definition of "subject to regulation" without directly raising any of our substantive objections to each of the four EPA rulemakings that collectively comprise your greenhouse gas control initiative. Those objections will be resolved in litigation now pending in the D.C. Circuit Court of Appeals. Given that you are unable to ascribe the benefits of your greenhouse permitting regime, it is difficult to see why you would refuse to stay the effectiveness of your greenhouse gas rules. We therefore ask you to stay the effectiveness of your rules until our challenge is resolved.

Sincerely,

Bryan W. Shaw, Ph.D.
Chairman
Texas Commission on Environmental Quality

Greg Abbott
Attorney General of Texas

EPA's Greenhouse Gas Tailoring Rule

Prevention of Significant Deterioration (PSD) and Title V Permitting

Briefing for the Joint Committee on Energy and Environmental Policy

September 9, 2010

Miles Stotts
Kansas Department of Health and Environment
Bureau of Air

Background

- April 2, 2007 - Massachusetts v. EPA
  - Supreme Court ruled that CAA gives EPA authority to regulate GHGs
- December 15, 2009 – EPA published 2 findings:
  - "Endangerment Finding"
    - GHGs reasonably anticipated to endanger public health
  - "Cause or Contribute Finding"
    - Emissions from motor vehicles contribute to GHG pollution
- May 7, 2010 – EPA issued Light-Duty Vehicle Rule
  - Established controls on GHGs from light-duty vehicles
- May 13, 2010 – EPA issued GHG Tailoring Rule
  - "Tailors" applicability thresholds for GHG emissions

2

The GHG Tailoring Rule

- "Tailors" applicability of PSD (construction) and Title V (operating) permits on largest GHG-emitting facilities
- Sets thresholds for permitting emissions of 6 GHGs:
  - Methane (CH_4)
  - Carbon dioxide (CO_2)
  - Nitrous oxide (N_2O)
  - Hydrofluorocarbons (HFCs)
  - Perfluorocarbons (PFCs)
  - Sulfur hexafluoride (SF_6)
- EPA will phase in permitting requirements for GHGs in two initial steps

3

Overview

- Prevention of Significant Deterioration of Air Quality (PSD) Permits
  - ☐ New construction or major modifications to existing facilities in attainment areas
  - ☐ Regulated under Title I of Clean Air Act (CAA)
  - ☐ Impacted under "Step 1" and "Step 2" of Tailoring Rule
- Title V Permits
  - ☐ Operating permits for existing facilities
  - ☐ Regulated under Title V of CAA
  - ☐ Impacted under "Step 2" of Tailoring Rule

4

Clean Air Act Thresholds

- PSD (construction)
  - 250 tons/year (or 100 tons/year for some categories)
- Title V (operating)
  - 100 tons/year
- Criteria pollutants:
  - NO_2, SO_2, O_3, CO, PM, Pb,

5

GHG Tailoring Rule Thresholds

- Step 1 – GHG emissions increase of ≥ 75,000 tons/year CO_2e
- Step 2 – GHG emissions of ≥ 100,000 tons/year CO_2e
- GHGs:
  - CO_2, CH_4, N_2O, HFCs, PFCs, SF_6

Tailoring Rule should prevent permitting chaos

- "Absurd Results"
  - Literal application of permitting thresholds would subject thousands of small sources and modifications to PSD and Title V programs
  - Could result in multi-year backlogs for issuance of permits
- "Administrative Necessity"
  - Literal application of PSD and Title V thresholds would make it impossible to administer permit programs

6

GHG Tailoring Rule Timeline

- May 13, 2010 – EPA issued GHG Tailoring Rule (published in *Federal Register* 6/3/2010)
- August 2, 2010 – Kansas submitted 60-day letter to EPA, outlining plans to implement at state level
- September 2, 2010 – EPA published proposed SIP/FIP calls
- October 4, 2010 – Kansas' 30-day letter due, notifying EPA of self-imposed deadline for Kansas' PSD SIP revision to EPA
- *October 26, 2010 – Public hearing for Kansas regulations to adopt the federal GHG Tailoring Rule by reference*
- December 1, 2010 – EPA plans to finalize SIP/FIP call
- January 2, 2011 – Step 1 of the Tailoring Rule begins

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Permitting Phase-In: Step 1

January 2, 2011 – June 30, 2011

- Affects only sources already covered by PSD
  - Potentially impacted facilities if permits not issued before January 2, 2011 include:
    - Sunflower Electric (Holcomb)
    - Abengoa Bioenergy (Hugoton)
    - KCP&L
    - NBAF
- Operating Permits (Title V)
  - Only sources subject to PSD for GHGs are subject to Title V requirements
- No sources subject to Tailoring Rule requirements *only* for GHG emissions.

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Permitting Phase-In: Step 2

July 1, 2011 to June 30, 2013

- PSD permitting requirements (BACT for GHGs)
  - *New construction* projects with GHG emissions ≥ 100,000 tons/year CO_2e.
  - *Modifications* at existing facilities with GHG emissions with ≥ 75,000 tons/year CO_2e
  - Annually, an average of 3 Kansas sources that meet criteria
- Operating permit requirements
  - ~30 Existing Title V sources in Kansas would be affected by the 100,000 tons/year Title V threshold.
  - 12 ethanol facilities & 25-30 landfills could be required to obtain an operating permit.

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Kansas Statutes/Regulations

- Kansas Air Quality Law provides a framework for EPA to add new pollutants
- Kansas must adopt federal regulations by reference to a "date certain"
- Kansas Air Quality Regulation 28-19-350 currently adopts the federal PSD regulations to 7/1/2007
- Therefore, KDHE is adopting the federal rules by reference to preserve state permitting authority

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Changes to Kansas Regulations

- Kansas taking action to implement Steps 1 and 2 of the GHG Tailoring Rule
  - Amending K.A.R. 28-19-350 (PSD) to include adoption of *Federal Register* publication of Tailoring Rule and its amendments to 40 CFR §52.21
  - Creating K.A.R. 28-19-200a to adopt 40 C.F.R. 70.2 by reference with modified definition of "major source" and new definition of "subject to regulation"
- Upon adoption of the regulations, Kansas will submit State Implementation Plan (SIP) revision to EPA

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EPA's ***Proposed*** PSD SIP Call

- Proposed rule in *Federal Register* September 2, 2010
- Thirteen states, including Kansas, "lack authority"
- The 13 states have until 10/4/2010 to notify EPA of when the state will submit SIP revision to EPA (from 3 weeks to 12 months)
- Uncertainty:
  - When is deadline for letter submission?
  - Consequences of not meeting SIP deadline?

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Kansas' Path Forward

- Attempt to submit a SIP revision ASAP for "parallel processing" ***and*** adopt rule by December (date?) → Kansas *potentially* continues to issue PSD permits
- If SIP revision not "in time":
  - Receive a FIP and EPA issues GHG-PSD permits
  - Submit a SIP, but if EPA doesn't approve our SIP in a VERY timely manner - by 1/2/2011 → Possible construction ban until SIP is approved by EPA
  - Ask for "delegation" from EPA, meaning we accept responsibility for administering federal regulations *per se*

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Results of "Tailoring"

Permit Type	Without Tailoring Rule	With Tailoring Rule
Title V	■6 million sources ■78% of national GHG emissions covered ■$21 billion annual permitting costs	■15,500 sources (15,000 already have permits) ■67% of national GHG emissions covered ■$69 million annual permitting costs
PSD	■82,000 permit actions per year ■78% of national stationary source GHG emissions covered ■$1.5 billion annual permitting costs	■1,600 permit actions per year (only 900 due solely to GHGs) ■67% of national stationary source GHG emissions covered ■$36 million annual permitting costs

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Testimony to the Kansas Legislature's Joint Committee on Energy and Environmental Policy regarding implementation of the USEPA Greenhouse Gas (GHG) Tailoring Rule

Presented by Greg Krissek, Director, Government Affairs, ICM, Inc.

September 9, 2010

Good morning Chair McGinn and members of the committee. I appreciate the opportunity to present testimony today regarding the likely impacts of the USEPA Greenhouse Gas (GHG) Tailoring Rule on the fuel ethanol industry. My comments primarily focus on the current grain ethanol industry but this rule may certainly also have impacts on the next generations of ethanol production from cellulosic and biomass feedstocks depending on the technology platforms which ultimately become commercially viable.

As a brief reminder, ICM is headquartered just west of Wichita in Colwich with approximately 300 employees. ICM designs, builds, and supports ethanol plants as well as serves as a leading ethanol industry advocate. Our engineering and design technology is the driver for 102 ethanol plants in the USA. We also designed and constructed eight (8) of the twelve (12) ethanol plants located and operating in Kansas.

ICM is a founding member of a national ethanol advocacy organization named Growth Energy. I serve as the Technical and Environmental Committee Chair for Growth Energy. We have been closely monitoring GHG proposals at the national level. As you are likely aware, no consensus has currently been reached in the US Congress to enact a new specific GHG program – especially for addressing atmospheric CO2 issues. Meanwhile, during the last several years of legislative debate USEPA has embarked on several regulatory initiatives targeting this topic. The climate debate has been driven in part by judicial decisions, and I expect future regulatory actions also to be influenced by either threatened or real legal actions.

Attached with my testimony are the comments that Growth Energy submitted to USEPA in December 2009 addressing the then proposed GHG Tailoring Rule. Modern fuel ethanol plants are governed by numerous environmental permits that help the industry not only provide a clean burning transportation fuel but make the industry a good environmental steward in its production operations. But existing dry mill ethanol plants (all in Kansas are) create three valuable products – ethanol, high quality animal feed as distiller's grains, and carbon dioxide (CO2). I would note that the CO2 generated by the ethanol plant includes both combustion CO2 and biogenic CO2. Biogenic CO2 results from the fermentation process and is nearly half of the amount generated at the plant. This source of CO2 realistically is part of the cycle that includes the large quantities of atmospheric CO2 absorbed by the grain (whether corn or grain sorghum) during the growing season and then currently released by the plant back into the cycle. The proposed GHG Tailoring Rule anticipated separating these types of CO2.

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Across the USA the vast majority of plants vent CO2 into the atmosphere, unless an opportunity exists for CO2 capture for refrigeration or beverage use. There is a growing opportunity for capture of the CO2 and its use in oil recovery – a practice intended for sequestration of significant amounts of the CO2 during the tertiary oil recovery process. Several plants in Kansas are currently actively pursuing this opportunity.

When USEPA finalized the GHG Tailoring Rule earlier this year, several thresholds were set that virtually assure that ethanol plants will be governed by the rule. The 75,000 tons per year equivalent should result in plants whose capacity is in excess of 30 million gallons per year being governed by the rule. I believe that will include all but three of the plants in Kansas coming under these provisions. Similar to Growth Energy's comments, ICM remains an advocate that if a plant falls under the GHG Tailoring Rule due to emissions other than CO2, the rule should apply. But if CO2 is the only emission to bring it under the rule it should not apply. The final USEPA rule currently does not accept this argument. Also in the final rule, USEPA chose to count both combustion CO2 and biogenic CO2 as the same towards meeting the threshold listed above.

You will also find attached to the testimony a current USEPA Call for Information in which the agency is seeking input from the industry about GHG technologies and best practices that may be applied to the industry. Growth Energy is in the final stages of preparing comments that are due next week including recognition of the biogenic sources of CO2 and treatment thereof by the rule. It is currently unknown exactly how USEPA plans to consider or hopefully incorporate this information into the rule and the agency's implementation process.

The impacts of the GHG Tailoring Rule upon the industry are only beginning to be understood. There will be additional regulatory burden placed upon the members of the industry to comply with the provisions of the rule. But more importantly we believe the need remains for USEPA to recognize the benefits that ethanol brings to the GHG debate including the carbon cycle related to biogenic emissions from the production facility as well as benefits in the transportation fuels sector where the use of ethanol is estimated to decrease GHG emissions by 59% compared to gasoline as reported in the Journal of Industrial Ecology. Further, there also is a concern on how certain states may implement the rules when it comes to other emissions programs that have annual costs. CO2 far exceeds the tonnage of these other emissions and the CO2 net may capture many more facilities further overwhelming state agencies that may already be experiencing budgetary and workload constraints of their own to enforce this burdensome regulation. This uncertainty at a time of much market uncertainty throughout the economy begs for caution in implementation both at the federal and state levels.

I strongly encourage USEPA to proceed carefully on implementation of the GHG Tailoring Rule and to consider the industry input they will receive via the Call for Information which is due next week. I request the same as KDHE creates its program in this regard and encourage this committee and the Kansas Legislature to remain engaged in oversight as this program continues its formation.

Thanks very much for the opportunity to testify today and I look forward to your questions.

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growth energy™
America's Ethanol Supporters

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December 23, 2009

EPA Docket Center
EPA West (Air Docket)
Attention Docket ID No. EPA-HQ-OAR-2009-0517
U.S. Environmental Protection Agency
Mailcode: 2822T
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Re: Comments in Response to Docket ID No. EPA-HQ-OAR-2009-0517; Proposed Rule – Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule

Dear Administrator Jackson:

On behalf of the U.S. fuel ethanol producing members of Growth Energy, I am pleased to respond to the October 27, 2009 Federal Register notice and request for public comment on the proposed rule (*Docket ID No. EPA-HQ-OAR-2009-0517*) for the Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring. These comments will outline significant concerns with the proposed rule and offer suggested improvements to the proposed requirements, potential costs and ramifications for our members.

Growth Energy strongly recommends *(and the Proposed Rule references in Section VIII. A. Sources that do not trigger PSD or Title V for a non-GHG pollutant would not be subject to these programs solely on the basis of their GHG emissions (Fed Reg 10/27/09 page 55327))* GHG emissions from U.S. fuel ethanol plants only become applicable to these programs if the facility is also subject to that program for non-GHG regulated pollutants.

Currently, the U.S. fuel ethanol industry makes a significant contribution to the nation's environmental well-being by providing benefits for pollution reduction in the vehicle fleet and its resulting emissions. Today's modern ethanol production facilities operate effectively within a system of environmental regulation and oversight from both federal and state government.

The industry continues to implement environmentally-friendly technologies to lessen carbon impacts while enhancing air and water quality. The modern grain ethanol industry is part of an ecosystem in which the crops that are processed into food, feed and fuel actually absorb inordinately large amounts of CO2 from the atmosphere (most often generated by the conversion or use of fossil fuels) and hence serve as a means of cycling CO2 rather than generating new additions to the overall loading of GHG's in the environment.

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If EPA moves to regulate stationary sources for GHG emissions, the proposed tailoring rule appropriately establishes an applicability threshold for GHG emissions other than those currently used under the PSD and Title V programs. Without an alternative applicability threshold for PSD and Title V programs, Growth Energy agrees EPA and its state partners will be completely overwhelmed administratively with permitting caseloads. The majority of U.S. dry mill ethanol production facilities are not subject to permitting requirements under the Title V program, and an even smaller percentage are applicable under PSD requirements of the Clean Air Act.

In the proposed rule, several timeframes are identified throughout the next five to six years with regard to implementation. Growth Energy and its members stand ready to work with EPA in a cooperative agency/industry task force during that time period to identify and develop a program best designed for specific oversight of the fuel ethanol industry. This collaboration would allow for the identification and development of the most beneficial scientific analysis, monitoring techniques and potential control mechanisms for the needs of our industry.

Furthermore, if EPA establishes the threshold for permitting of GHG's at 25,000 tons per year equivalent, we strongly oppose any future reduction. Discussion in the proposed rule suggests the threshold could be reduced to a lower level (such as 10,000 tons per year CO2 equivalent). We also oppose the significance threshold for PSD permitting to be set at 10,000 tons per year equivalent instead of the proposed alternative of 25,000 tons per year CO2 equivalent. The frequency a facility would be required to re-permit, and costs compared to the benefit gain for lowering GHG emissions, does not support the lower significance threshold.

Growth Energy recognizes ethanol plants are considered stationary sources that generate CO2 as a result of the conversion process for the various products created. Earlier this year, EPA created the 25,000 metric tons per year CO2 equivalent threshold through its finalized GHG reporting rule. Virtually every commercial ethanol plant in the country will exceed this threshold and will need to begin complying with these reporting requirements during 2010.

SIPS and Cost Uncertainty

Our review of the proposed rule raises a number of concerns regarding implementation scenarios that may be premature or likely to create burdensome and unintended consequences. First, the proposed rule lacks an appropriate coordinating plan with state governments regarding their respective State Implementation Plans (SIP) for the PSD program. This lack of coordination will quickly yield significant confusion with a potential patchwork quilt of regulation across states. Requiring actual revision to the state SIPs would be important not only for program success, but also for certainty within the regulated community.

As a potential member of the regulated community, our ethanol facilities are concerned EPA is not providing any guidance to the states regarding fee schedules for GHG emissions. The significantly larger volumes of GHG emissions, compared to current regulated pollutants, present a risk that states may attempt to create funding sources far beyond the resources necessary to administer the programs. Nearly every state in the nation is facing a budget shortfall, EPA's coordination or recommendation of a model approach to adequately match resource needs for anticipated workloads should be addressed in the final rule.

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Finally, in regards to facility costs, the proposal will unnecessarily create the need for ethanol plants to potentially re-permit frequently and incur significant application and consulting fees at a time that economic conditions present a very challenging situation. PSD and Title V application requirements go above and beyond the technical expertise of a typical ethanol plant employee. Many facilities rely upon a qualified consultant to prepare such extensive and complex applications. Total fees for consulting, application and annual emission inventory can quickly reach over $150,000. It is one more additional financial burden these facilities may not be able to cover, especially during the current economic climate. Not to mention the lack of consistency in application and emission inventory fees among state regulatory agencies.

Additional Comments

Our highest priority as discussed above remains that a facility should only come under the applicable Title V and PSD programs for GHG emissions if it is also subject to the program for non-GHG pollutants.

We strongly encourage EPA to consider suspending implementation of this proposed rule should the agency incur any legal challenge to its Endangerment Findings for Greenhouse Gases under the Clean Air Act dated December 15, 2009.

We also encourage the EPA to delay implementation of this rule until more programmatic systems have been developed. If the agency chooses to institute presumptive best available control technology (BACT) analysis for GHG emissions from ethanol production facilities, Growth Energy strongly encourages the creation of an agency/industry advisory group to identify and develop realistic and cost-effective tools for the implementation of the Title V and PSD programs for GHG emissions The ethanol industry GHG emissions are significantly smaller than utilities (and actually more a cycling of the CO2 due to our feedstock's ability to absorb CO2 from the atmosphere) and other stationary sources that basically are fossil fuel processors, therefore we encourage EPA to consider addressing other industries initially with this rule while working with the ethanol industry to develop best GHG control practices.

While the ethanol industry is growing in size, regulatory applicability and experience, our facilities should not be compared to larger emitting utilities that can afford to employ most costly control technologies. A typical BACT review will take into account current control technologies available, control technologies implemented for a particular piece of equipment or mitigation need and economics. While it may be economical to employ one control strategy at one facility or industry, it may cause significant financial burden to apply the same control measure at a smaller facility that does not have as many regulated emissions. All components of a general permit or presumptive BACT need to be analyzed carefully to ensure that the requirements would not impose unnecessary hardship to a certain facility or industry.

Thank you for your consideration of these comments.

Sincerely,

Tom Buis

Tom Buis, CEO
Growth Energy

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EPA–HQ–OECA–2009–0544, which is available for public viewing Online at *http://www.regulations.gov,* in person viewing at the Enforcement and Compliance Docket in the EPA Docket Center (EPA/DC), EPA West, Room 3334, 1301 Constitution Avenue, NW., Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566–1744, and the telephone number for the Enforcement and Compliance Docket is (202) 566–1752.

Use EPA's electronic docket and comment system at *http://www.regulations.gov,* to submit or view public comments, access the index listing of the contents of the docket, and to access those documents in the docket that are available electronically. Once in the system, select "docket search," then key in the docket ID number identified above. Please note that EPA's policy is that public comments, whether submitted electronically or in paper, will be made available for public viewing at *http://www.regulations.gov,* as EPA receives them and without change, unless the comment contains copyrighted material, Confidential Business Information (CBI), or other information whose public disclosure is restricted by statute. For further information about the electronic docket, go to *http://www.regulations.gov.*

Title: NESHAP for Stationary Combustion Turbines (Renewal).

ICR Numbers: EPA ICR Number 1967.04, OMB Control Number 2060–0540.

ICR Status: This ICR is scheduled to expire on September 30, 2010. Under OMB regulations, the Agency may continue to conduct or sponsor the collection of information while this submission is pending at OMB. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in title 40 of the CFR, after appearing in the **Federal Register** when approved, are listed in 40 CFR part 9, and displayed either by publication in the **Federal Register** or by other appropriate means, such as on the related collection instrument or form, if applicable. The display of OMB control numbers in certain EPA regulations is consolidated in 40 CFR part 9.

Abstract: The affected entities are subject to the General Provisions of the NESHAP at 40 CFR part 63, subpart A, and any changes, or additions to the Provisions specified at 40 CFR part 63, subpart YYYY. Owners or operators of the affected facilities must submit a one-time-only report of any physical or operational changes, initial performance tests, and periodic reports and results. Owners or operators are also required to maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility, or any period during which the monitoring system is inoperative. Reports, at a minimum, are required semiannually.

Burden Statement: The annual public reporting and recordkeeping burden for this collection of information is estimated to average 8 hours (rounded) per response. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements which have subsequently changed; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

Respondents/Affected Entities: Stationary combustion turbines.

Estimated Number of Respondents: 31.

Frequency of Response: Semiannually.

Estimated Total Annual Hour Burden: 435.

Estimated Total Annual Cost: $42,652, which includes $41,152 in labor costs, $1,500 in capital/startup costs and no operation and maintenance costs.

Changes in the Estimates: There is no change in the labor hours to respondents in this ICR compared to the previous ICR. This is due to two considerations: (1) The regulations have not changed over the past three years and are not anticipated to change over the next three years; and (2) the growth rate for the industry is very low, negative or non-existent. Therefore, the labor hours in the previous ICR reflect the current burden to the respondents and are reiterated in this ICR.

The increase in cost to the respondents and the Agency is due to labor rate adjustments to reflect the most recent available estimates.

Dated: July 9, 2010.

John Moses,

Director, Collection Strategies Division.

[FR Doc. 2010–17278 Filed 7–14–10; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OAR–2010–0560; FRL–9175–9]

Call for Information: Information on Greenhouse Gas Emissions Associated With Bioenergy and Other Biogenic Sources

AGENCY: Environmental Protection Agency (EPA).

ACTION: Call for Information.

SUMMARY: EPA is publishing this Call for Information to solicit information and viewpoints from interested parties on approaches to accounting for greenhouse gas emissions from bioenergy and other biogenic sources. The purpose of this Call is to request comment on developing an approach for such emissions under the Prevention of Significant Deterioration (PSD) and Title V Programs as well as to receive data submissions about these sources and their emissions, general technical comments on accounting for these emissions, and comments on the underlying science that should inform possible accounting appoaches.

DATES: Information and comments must be received on or before September 13, 2010.

ADDRESSES: Submit your information, identified by Docket ID No. EPA–HQ–OAR–2010–0560, by one of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov:* Follow the online instructions for submitting comments.
- *E-mail: GHGBiogenic@epa.gov.*
- *Fax:* (202) 566–1741.
- *Mail:* EPA Docket Center, Attention Docket OAR–2010–0560, Mail code 2822T, 1200 Pennsylvania Avenue, NW., Washington, DC 20460.
- *Hand/Courier Delivery:* EPA Docket Center, Public Reading Room, Room 3334, EPA West Building, Attention Docket OAR–2010–0560, 1301 Constitution Avenue, NW., Washington, DC 20004. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your information and comments to Docket ID No. EPA–HQ–OAR–2010–0560. EPA's policy is that all information received will be included in the public docket without

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change and may be made available online at *http://www.regulations.gov*, including any personal information provided, unless the information includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *http://www.regulations.gov*. The *http://www.regulations.gov* Web site is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through *http://www.regulations.gov* your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD–ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters or any form of encryption, and should be free of any defects or viruses.

Docket: All documents in the docket are listed in the *http://www.regulations.gov* index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in *http://www.regulations.gov* or in hard copy at EPA's Docket Center, Public Reading Room, EPA West Building, Room 3334, 1301 Constitution Ave., NW., Washington, DC 20004. This Docket Facility is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Air Docket is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: Jennifer Jenkins, Climate Change Division, Office of Atmospheric Programs (MC–6207J), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460; telephone number: (202) 343–9361; fax number: (202) 343–2359; e-mail address: *jenkins.jennifer@epa.gov*.

SUPPLEMENTARY INFORMATION:

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I. General Information

A. What is today's action?

On June 3, 2010, EPA published the final *Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule* (known hence forth as the Tailoring Rule) (75 FR 31514). In that Rule, EPA did not take action on a request from commenters to exclude CO_2 emissions from biogenic fuels [1]. Instead, EPA explained that the legal basis for the Rule, reflecting specifically the overwhelming permitting burdens that would be created under the statutory emissions thresholds, does not itself provide a rationale for excluding all emissions of CO_2 from combustion of a particular fuel, even a biogenic one. The fact that the Tailoring Rule did not take final action one way or another concerning such an exclusion does not mean that EPA has decided there is no basis for treating biomass CO_2 emissions differently from fossil fuel CO_2 emissions under the Clean Air Act's PSD and Title V Programs. Further, in finalizing the Tailoring Rule, the Agency did not have sufficient information to address the issue of the carbon neutrality of biogenic energy in any event.

This Call for Information serves as a first step for EPA in considering options for addressing emissions of biogenic CO_2 under the PSD and Title V programs as indicated above.

Given the broad and complex nature of this issue, EPA also welcomes stakeholders to respond to this Call for Information by providing data submissions about these sources and their emissions and technical comments on approaches generally to accounting for GHG emissions from bioenergy and other biogenic sources. EPA requests that stakeholders provide relevant information on the underlying science that should inform possible accounting approaches.

In response to this Call for Information, interested parties are invited to assist EPA in the following: (1) Surveying and assessing the science by submitting research studies or other relevant information, and (2) evaluating different accounting approaches and options by providing policy analyses, proposed or published methodologies, or other relevant information. Interested parties are also invited to submit data or other relevant information about the current and projected scope of GHG emissions from bioenergy and other biogenic sources.

B. What additional background information is EPA making available?

National-level GHG inventories are a common starting point for evaluations and discussions of approaches to accounting for GHG emissions from bioenergy sources. EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks (the Inventory) [2] is an impartial, policy-neutral report that tracks annual GHG emissions including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). The United States has submitted the Inventory to the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC) under its obligation as a Party to the Convention every year since 1993. The UNFCCC, ratified by the United States in 1992, defines the overall framework for intergovernmental efforts to tackle the challenge posed by climate change. The Inventory submitted by the United States is consistent with national inventory data submitted by other UNFCCC Parties, and uses internationally accepted methodologies established by the Intergovernmental Panel on Climate Change (IPCC).

The Revised 1996 IPCC Guidelines (IPCC Guidelines) [3] provide methodologies for estimating all anthropogenic sources and sinks of GHG emissions at the national scale, classified into six broad sectors: Energy, Industrial Processes, Solvents and Other Product Uses, Agriculture, Land-Use Change and Forestry (LUCF), and Waste. The Energy Sector includes all GHGs

[1] GHG emissions from bioenergy and other biogenic sources are generated during the combustion or decomposition of biologically-based material, and include sources such as, but not limited to, utilization of forest or agricultural products for energy, wastewater treatment and livestock management facilities, landfills, and fermentation processes for ethanol production.

[2] US EPA. 2010. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2008. U.S. EPA #430–R–10–06. Available in Docket at EPA–HQ–OAR–2010–0560.

[3] Intergovernmental Panel on Climate Change (IPCC). 1996. Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories, Prepared by the National Greenhouse Gas Inventories Programme. Published: IGES, Japan. 3 Volumes. Available in Docket at EPA–HQ–OAR–2010–0560.

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emitted during the production, transformation, handling and consumption of energy commodities, including fuel combustion. The LUCF Sector includes emissions and sequestration resulting from human activities which change the way land is used or which affect the amount of biomass in existing biomass stocks. According to the IPCC Guidelines, CO_2 emissions from biomass combustion

"* * * should not be included in national CO_2 emissions from fuel combustion. If energy use, or any other factor, is causing a long term decline in the total carbon embodied in standing biomass (*e.g.* forests), this net release of carbon should be evident in the calculation of CO_2 emissions described in the Land Use Change and Forestry chapter."[4]

Thus, at the national level, these CO_2 emissions are not included in the estimate of emissions from a country's Energy Sector, even though the emissions physically occur at the time and place in which useful energy is being generated (*i.e.,* power plant or automobile). The purpose of this accounting convention is to avoid double-counting that would provide a misleading characterization of a country's contribution to global GHG emissions (*i.e.,* to avoid having CO_2 emissions accounted both in the Energy Sector and the LUCF Sector). Carbon dioxide emissions from bioenergy sources are still reported as information items in the Energy Sector of the Inventory, but are not included in national fuel-combustion totals to avoid this double-counting at the national scale.[5]

The IPCC Guidelines for National Greenhouse Gas Inventories are relevant to today's Call for Information because they have influenced subsequent reporting systems, such as the World Resources Institute/World Business Council for Sustainable Development (WRI/WBCSD) protocols.[6] Additionally, some stakeholders have identified the IPCC Guidelines and the Inventory as providing a foundational methodology for accounting for GHG emissions from bioenergy.[7]

[4] Ibid., Reference Manual (Vol. 3), Page 1.10.

[5] Emissions of methane and nitrous oxide from the combustion of biomass for energy are included in the Energy Sector, however, because their magnitude is dependent on the specific way in which the fuel is burned (i.e., combustion technology and operating conditions), which cannot be known by analyzing the changes in the amount of carbon in standing biomass.

[6] World Resources Institute/World Business Council on Sustainable Development. 2004. A Corporate Accounting and Reporting Standard. Available in Docket at EPA–HQ–OAR–2010–0560.

[7] Letter from Mr. Daniel Fulton, President and CEO, Weyerhaeuser Corporation to Administrator Jackson, May 24, 2010. Available in Docket at EPA–HQ–OAR–2010–0560.

Separately, to assist interested parties in considering the broader issues pertaining to this Call for Information, EPA has assembled and placed into the docket a set of documents relevant to the topic of today's action. This collection of documents is not intended to represent a complete or exhaustive set of materials, but rather serves as a starting point to provide further background information to interested parties regarding key concepts and scientific research. For example, the Docket includes for review the following information:

- U.S. EPA. 2010. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2008. U.S. EPA #430–R–10–06.
- Intergovernmental Panel on Climate Change (IPCC). 1996. Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories, Prepared by the National Greenhouse Gas Inventories Programme. Published: IGES, Japan.
- IPCC. 2000. Special Report on Land Use, Land-Use Change, and Forestry. Watson, R., Noble, I., Bolin, B., Ravindranath, N., Verardo, D., and Dokken, D. (eds.). Cambridge: Cambridge University Press.
- IPCC. 2000. Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories, Prepared by the National Greenhouse Gas Inventories Programme. Published: IGES, Japan.
- IPCC. 2003. Good Practice Guidance for Land Use, Land-Use Change and Forestry. Prepared by the National Greenhouse Gas Inventories Programme. Penman, J., Gytarsky, M., Krug, T., Kruger, D., Pipatti, R., Buendia, L., Miwa, K., Ngara, T., Tanabe, K. and Wagner, F. (eds.). Published: IGES, Japan.
- IPCC. 2006. 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Prepared by the National Greenhouse Gas Inventories Programme. Eggleston, H.S., Buendia, L., Miwa, K., Ngara, T. and Tanabe, K. (eds.). Published: IGES, Japan.
- World Resources Institute/World Business Council on Sustainable Development. 2004. A Corporate Accounting and Reporting Standard.
- Letter from Mr. Daniel S. Fulton, President and CEO, Weyerhaeuser Corporation to Administrator Lisa P. Jackson. May 24, 2010.
- Response from Assistant Administrator Gina McCarthy to Mr. Fulton. June 2, 2010.
- Interim Phase I Report of the Climate Change Work Group of the Permits, New Source Review and Toxics Subcommittee, Clean Air Act Advisory Committee. February 3, 2010.
- Manomet Center for Conservation Sciences. 2010. Massachusetts Biomass Sustainability and Carbon Policy Study: Report to the Commonwealth of Massachusetts Department of Energy Resources. Walker, T. (Ed.). Contributors: Cardellichio, P., Colnes, A., Gunn, J., Kittler, B., Recchia, C., Saah, D., and Walker, T. Natural Capital Initiative Report NCI–2010–03. Brunswick, Maine.
- USDA Forest Service, Pacific Southwest Research Station. 2009. Biomass to Energy: Forest Management for Wildfire Reduction, Energy Production, and Other Benefits. California Energy Commission, Public Interest Energy Research (PIER) Program. CEC–500–2009–080.
- Searchinger, T., Hamburg, S., Melillo, J., Chameides, W., Havlik, P., Kammen, D., Likens, G., Lubowski, R., Obersteiner, M., Oppenheimer, W., Robertson, G.P., Schlesinger, W., Tilman, G.D. 2009. Fixing a critical climate accounting error. Science 326: 527–528.
- Meridian Institute. 2010. Summary of Bioenergy Greenhouse Gas Accounting Stakeholder Group Discussions. May 13, 2010. Washington, DC.

C. Where can I get the information?

All of the information can be obtained through the Air Docket and at *http://www.regulations.gov* (see **ADDRESSES** section above for docket contact information).

D. What specific information is EPA seeking?

As described in Section I.A, EPA is requesting two types of submissions via this Call for Information: (1) Technical comments and data submissions related to the accounting for GHG emissions from bioenergy and other biogenic sources with respect specifically to the PSD and Title V Programs, and (2) more general technical comments and data submissions related to accounting for GHG emissions from bioenergy and other biogenic sources without reference to specific rulemaking efforts.

EPA is soliciting from interested parties information and views on topics and questions including, but not limited to the following:

- Biomass under PSD/BACT. What criteria might be used to consider biomass fuels differently with regard to the Best Available Control Technology (BACT) review process under PSD? How could the process of determining BACT under the PSD program allow for

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adequate consideration of the impacts and benefits of using biomass fuels?

• National-scale carbon neutrality in the IPCC Guidelines. In the IPCC accounting approach described in Section I.B, at the national scale emissions from combustion for bioenergy are included in the LUCF Sector rather than the Energy Sector. To what extent does this approach suggest that biomass consumption for energy is "neutral" with respect to net fluxes of CO_2?

• Smaller-scale accounting approaches. The Clear Air Act (CAA) provisions typically apply at the unit, process, or facility scale, whereas the IPCC Guidance on accounting for GHG emissions from bioenergy sources was written to be applicable at the national scale. EPA is interested in understanding the strengths and limitations of applying the national-scale IPCC approach to assess the net impact (i.e. accounting for both emissions and sequestration) on the atmosphere of GHG emissions from specific biogenic sources, facilities, fuels, or practices. To what extent is the accounting procedure in the IPCC Guidelines applicable or sufficient for such specific assessments?

• Alternative accounting approaches. Both a default assumption of carbon neutrality and a default assumption that the greenhouse gas impact of bioenergy is equivalent to that of fossil fuels may be insufficient because they oversimplify a complex issue. If this is the case, what alternative approaches or additional analytical tools are available for determining the net impact on the atmosphere of CO_2 emissions associated with bioenergy? Please comment specifically on how these approaches address:

—The time interval required for production and consumption of biological feedstocks and bioenergy products. For example, the concept of "carbon debt" has been proposed as the length of time required for a regrowing forest to "pay back" the carbon emitted to the atmosphere when biomass is burned for energy.
—The appropriate spatial/geographic scale for conducting this determination. For example, the question of spatial scale has legal complications under the CAA, but may be relevant for some of the suggested approaches.

• Comparison with fossil energy. EPA is interested in approaches for assessing the impact on the atmosphere of emissions from bioenergy relative to emissions from fossil fuels such as coal, oil, and gas. What bases or metrics are appropriate for such a comparison?

• Comparison among bioenergy sources. EPA is also interested in comments on accounting methods that might be appropriate for different types of biological feedstocks and bioenergy sources. What bases or metrics are appropriate for such a comparison among sources? In other words, are all biological feedstocks (e.g. corn stover, logging residues, whole trees) the same, and how do we know?

• Renewable or sustainable feedstocks. Specifically with respect to bioenergy sources (especially forest feedstocks), if it is appropriate to make a distinction between biomass feedstocks that are and are not classified as "renewable" or "sustainable," what specific indicators would be useful in making such a determination?

• Other biogenic sources of CO_2. Other biogenic sources of CO_2 (i.e., sources not related to energy production and consumption) such as landfills, manure management, wastewater treatment, livestock respiration, fermentation processes in ethanol production, and combustion of biogas not resulting in energy production (e.g., flaring of collected landfill gas) may be covered under certain provisions of the CAA, and guidance will be needed about exactly how to estimate them. How should these "other" biogenic CO_2 emission sources be considered and quantified? In what ways are these sources similar to and different from bioenergy sources?

• Additional technical information. EPA is also interested in receiving quantitative data and qualitative information relevant to biogenic greenhouse gas emissions, including but not limited to the following topics:

—Current and projected utilization of biomass feedstocks for energy.
—Economic, technological, and land-management drivers for projected changes in biomass utilization rates.
—Current and projected levels of GHG emissions from bioenergy and other biogenic sources.
—Economic, technological and land-management drivers for projected changes in emissions.
—Current and projected C sequestration rates in lands used to produce bioenergy feedstocks.
—Economic, technological and land-management drivers for projected changes in sequestration rates.
—The types of processes that generate or are expected to generate emissions from bioenergy and other biogenic sources.
—The number of facilities that generate or are expected to generate such emissions.
—Emission factor information, particularly for the biogenic CO_2 source categories of wastewater treatment, livestock management, and ethanol fermentation processes.
—Potential impacts on specific industries and particular facilities of various methods of accounting for biogenic GHG emissions.
—Potential impacts of GHG emissions from bioenergy and other biogenic sources on other resources such as water availability and site nutrient quality.
—Potential impacts of GHG emissions from bioenergy and other biogenic sources on other air pollutants such as VOCs, other criteria pollutants, and particulate matter.

E. What should I consider as I prepare information for EPA?

You may find the following suggestions helpful for preparing your comments:

1. Explain your views as clearly as possible.
2. Describe any assumptions that you used.
3. Provide any technical information or data you used that support your views.
4. Provide specific examples to illustrate your concerns, suggestions, and recommendations.
5. Offer alternatives, if possible, if a particular approach is criticized.
6. Make sure to submit your information by the deadline identified.
7. To ensure proper receipt by EPA, identify the appropriate docket identification number in the subject line on the first page of your response. It would also be helpful if you provided the name, date, and **Federal Register** citation related to your comments.

F. Submitting Confidential Business Information (CBI).

Do not submit information you are claiming as CBI to EPA through *http://www.regulations.gov* or e-mail. Clearly mark the part of the information that you claim to be CBI. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. For CBI information in a disk or CD ROM that you mail to EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information

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claimed as CBI must be submitted for inclusion in the public docket.

Dated: July 9, 2010.

Gina McCarthy,

Assistant Administrator, Office of Air and Radiation.

[FR Doc. 2010–17266 Filed 7–14–10; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OAR–2010–0280; FRL–9173–9]

Protection of Stratospheric Ozone: Request for Methyl Bromide Critical Use Exemption Applications for 2013

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of solicitation of applications and information on alternatives.

SUMMARY: EPA is soliciting applications for the critical use exemption from the phaseout of methyl bromide for 2013. Critical use exemptions last only one year. All entities interested in obtaining a critical use exemption for 2013 must provide EPA with technical and economic information to support a "critical use" claim and must do so by the deadline specified in this notice even if they have applied for an exemption in a previous year. Today's notice also invites interested parties to provide EPA with new data on the technical and economic feasibility of methyl bromide alternatives. The U.S. critical use exemption program has cushioned the U.S. transition in an important way. Thus far, EPA has allocated critical use methyl bromide through rulemaking for each of the six years (2005–2010) since the U.S. phaseout, and plans to do so for another four years (2011–2014). Critical use nominations must be approved each year at the international level by the Parties to the Montreal Protocol, and the U.S. is one of five remaining developed countries requesting such exemptions; several of these countries have announced final dates for all or part of their requests in the years between now and 2015, the year that developing countries are required to phase out methyl bromide. While EPA with this notice is seeking applications for 2013 and will likely request applications for 2014, EPA believes it is appropriate at this time to consider a year in which the Agency will stop requesting applications for critical use exemptions. EPA will seek comment on this issue in the proposed rule for the 2011 critical use exemption.

DATES: Applications for the 2013 critical use exemption must be postmarked on or before September 13, 2010.

ADDRESSES: EPA encourages users to submit their applications electronically to Jeremy Arling, Stratospheric Protection Division, at *arling.jeremy@epa.gov*. If the application is submitted electronically, applicants must fax a signed copy of Worksheet 1 to 202–343–9055 by the application deadline. Applications for the methyl bromide critical use exemption can also be submitted by mail to: U.S. Environmental Protection Agency, Office of Air and Radiation, Stratospheric Protection Division, Attention Methyl Bromide Team, Mail Code 6205J, 1200 Pennsylvania Ave, NW., Washington, DC 20460 or by courier delivery (other than U.S. Post Office overnight) to: U.S. Environmental Protection Agency, Office of Air and Radiation, Stratospheric Protection Division, Attention Methyl Bromide Review Team, 1310 L St., NW., Room 1047E, Washington, DC 20005.

FOR FURTHER INFORMATION CONTACT:

General Information: U.S. EPA Stratospheric Ozone Information Hotline, 1–800–296–1996; also *http://www.epa.gov/ozone/mbr.*

Technical Information: Bill Chism, U.S. Environmental Protection Agency, Office of Pesticide Programs (7503P), 1200 Pennsylvania Ave., NW., Washington, DC 20460, 703–308–8136. *E-mail: chism.bill@epa.gov.*

Regulatory Information: Jeremy Arling, U.S. Environmental Protection Agency, Stratospheric Protection Division (6205J), 1200 Pennsylvania Ave., NW., Washington, DC 20460, 202–343–9055. *E-mail: arling.jeremy@epa.gov.*

SUPPLEMENTARY INFORMATION:

Table of Contents

I. What do I need to know to respond to this request for applications?

A. Who can respond to this request for information?

Entities interested in obtaining a critical use exemption must complete the application form available at *http://www.epa.gov/ozone/mbr.* The application may be submitted either by a consortium representing multiple users who have similar circumstances or by individual users who anticipate needing methyl bromide in 2013 and have evaluated alternatives and as a result of that evaluation, believe they have no technically and economically feasible alternatives. EPA encourages groups of users with similar circumstances of use to submit a single application (for example, any number of pre-plant users with similar soil, pest, and climactic conditions can join together to submit a single application). In some instances, state agencies will assist users with the application process (*see* discussion of voluntary state involvement in Part I.B. below).

In addition to requesting information from applicants for the critical use exemption, this solicitation for information provides an opportunity for any interested party to provide EPA with information on methyl bromide alternatives (*e.g.*, technical and/or economic feasibility research).

B. Who can I contact to find out whether a consortium is submitting an application for my methyl bromide use?

You should contact your local, state, regional, or national commodity association to find out whether it plans to submit an application on behalf of your commodity group.

Additionally, you should contact your state regulatory agency (generally this will be the state's agriculture or environmental protection agency) to receive information about its involvement in the process. If your state agency has chosen to participate, EPA recommends that you first submit your application to the state agency, which will then forward applications to EPA. The National Pesticide Information Center Web site identifies the lead pesticide agency in each state (*http://npic.orst.edu/state1.htm).*

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Electric Utility Comments on EPA Tailoring Rule

Submitted on behalf of:

Empire District Electric Company
Kansas City Power & Light
Kansas Electric Cooperatives
Kansas Electric Power Cooperative
Kansas Municipal Utilities
Midwest Energy
Sunflower Electric Power Corporation
Westar Energy

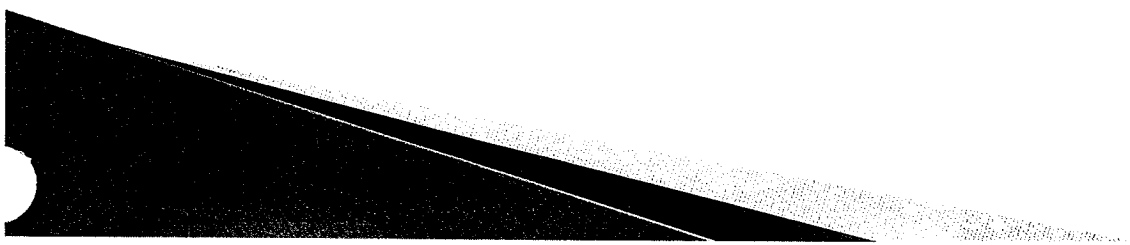
September 9, 2010

State vs. Federal

- SIP vs. FIP
- Concerns:
  - KDHE's ability to complete SIP for rule.
  - EPA's significant timeline to approve SIPs.
  - Tailoring Rule requires a SIP for including GHGs within the PSD program to be developed and submitted earlier than original suggested date of January 2, 2011. Moving deadlines impacts KDHE staff's time to prepare. Increases chances of FIP being issued.
  - With delayed SIP approvals and shifting deadlines, plant modifications or new plant construction that could potentially trigger GHG thresholds may not be permitted by KDHE until a SIP/FIP is approved. Projects that could face delays include:
    - Holcomb II
    - SCR at JEC 2
    - Emission Controls at La Cygne Station

GHG Regulation

- Rule requires permitting of GHG sources.
  - "New or modified facilities with GHG emissions that trigger PSD permitting requirements would need to apply for a revision to their operating permits to incorporate the best available control technologies and energy efficiency measures to minimize GHG emissions. These controls are determined on a case-by-case basis during the PSD process." *from EPA Fact Sheet*
- No commercially available, utility-scale technology exists to control GHG emissions.
- Processes (e.g. use of biomass or energy efficiency) may be available but guidance is lacking.
- Unpredictable planning for businesses; technology availability and regulatory deadlines are incongruous.
- EPA taking initial steps to subsequent regulation of all sources for GHG emissions.



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Electric Utility Comments on EPA Transport Rule

Submitted on behalf of:
Empire District Electric Company
Kansas City Power & Light
Kansas Electric Cooperatives
Kansas Electric Power Cooperative
Kansas Municipal Utilities
Midwest Energy
Sunflower Electric Power Corporation
Westar Energy
September 9, 2010

Concerns

- SIP vs. FIP
- Accelerated rulemaking and implementation dates.
- Recently, EPA significantly modified the data used in modeling emission projections.
  - Comment period closes October 1 for the Transport Rule, and October 15 for the proposed modeling changes.
    - Modeling runs take 30 – 45 days to complete.
- EPA modeling, used as the basis for this rule, does not reflect current emission rates for Kansas utilities, either by permit or by agreement.
- Likely limited interstate allowance trading available in rule.

Concerns (cont.)

- Due to inaccurate modeling assumptions, the rule will require new emission control technology on Kansas plants prior to 2014.
  - Kansas utilities have spent/will spend over $1B on new control equipment at these plants.
  - Direct cost impact to customers.
- Because of ongoing control technology upgrades, the supply chain queue for further enhancements is full.
  - Not enough workers or manufacturing capacity to meet timeline.

Reciprocating Internal Combustion Engine (RICE) Rule

- Compression Ignition (CI) Rule – February 2010
- Spark Ignition (SI) Rule – August 2010
- Potentially Impacts Thousands of Engines in Kansas.
- Electric Industry Impact:
  - Municipal (>550 MW);
  - Midwest Energy and other Electric Cooperatives;
  - Investor-Owned Utilities.
- Primarily Peaking and Emergency Units
- Compliance Measures:
  - Installing emission control equipment (catalysts);
  - Perform emissions tests.

AEP vs. Connecticut

- September 2005, U.S. District Judge dismissed the case brought by eight states and New York City against AEP, Southern Company, TVA, Xcel Energy and Cinergy (now part of Duke Power). The suit alleged that GHG emissions from the utilities created a public nuisance in those states.
- September 2009, 2nd U.S. Circuit Court of Appeals overturned the lower court's dismissal.
- September 2010, 12 states, including Kansas, signed on to an amicus brief asking the U.S. Supreme Court to overturn the federal appeals court ruling.

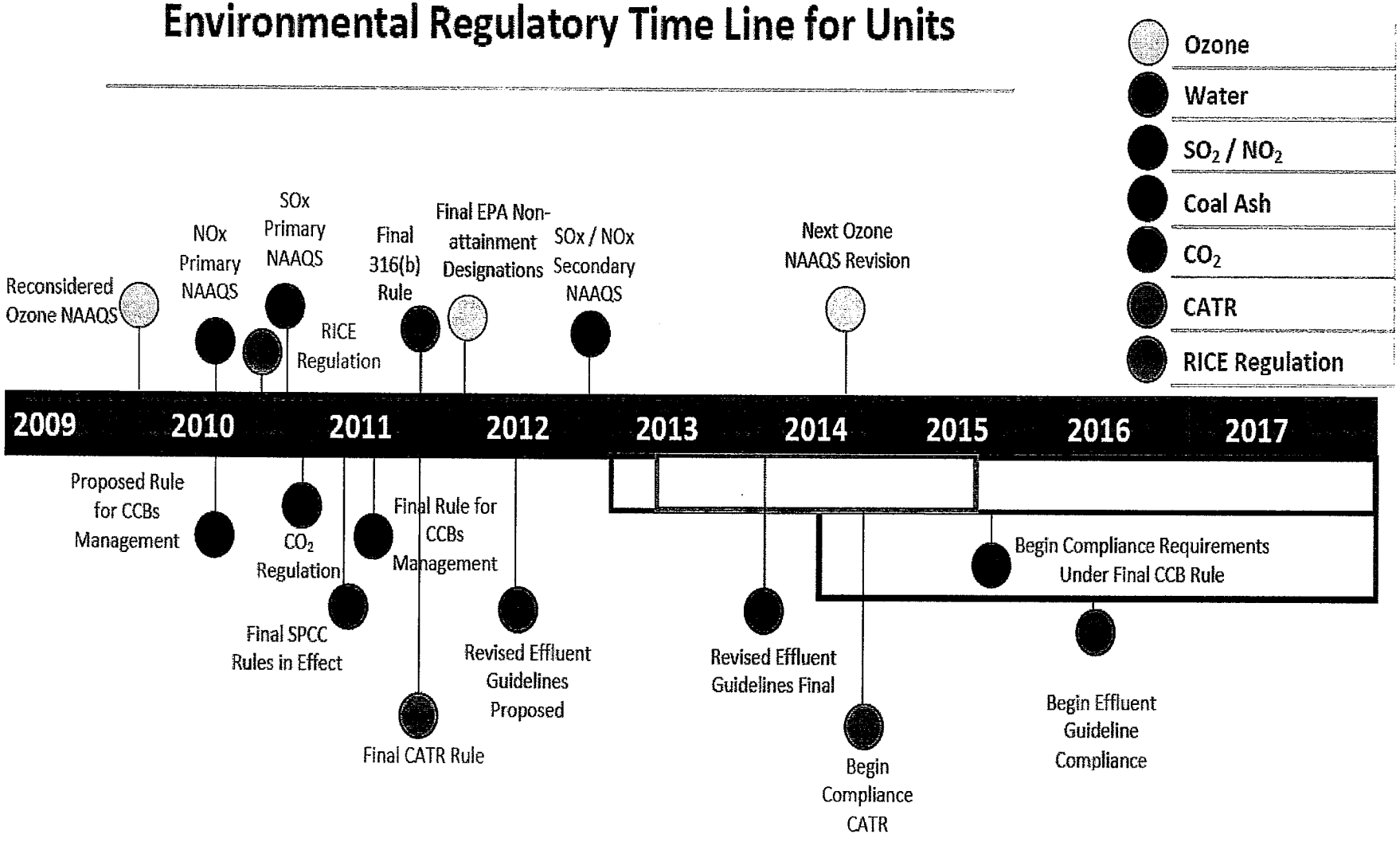
National Ambient Air Quality Standards (NAAQS)

- Applies to the six "criteria pollutants":

Particulates	Carbon monoxide
Ozone	Nitrogen oxides
Lead	Sulfur dioxide

- Primary ozone standard will be an 8-hour value in range from 0.060 - 0.070 ppm (current value is 0.075 ppm).
- Standard is final. Attainment designations August 2011 with attainment date as early as 2014.
- Currently Kansas City metro is the only non-attainment area in Kansas. With new regs, the Wichita metro area could also be classified as non-attainment.

Environmental Regulatory Time Line for Units



HAMM

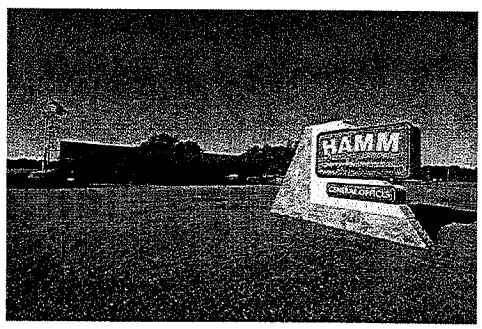
Hamm Sanitary Landfill

Tailoring Rule

Kansas Joint House and Senate Committee on Energy and Environment

September 9, 2010

Hamm Operations Overview



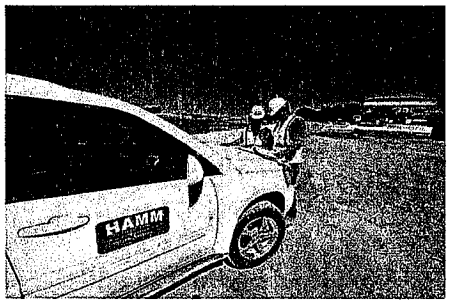
HAMM

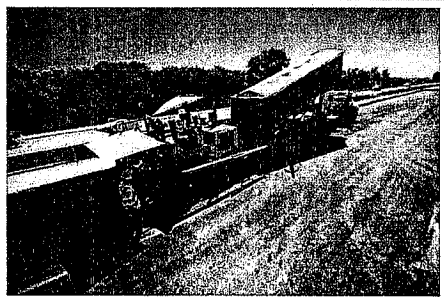
JOINT COMMITTEE ON ENERGY AND ENVIRONMENTAL POLICY

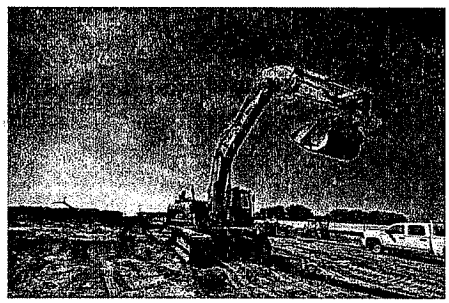
DATE: 9/9/10

ATTACHMENT 9-1

Hamm Operations Overview







HAMM

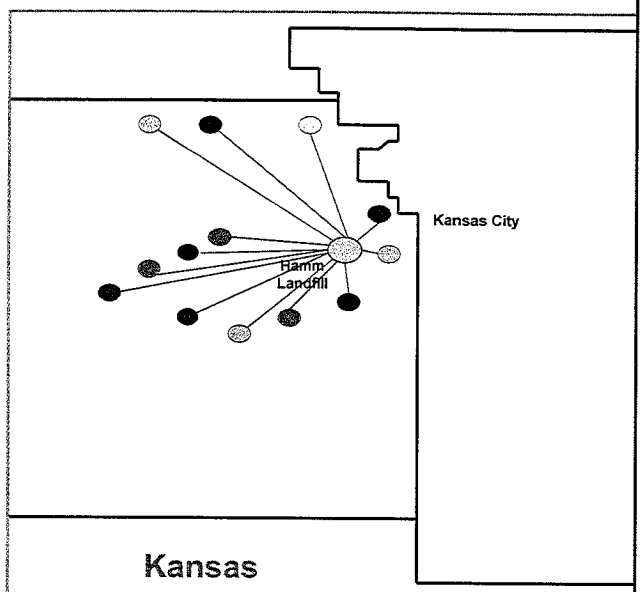
Hamm Operations Overview

HAMM

Kansas Citizens Served by Hamm

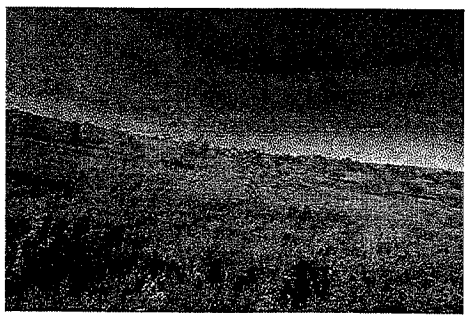
Hamm Serviced
Transfer Stations

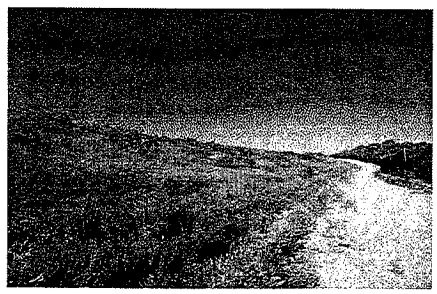
- Brown Co.
- Geary Co.
- Franklin Co.
- Marshall Co.
- Dickinson Co.
- Olathe
- Washington Co.
- Morris Co.
- Leavenworth Co.
- Pottawatomie C
- City of Emporia
- Riley Co.
- Osage City



HAMM

Current Status at Landfill



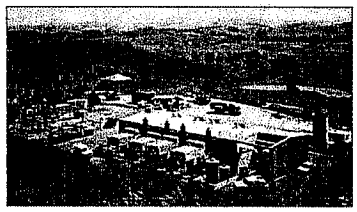


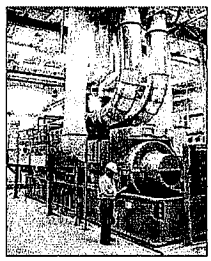
HAMM

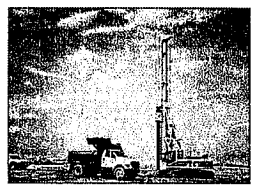
Current Air Status

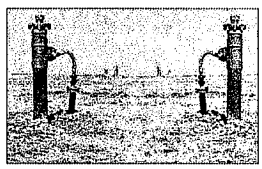
Planning for Voluntary Market for Carbon Credits

- Reduced carbon footprint
- Landfill Gas Collection System









HAMM

Tailoring Rule Effects

- Effects on Hamm:
  - Moves up Gas Collection Install from 2015 to 2011
  - Currently our facility is subject to multiple GHG reporting regulations, both from a state and appears now federal level.

    - We have voluntarily reported GHG emissions to KDHE, now have an additional level of reporting.

HAMM

Tailoring Rules Shifts Costs

Compliance Costs Shifted from 2015 to 2011:

- –GCCS Total Capital Costs - $2 million
- –Cost of Title V program - $10k -$20k
- –Cost of PSD program - $50k -$150k
- –GCCS annual O&M - $25k -$50k
- –Maintain Title V - $3k -$15k

HAMM

Tailoring Rule Effects on Kansas Landfills

- May trigger new permitting requirements at closed Kansas landfill facilities.
- Small and closed Kansas landfills are likely to be subject to the requirements due to the low threshold and the fact that applicability is based on CH4 generation, not CH4 emissions.

HAMM

Tailoring Rule

- Nationally, EPA estimates that 1,700 landfills may be added to the Title V program
- How many in Kansas?
- Any landfill expansion would likely trigger PSD pre-construction permitting (landfill BACT)

HAMM

Applicability Issues or Uncertainty

Other Areas of Uncertainty –

- Yet to be determined factors by EPA

-BACT Standard for our industry - How can BACT be adhered to if there is no industry standard yet?

-Determinations about our Site

HAMM

Remaining Issues/Questions

Remaining Issues

- Alternative thresholds proposed by EPA are still too low and do not represent "major sources"
  – Industry experts suggest: 100,000 to 700,000 tpy CO_2e as equivalent threshold

- EPA does not appear to be excluding fugitive emissions from landfills

- EPA has not recognized the difference between biogenic and anthropogenic CO_2 emissions

HAMM

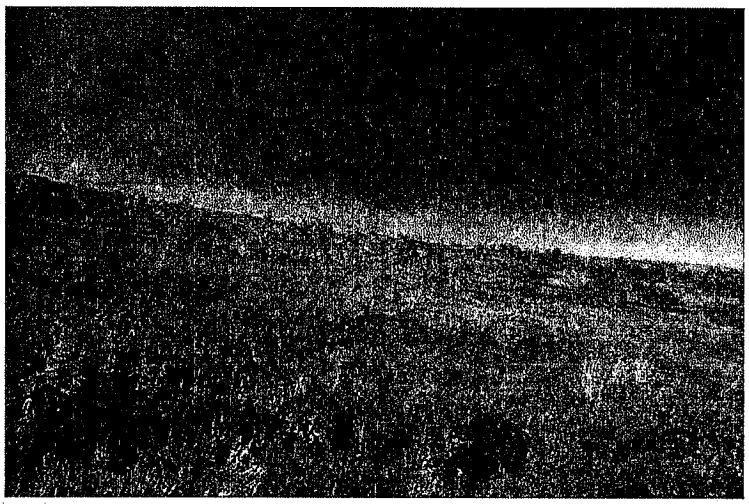
Needed Support

- If EPA continues with Tailoring Rule-

  Timely and clear guidance from EPA is a fundamental foundation on which businesses and facilities can plan and build systems properly.

HAMM

Sustainability



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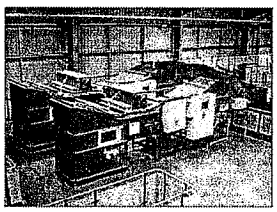
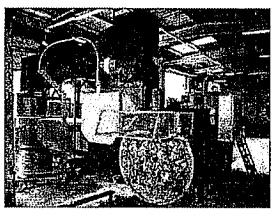
Sustainability

Sustainability –

Curbside recycling – Materials Recycling Facility


HAMM

Presentation to Joint Committee on Energy & Environment Regarding Effect of EPA Tailoring Rule on the Kansas Cement Industry

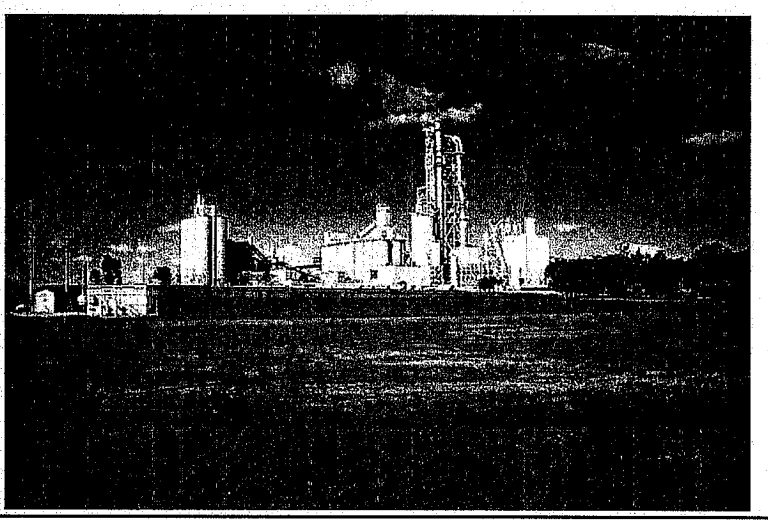
By
Edward R. Moses
Kansas Cement Council
September 9, 2010

Kansas Cement Industry

- Currently there are three cement manufacturing facilities and related operations contributing to the Kansas economy: Ash Grove Cement Company, Chanute & Overland Park; Lafarge North America, Fredonia, Wichita and Johnson County; Monarch Cement, Humboldt, Salina, Dodge City, Hutchinson, Topeka, Garden City and Johnson County

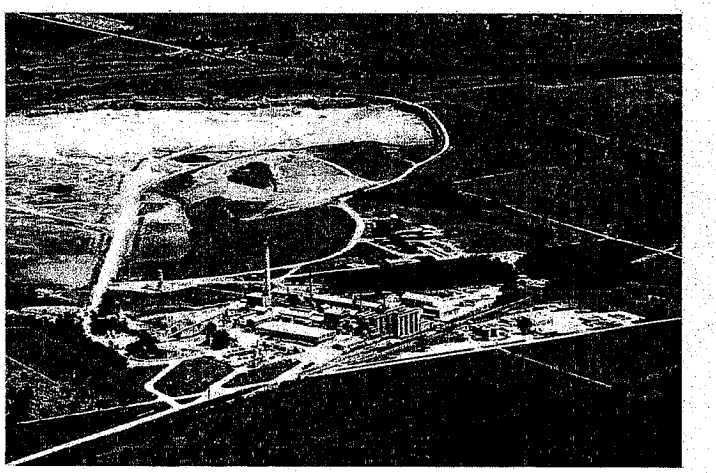
ASH GROVE

Ash Grove Cement
Chanute

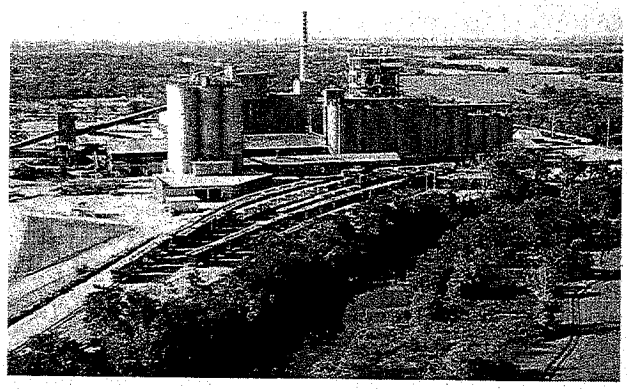


LAFARGE
North America

Lafarge North America Cement
Fredonia



Monarch Cement Humboldt



Kansas Cement Industry

- During the last 100 years the Kansas Cement Industry has played a vital role in the Kansas economy.
- At one time Kansas led the nation in cement production with 17 cement mills.
- For example, the Kansas Cement Industry invested almost $300 million to support the completion of our current Comprehensive Transportation Program. And, this investment was made completely with private capital with no requests for internal revenue bonds, Star Bonds, property tax breaks or Tax Increment Financing.
- All three of these companies are also members of the Portland Cement Association (PCA), which implemented a voluntary program in 2001 to reduce carbon dioxide emissions by10 percent from 1990 levels by 2020.

Cement Production

- The conversion of limestone (calcium carbonate) to calcium oxide is key to the cement manufacturing process and results in the release of carbon dioxide.
- This process is known as "calcination."
- Roughly half of the carbon dioxide emissions associated with cement manufacturing result from calcinations, sometimes known as "process" CO_2.
- Cement produced **anywhere in the world** releases an equal amount of carbon dioxide due to calcination, and it is not possible to produce cement without releasing carbon dioxide from limestone.

Cement Production

- Since there is no known commercially viable control technology for CO_2, the best known current "control" is simply the application of fuel efficiency improvements.
- Industry has reduced its GHG emissions by over 30% in the last 30 years
- But this is only on the input side

Tailoring Rule

- The Tailoring Rule imposes EPA's existing PSD framework to a pollutant (CO_2) that was never considered as part of the construct of the Clean Air Act.
- A misguided attempt to use the Federal Clean Air Act to regulate Greenhouse Gas Emissions

Tailoring Rule

- The Clean Air Act ("CAA") is not the appropriate regulatory mechanism to address the challenges of climate change
- Leaves many sources still unregulated
- PCA supports a comprehensive law regulating all source, including transportation

Effect of Tailoring Rule

- Our business is conducted in an unregulated market and on a worldwide basis
- If successfully implemented in January 2011 the Tailoring Rule will have a severe effect on the Kansas Cement Industry and consequently the Kansas economy.

Effect of Tailoring Rule

- Shrink available market
- Make our markets more vulnerable to imported cement (unregulated) especially from Mexico & Venezuela
- Reduce employment
- Reduce state and local tax base

The Tailoring Rule Will Not

- ***Reduce Green House Gas emissions***
- As cement is produced and consumed on a worldwide basis
- Emissions per capita will continue to rise with worldwide population growth
- Kansas production will merely be replaced by other sources

Thank You

- Thank for the opportunity to provide these comments today
- I will be happy to respond to any questions you may have at the appropriate time

SIERRA CLUB
FOUNDED 1892

SIERRA CLUB, KANSAS CHAPTER
9844 GEORGIA, KANSAS CITY, KS 66109

STATEMENT OF CHRIS CARDINAL, LEGISLATIVE COORDINATOR
SEPTEMBER 9TH, 2010
BEFORE THE JOINT COMMITTEE ON ENERGY AND ENVIRONMENTAL POLICY

EPA TAILORING RULE

Chairperson McGinn, and honorable members of the committee:

My name is Chris Cardinal, and I am here on behalf of the Kansas Chapter of the Sierra Club, the nation's largest and oldest grassroots environmental organization.

After a thorough and careful review of scientific evidence, as well as reviewing nearly 400,000 public comments, the Environmental Protection Agency determined that greenhouse gases pose a threat to public health and welfare of current and future generations.

Sierra Club supports the EPA's efforts to reduce greenhouse gases that are exacerbating global warming, and we support the goals of the tailoring rule. The scientific community has been calling for swift reductions in greenhouse gases to avoid catastrophic consequences of global warming. Efforts to reduce our contributions to global warming are long overdue, as a 2007 Supreme Court case (*Massachusetts v. EPA*) held that greenhouse gases, including carbon dioxide, are pollutants under the Clean Air Act.

The tailoring rule would focus on the largest emitters of greenhouse gas pollutants first, those which are responsible for a large share of greenhouse gas emissions from stationary sources, which is a practical approach that would not burden small agricultural operations or small businesses. The need and urgency to require large sources of greenhouse gas pollution to utilize the Best Available Control Technology (BACT) to minimize climate changing emissions is unprecedented. Continued inaction to slow global warming is irresponsible, as there is a shared responsibility to protect the environment, the public health, and vulnerable, at-risk communities.

Failure to address climate change could have harmful impacts on our state. Recent research from Kansas University projects that if greenhouse gas emissions continue to increase, Kansas could experience higher temperatures, which will stress crops and livestock. Western Kansas could become warmer and drier, and soil moisture could decrease putting more pressure on irrigation. Higher summer nighttime temperatures could stress livestock and harm crop production, as some crops, such as wheat, require cool nighttime temperatures. Tom Vilsack, the U.S. Secretary of agriculture, recently said "...climate change promises to have an outsized impact on the global food supply. Variations in temperature, increased frequency of extreme weather like drought, floods and storms, and the spread of pests and diseases to new geographic areas will likely impact productivity...." Higher temperatures will also have public health consequences leading

to more heat-related illnesses and the spread of infectious diseases. Potential health impacts of climate change are well-documented in the medical community and are detailed in reports published by the American Academy of Pediatrics and Physicians for Social Responsibility. The consèquences of unaddressed climate change will inevitably and unfairly burden vulnerable communities, such as those who reside in poor and undeveloped regions who do not have access to quality health care, as well as the elderly, children, and disabled populations.

In closing, the tailoring rule is supported by extensive climate science and climate data, and we expect that it will be implemented in a reasonable fashion that will not burden small emitters or small businesses, and that it will ultimately help our state and country avoid costly and harmful consequences from climate change that could threaten our national security, food production, health, and environment. We must recognize there are costs associated with allowing global warming to progress, and these are costs that we will all pay in the form of health care costs, extreme weather events, and so forth. Requiring large sources of harmful pollution to utilize available pollution controls is a small burden when one considers the overwhelming burden to society increased global warming pollution will bring.

11-2

PCA
Portland Cement Association

December 28, 2009

Environmental Protection Agency
EPA Docket Center (EPA/DC)
EPA West (Air Docket)
Mailcode 2822T
Attention Docket ID No. EPA–HQ–OAR–2009–0517
1200 Pennsylvania Avenue, NW.
Washington, DC 20460

Re: Comments on Proposed Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, Docket ID No. EPA-HQ-OAR-2009–0517

Dear Sir or Madam:

I am writing to offer the comments of the Portland Cement Association (PCA) on a proposed rule, published October 27, 2009 (74 Fed. Reg. 55,292), which would modify the thresholds for greenhouse gases for applicability of the Clean Air Act Prevention of Significant Deterioration ("PSD") permitting and Title V operating permit programs (the "Tailoring Rule").

PCA offers these comments on behalf of its members. PCA is a trade association representing cement companies in the United States and Canada. PCA's U.S. membership consists of 45 companies operating 106 plants in 35 states and distribution centers in all 50 states servicing nearly every Congressional district. PCA members account for more than 95% of cement-making capacity in the United States. Facilities operated by PCA members would be directly affected by the permitting requirements addressed by the Tailoring Rule.

Introduction and Overview

PCA and its members for years have been at the forefront of industries seeking to understand and reduce their greenhouse gas ("GHG") emissions and to promote energy security. In fact, PCA members already have made significant reductions in the GHG emission rate required to manufacture Portland cement. In addition, the cement industry plays an increasingly important role in reducing GHG emissions thorough the promotion of concrete in product applications, including road construction. The use of concrete improves vehicles' rolling resistance and decreases solar heat absorption by the roadway as compared to other road construction materials.

PCA's members strongly believe that the Clean Air Act ("CAA") is not the appropriate regulatory mechanism to address the challenges of climate change. In our view, the best way to arrive at the right climate change solution for our nation is to develop a single

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national program purposefully designed to deal with the issue of climate change, and addressing as well the interrelated issues of energy policy. It is essential as well that climate change regulatory policy promote the health and welfare of Americans by not causing severe adverse economic impacts domestically and placing U.S. industry at a severe international competitive disadvantage.

We believe this is best accomplished through the careful development of a new national law, separate and distinct from the CAA. The Supreme Court's decision in *Massachusetts v. EPA* that EPA has authority to consider regulation of GHGs under the CAA did not require EPA to take any particular regulatory action with respect to GHG emissions from motor vehicles, let alone for stationary sources. As EPA has recognized, because of the near-ubiquitous nature of CO_2 and methane, and the fact that CO_2 in particular is emitted by many types of combustion sources in quantities far greater than other, "criteria" pollutants, applying the same annual emissions thresholds for application of PSD and Title V permitting to GHG emissions that apply to emissions of criteria pollutants and other air pollutants would create enormous burdens for businesses and regulatory agencies, far beyond what Congress was contemplating when it enacted those provisions.

While PCA appreciates EPA's efforts to reduce those burdens, the Tailoring Rule as written is a convoluted, dubious approach that falls far short of accomplishing that goal. PCA believes that instead it would be in the best interests of all involved if EPA, rather than trying to adjust the threshold for major sources and modifications, simply deferred applicability of PSD and Title V permitting to GHG emissions for at least 4-5 years while Congress is proceeding to consider comprehensive legislation to address climate change. During this deferral period, EPA will be able to gather more information on GHG emissions and (if necessary) develop reasonable mechanisms to reduce any permitting burden should a national law not preempt application of these CAA programs to GHGs. Deferring applicability of PSD and Title V for a number of years also could help address the huge burden that State permitting agencies would face, many of which would have to amend State statutes or regulations to establish new applicability criteria for GHGs, a process that alone could take a year or two. Deferral of PSD and Title V applicability to GHG emissions could be accomplished either by adopting amendments to the PSD and Title V regulations, excluding GHGs for the time-being, or (at least until EPA adopts some other CAA regulation limiting GHG emissions) by dropping or deferring the CAA-based portion of the recently proposed rules to increase motor vehicle fuel economy and reduce motor-vehicle GHG emissions.[1]

[1] EPA has suggested that the GHG tailpipe emissions standards for motor vehicles that it recently proposed in conjunction with National Highway Transportation Safety Administration motor vehicle fuel economy standards would, once applicable, constitute regulation under the CAA that would trigger application of the PSD and Title V permitting programs to vastly increased numbers of stationary sources because of their GHG emissions. 74 Fed. Reg. at 55,294. In the preamble to the proposed GHG tailpipe emission standards, however, EPA acknowledges that the only technology currently available to reduce GHG emissions from motor vehicles is increasing their fuel economy, which NHTSA proposed to require in a joint proposal with the EPA tailpipe emission standards. See 74 Fed. Reg. at 49,465 col.3, 49,470 n. 49, 49,539. Promulgation of the proposed fuel economy

12-2

Application of PSD and Title V to GHGs would be unworkable and inconsistent with congressional intent.

In the preamble to the proposed Tailoring Rule, EPA indicates that its anticipated promulgation next spring of GHG tailpipe emission standards for motor vehicles will trigger PSD permitting requirements, including potentially costly Best Available Control Technology ("BACT") emission controls, for GHG emissions for tens of thousands of new and modified stationary sources every year that would not otherwise be covered by the PSD program. EPA also asserts that promulgation of the GHG tailpipe standards would result in millions of stationary sources exceeding the current major source emission threshold, thereby requiring them to obtain CAA Title V operating permits for the first time. See 74 Fed. Reg. at 55,294. EPA recognizes that this huge expansion in the number of facilities subject to PSD and Title V permitting requirements would result in PSD requirements that produce "absurd results," "run contrary to expressed congressional intent for the PSD and Title V provisions, and, in fact, severely undermine both programs." Id. at 55,303; see also, e.g., id. at 55,330. PCA agrees with these conclusions.

It is difficult to overstate the problems that would result, for businesses, permitting authorities, and the nation as a whole, if PSD and Title V permits where required for orders-of-magnitude greater numbers of facilities and projects. Even under the current PSD regulations, which do not apply to GHGs, obtaining a PSD permit takes many months, and often more than a year. This already creates a significant impediment to economic development and innovation. It took more than a decade to issue Title V permits to the sources currently affected, and Title V permit modifications that can be required for changes to the facility also generally take many months (and in some cases years) to process. It is obvious from this experience that State and EPA permitting authorities would be completely overwhelmed by the expansion of current PSD and Title V permitting programs to encompass sources whose GHG emissions exceed the applicability thresholds in the current regulations.

Congress certainly did not intend for the PSD program to require tens of thousands of new and modified sources to obtain PSD permits every year (and for EPA and State agencies to process tens of thousands of such permits). See, e.g., *Alabama Power Co. v. Costle*, 636 F.2d 323, 353 (D.C. Cir. 1980) ("Congress's intention was to identify facilities which, due to their size, are financially able to bear the substantial regulatory costs imposed by the PSD provisions and which, as a group, are primarily responsible for emission of the deleterious pollutants that befoul our nation's air."); id. at 354 ("a further look at the legislative history reveal[s] that Congress was concerned with large industrial enterprises—major actual emitters of air pollution. The draftsmen were of the view that certain small industrial facilities within these categories might actually and potentially emit less than the threshold

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standards by NHTSA would achieve the motor vehicle GHG emission reductions EPA is seeking, without GHG tailpipe emission standards promulgated by EPA under the CAA that would trigger application of PSD and Title V and all the unacceptable consequences that follow.

12-3

amount.").[2] Even more importantly, Congress did not intend the PSD program to produce the kind of severe restrictions on development and refinement of industrial and commercial facilities that would necessarily result from the permitting gridlock that a huge expansion of PSD permitting applicability would produce. For example, during congressional consideration of 1977 amendments to the CAA to incorporate PSD permitting, Senator Randolph, chairman of the Senate Committee on the Environment and Public Works, said: "I assure Members of the Senate that this program—which would be almost totally administered by the States—will not bring a halt to industrial and commercial activity in this country. It will not prohibit the development of needed energy resources. It will not impose Federal land-use planning on communities. It will not result in high costs to individual citizens." Senate Debate on S. 252, June 9, 1977 (reprinted in 1977 Legis. Hist. 910).

PCA suggests that, in the absence of EPA action, the overwhelming burden of applying for and obtaining permits for a vastly increased number of sources would not just render the permitting programs unworkable and vastly more expensive. It also would have a very real detrimental effect on measures to reduce atmospheric GHG loadings. If the nation is going to make the kinds of dramatic changes in GHG emissions that EPA has indicated will be necessary in the coming years, it will be especially important to assure that modifications to facilities, for purposes such as fuel switching, energy efficiency, and so forth—which will be essential to reducing or mitigating GHG loadings—can proceed in a timely fashion, unimpeded by lengthy permitting delays and costly application procedures. Businesses will have little or no incentive to identify and engineer projects to reduce GHG emissions if they know that those projects will be delayed for years by permitting gridlock. And to almost as great an extent, companies will be unwilling to embark on projects that could reduce GHG loadings if there is great uncertainty about what will be required in order for them to get the permits needed for the project. In short, in ways that are obvious and undeniable, application of the current PSD and Title V applicability thresholds to GHG emissions would produce absurd results, creating permitting gridlock that is contrary to what Congress intended and that would stifle even environmentally beneficial projects.

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[2] In that regard, we are not aware of any basis for EPA's statement that such seemingly minor sources as small boilers in the 15-20 mmBtu/hr. range and internal combustion engines of 2000 horsepower are the types of sources that "should be subject to PSD." See 74 Fed. Reg. 55,334 cols. 1-2. Compare that statement to the D.C. Circuit's conclusion, in rejecting an approach to PSD applicability under which the heating plant in a large high school or a small community college would be subjected to PSD: "We have no reason to believe that Congress intended to define such obviously minor sources as "major" for the purposes of the PSD provision." *Alabama Power*, 636 F.2d at 354. To the contrary, an essential design element of the PSD program is that it involve relatively few, large sources: "Though the costs of compliance with section 165 requirements are substantial, they can reasonably be borne by facilities that actually emit, or would actually emit when operating at full capacity, the large tonnage thresholds specified in section 169(1). The numbers of sources that meet these criteria, as we delineate them, are reasonably in line with EPA's administrative capability." Id.

12-4

The Tailoring Rule does not go far enough to mitigate the absurd results and administrative infeasibility of applying PSD and Title V regulations to GHG emissions.

The Tailoring Rule EPA has proposed certainly would help mitigate some of the adverse impacts of triggering PSD and Title V permitting requirements for sources of GHGs. The Tailoring Rule does not go nearly far enough, however, with the result that implementation of the PSD and Title V programs for GHGs would still be infeasible and impracticable. EPA suggests that, with application of the Tailoring Rule, the number of PSD permit applications that regulatory agencies will have to process will still more than double. See 74 Fed. Reg. at 55,331 col. 1. While this is certainly better than the 140-fold increase in permits that would result if GHGs were subject to PSD permitting at the same 100/250 tons per year (tpy) threshold as other pollutants, see 74 Fed. Reg. 55,349, it nevertheless represents an unreasonable burden that would stifle economic development and innovation. As noted above, the requirement to obtain a PSD permit, with the cost and lengthy delay involved, already prevents many companies from going forward with many important projects. A doubling of the time required to get a PSD permit would present a much greater disincentive. Similarly, while we certainly agree with EPA that increasing the number of facilities requiring Title V permits by 400-fold (and therefore increasing the number of projects that might require Title V permit modifications to a similar degree) would be entirely unworkable, see id., the doubling of Title V permitted facilities that EPA projects would occur under the proposed Tailoring Rule, see 74 Fed. Reg. 55,335 col. 1, also would produce unworkable results and would be counterproductive to goals of reducing GHG atmospheric loadings and otherwise controlling air pollution.

Even at that, we believe EPA has greatly underestimated the number of additional new sources and modification projects that would be subject to PSD and Title V permitting at a 25,000 tpy CO_2e threshold for new/major sources and 10,000-25,000 tpy CO_2e threshold for PSD major modifications, as proposed in the Tailoring Rule. For example, according to EPA's compilation of emission factors, AP-42, a gas-fired boiler has a potential to emit 120,000 lbs. of CO_2 per million standard cubic feet (mmscf) of natural gas burned, but only 7.6 lbs. per mmscf of particulate matter, the pollutant emitted at the next-highest rate,. A gas-fired boiler thus could burn over 65,000 mmscf/yr before exceeding the 250 tpy threshold for PSD applicability for smaller boilers for pollutants currently regulated, but only 416 mmscf/yr before exceeding a threshold of 25,000 tpy CO_2e. See AP-42 p. 1.4-6, Table 1.4-2. Emission factors compiled recently by the Department of Energy's Argonne National Laboratory indicate that emissions from small boilers of NO_x, the conventional pollutant emitted at the highest rate in that analysis, are around 50 g of NO_x/mmBtu heat input, but those same boilers emit about 60,000 g of CO_2/mmBtu, or more than 1000 times more CO_2 than the next-highest-emitted pollutant. See http://www.transportation.anl.gov/modeling_simulation/GREET/pdfs/esd_av2.pdf. These comparisons do not even take into account the fact that, in many cases, the applicant may be subject to or propose emission limits—for pollutants other than GHGs—that reduce the "potential to emit" those pollutants to much less than the uncontrolled emission factors would

12-5

indicate. (For example, under Subpart Db New Source Performance Standards, a low heat release rate boiler would have to have a permit limit no higher than 45 g of NO_x/mmBtu.)

EPA says that it expects that a large majority of the impact of GHG permitting under the terms of the Tailoring Rule would be for boilers and similar fossil-fuel combustion units. 74 Fed. Reg. at 55,334, col. 1. PCA agrees that small boilers and other fossil-fuel combustion units are likely to be the sources that push facilities for the first time into the PSD or Title V "major source" category. It also seems that these types of emission units are likely to be the trigger for a "major modification," requiring a PSD permit, for a project that is adding such a unit or increasing its operation but that would not be subject to PSD, but for its GHG emissions. But as demonstrated above, although EPA has proposed a major stationary source threshold for CO_2e that is 100 times higher than for other pollutants, the small boilers most likely to be affected emit on the order of 1000-1500 times more CO_2 than other pollutants. This suggests that the Tailoring Rule could easily result in businesses needing to obtain, and regulatory agencies needing to process, 10 times as many PSD permits than they do now. This is a recipe for permitting overload and gridlock almost as devastating as that which EPA has attributed to applying PSD and Title V permitting without the Tailoring Rule.

EPA should defer application of PSD and Title V programs to GHGs altogether.

EPA must not implement the PSD and Title V programs in a way that would have such an unacceptable burden and unworkable implementation. If EPA has authority, as it has argued, to depart from statutory and regulatory thresholds in order to avoid "absurd results" and "administrative infeasibility" when applied to GHGs, then for the same reasons EPA can and should simply defer application of PSD and Title V to GHGs altogether.

As PCA sees it, it is almost impossible under the circumstances for EPA to come up with a version of the Tailoring Rule that would apply PSD and Title V to some sources without creating widespread confusion and delay, at best, in the permitting programs. Moreover, it is irrational to try to force GHG emissions, where the concern is achieving a broad reduction in total GHG loadings to the global atmosphere, into Clean Air Act programs designed to prevent unacceptable deterioration of relatively high-quality air in the vicinity of the new or modified source (in the case of PSD) and to collect and clarify the applicable limitations and conditions for a source's air emissions (in the case of Title V). Unlike the emissions for which the PSD program was designed, reducing GHGs emissions in New York City contributes just as much to reducing atmospheric loadings as reducing GHG emissions in Alaska. Moreover, there is no reason to think that requiring the Best Available Control Technology to reduce GHG emissions from new and modified major sources is anywhere near a cost-effective means to achieve a given GHG atmospheric loading reduction goal, and to achieve the ambitious GHG reduction targets EPA has suggested are needed it would be imperative for the nation's resources to be focused on the most cost-effective ways to reduce GHGs. Title V permitting for GHGs makes even less sense, since the Title V permit is not intended to impose new compliance obligations, and there are almost no existing federally

12-6

applicable GHG compliance obligations to be consolidated into a Title V permit (other than those that would be created by PSD permits addressing GHG emissions).

Rather than rush ahead and impose the PSD and Title V permitting obligations on sources of GHGs, EPA should defer those obligations while Congress is considering comprehensive climate change legislation, and while EPA is learning more about stationary source GHG emissions (through the recently promulgated mandatory GHG emission reporting regulations) and developing and evaluating ways to mitigate the tremendous administrative and financial burdens if PSD or Title V permitting has to be imposed on some sources based on their GHG emissions. There is ample authority for EPA to do so.

First, EPA could rightly conclude that Congress never intended the PSD and Title V permitting provisions of the CAA to apply to GHGs. As noted above, the legislative history of the CAA indicates clearly that Congress did not want these permitting programs to be a barrier to economic development and innovation and did not expect that they would apply more broadly than to the largest sources. With respect to PSD in particular, the PSD permitting requirements in the statute are in the context of new major sources and major modifications in areas that are classified as attainment or unclassifiable for National Ambient Air Quality Standards. PSD, under the terms of the statute, is not a catch-all requirement that applies in all circumstances, and in fact it makes no sense to apply it to GHGs, where the concern is aggregate GHG loadings to the global atmosphere, as opposed to changes that might deteriorate local air quality in high-air-quality areas or might cause an exceedance of a National Ambient Air Quality Standard. EPA would have ample grounds for interpreting the CAA not to require PSD and Title V permits based on a source's GHG emissions.

Second, EPA has substantial discretion in implementing the PSD program, and EPA has taken steps in the past to delay implementation of aspects of the PSD program in order to avoid administrative impracticability. The 1980 PSD regulations contained a number of transition provisions, for example, that delayed applicability to certain classes of sources. And EPA has for a decade effectively deferred application of PSD provisions based on $PM_{2.5}$ emissions, despite adoption of National Ambient Air Quality Standards for $PM_{2.5}$ in 1997, relying on PM_{10} instead because of problems measuring and modeling $PM_{2.5}$ emissions. See 73 Fed. Reg. 28,321, 28,324 (May 16, 2008).

Third, the same arguments EPA offers to explain why it can depart from a literal application of CAA PSD and Title V requirements to all sources that emit more than 100/250 tpy of GHGs could be applied to deferring application of PSD and Title V to GHGs altogether. As noted above, requiring Title V permits even for only the larger sources of GHGs would not produce any environmental benefit (because there are no GHG emission limitations to consolidate into a Title V permit, and GHG monitoring and reporting is already required under the recently promulgated GHG mandatory emission reporting rule). Similarly, imposing PSD permitting requirements, even only for larger GHG sources, would have precious little environmental benefit: there are no ambient standards or PSD increments to apply, and there are no demonstrated CO_2 emission control technologies per se to apply

12-7

through the BACT requirement (and even if there were, there likely are much less costly ways to achieve the same reductions in CO_2 emissions). Moreover, greatly expanding the number of sources requiring PSD or Title V permits will congest the permitting process and delay or preempt countless projects, especially when permit writers have virtually no guidance or precedent to help them with GHG permitting. These circumstances all constitute the kind of absurd results and administrative infeasibility that EPA claims justify departing from the strict language of the statute through the Tailoring Rule.

Importantly, in many States there are independent provisions of State law or regulations that could still require PSD or Title V permitting of 10 times as many sources as currently, as a matter of State law, if GHGs become a "regulated NSR pollutant," until the State is able to go through the lengthy procedures required to modify a law or regulation. During that time, the capability to review and issue permits in those States would be overwhelmed, and the purposes of the Tailoring Rule would be thwarted. Moreover, EPA says, in VII.B. of the Preamble to the proposed Tailoring Rule, that developing and implementing various potential techniques to "streamline" and reduce the burden of PSD and Title V permitting, some of which are discussed below, would take three to four years. The time needed for States to act and for EPA to consider and adopt mechanisms for reducing the cost and delay associated with expansion of the PSD and Title V permitting programs to encompass GHG emissions provides additional strong justification for deferral of PSD and Title V application to GHG emissions altogether.

PCA urges EPA to defer application of PSD and Title V permitting requirements to GHG emissions for at least 4-5 years. At that time, EPA may revise its permitting regulations to address GHG emissions, providing States the time to make necessary adjustments in State laws and regulations and permit processing capabilities. Or the matter may have become moot due to congressional action.

If EPA insists on applying PSD and Title V programs to GHGs, it should increase the proposed applicability thresholds.

At the very least, even if EPA does not defer application of PSD and Title V to GHGs altogether, EPA should substantially increase the applicability thresholds. Based on the analysis presented above, it would make sense to set a PSD threshold for GHGs of at least 100,000 tpy. This would still pull in many fossil-fuel combustion sources that would not be considered major for any other pollutant. We do not necessarily agree that assessing what portion of aggregate national stationary source GHG emissions would be "covered" at various threshold levels is an appropriate way to consider whether a threshold will avoid the unintended and unworkable consequences of an overbroad applicability provision. But since EPA has considered that factor, we note that the information EPA provided in the preamble to the proposed Tailoring Rule shows that a relatively small reduction in the percentage of national stationary source emissions covered would produce a substantial reduction in the number of additional sources that would have to obtain PSD and Title V permits.

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For example, according to Table VIII-1 at 74 Fed. Reg. 55,332, increasing the major source threshold from 25,000 to 100,000 would reduce the number of permits that would have to be issued per year by sixty percent. Yet increasing the threshold from 25,000 to 100,000 reduces the percentage coverage of nationwide stationary source GHG emissions by only four (4) percentage points, or by less than six percent. See Table VIII-2 at 74 Fed. Reg. 55,333. The number of Title V permits that would have to be issued (i.e., the number of existing facilities above the size cutoff) would decrease by about two-thirds. Id. These large reductions in permitting burden, with only a very small difference in the portion of stationary source GHG emissions covered, present a strong case for increasing the major source and major modification thresholds from the 25,000 tpy EPA has proposed (and certainly from the 10,000 tpy significance level EPA says it is considering). (PCA assumes that the comparisons would be similar—but the relief provided by higher thresholds, in terms of lower numbers of facilities and projects requiring permits, would be much more dramatic—if a more reasonable, higher estimate of the number of sources affected at the proposed Tailoring Rule applicability thresholds, as discussed above, were used in the analysis.)[3]

Increasing the number of new facilities and modifications of existing facilities that will have to obtain PSD permits by a factor of 2, 4, 10 or more would wreak havoc with the permitting programs, resulting in unreasonable delays, excessive costs for both industry and permitting authorities, and ultimately a reduction in environmental protection by decreasing the attention the could be paid to each permit, and by greatly delaying or effectively precluding many projects that would have net environmental benefits (including a net improvement in GHG loadings). While we believe the right thing for EPA to do is to defer application of the PSD and Title V programs to GHGs altogether, if EPA refuses to do that EPA should at a minimum increase the applicability thresholds to 100,000 tpy CO_2e for major new source status and for major modifications.[4]

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[3] On a related note, PCA was concerned by EPA statements in the preamble to the proposed Tailoring Rule that discuss "strategies for obtaining GHG reductions from sources under the proposed GHG permit thresholds," i.e. "through means other than PSD and Title V during the first phase" of the Tailoring Rule. See 74 Fed. Reg. at 55,325. The Title V program is, by congressional directive, not to be a program for imposing new reductions in or "mitigating" emissions of pollutants. Thus, exempting sources of GHGs below a certain size cutoff from Title V permitting in no way creates a rationale for EPA to impose other regulatory requirements that would reduce GHG emissions from such sources. Similarly, the PSD program is designed to avoid "backsliding" that would interfere with continued attainment of air quality standards in clean-air areas. Congress did not intend the PSD provisions of the CAA to be used for purposes of reducing emissions (overall or in attainment areas) from existing sources, nor is reducing emissions even from new and modified sources a broad goal of the PSD program, other than ensuring that the best available control technology is used. See, e.g., CAA §§ 160, 161. To the extent EPA is suggesting that there is some legal or policy reason to develop ways to reduce GHG emissions from sources falling below the applicability thresholds in the Tailoring Rule, simply because they will not be subject to PSD and Title V permitting, there is no legal or logical reason for that assertion.

[4] There is precedent in the current PSD regulations for setting the significance level for modifications the same as the major source threshold: under 40 C.F.R. § 52.21(b)(23)(i), only those emissions increases for carbon monoxide that equal or exceed 100 tpy are considered significant, even though

12-9

EPA should include clarifications to the PSD program if it subjects GHG emissions to PSD permitting.

If EPA, rather than deferring application of PSD to GHGs altogether for the time-being, nevertheless publishes something like the Tailoring Rule, establishing applicability thresholds for GHGs, EPA should at the same time clarify existing regulations or adopt changes to those regulations to address issues that will become even more important once the PSD rules are applied to many more sources due to their GHGs emissions. EPA has been involved in a years-long project to improve and clarify the workings of the PSD regulations, and it is not good policy for EPA to implement a huge expansion of the number of sources covered by the PSD regulations before EPA has completed work on improving those regulations.

In particular, if EPA persists in applying PSD to GHG emissions, it would be especially important for EPA to clarify application of the exclusion from PSD, under existing regulations, for changes at a facility that merely result in the increased utilization of a unit or increased fuel burning or burning of an alternative fuel, provided the unit was capable of accommodating that change. See 40 C.F.R. § 52.21(b)(2)(iii)*(e)* - *(f)*. Since EPA has identified combustion sources like boilers as the primary units that will be affected by or will trigger PSD permitting for GHGs, see 74 Fed. Reg. at 55,334 col.1, there will be an increased number of questions about whether increases of fuel consumption or fuel-switching at those units is exempted from being a PSD major modification.

Similarly, EPA needs to clarify how debottlenecking projects will be treated and how projects must be aggregated for PSD applicability purposes. EPA should clearly indicate in the regulations as well how "contemporaneous" increases and decreases of GHGs will be addressed with respect to changes in GHG emissions that took place before they became regulated under the PSD rules. PCA also believes that, in light of the lack of current limitations on GHG emissions, and the practical inability for a source to secure such limitations once the permitting authorities are overwhelmed by the doubling or tripling or more of their permitting load under the Tailoring Rule, EPA needs to make every effort to modify or clarify its regulations and policy concerning the determination of a source's "potential to emit" GHGs. We suggest that (a) EPA has asserted in the past that it has substantial discretion in determining such details of the PSD program and (b) there is a clear need to base applicability for GHG emissions on a measure more reflective of reality than the source's theoretical ability to emit CO_2 at the maximum fuel-burning rate every hour of the year. Additionally, while we think it is clear from existing regulations, EPA also should reinforce explicitly that the GHG emissions to be assessed are those from the source itself, and not those from things like transportation or off-site electricity generation that has some connection with the source.

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for designated source categories a potential to emit 100 tpy of carbon monoxide or other regulated pollutants makes the source "major" and subject to PSD.

12-10

EPA indicates that it has efforts underway separately to consider how BACT requirements might apply in the context of GHG emissions, and whether EPA may be able to issue guidance that would reduce somewhat the burden of BACT analyses for GHGs. PCA supports those efforts as a general matter, and we look forward to participating in what we hope and presume will be a transparent process, with public input, as EPA develops BACT guidance specifically intended for GHGs. While PCA believes that issues of BACT for GHG are for the most part beyond the scope of the proposed Tailoring Rule and these comments on that proposal, we already have some concerns about some of the remarks EPA has made in the preamble to the proposed Tailoring Rule and in other settings. For example, statements about "presumptive BACT" in the preamble seem inconsistent with the fact that BACT is by statute supposed to be a case-by-case analysis, rather than the imposition of national emission standards. See CAA §§ 165(a)(4) and 169(3). PCA also is concerned that EPA seems to be suggesting that it could be appropriate, under the rubric of determining BACT, to tell a source what type of combustion unit it must build, or what type of fuel it may use, or how it must engineer its operations to reduce demand for the thermal energy or electricity that the combustion unit will generate. Such expansion of the statutory requirement to assure that the best available control technology is used for a particular project, into an inquiry by the permitting authority into whether a plant can be designed or operated more efficiently, or whether it might be environmentally preferable for the plant to be proposing a different kind of project, would be inconsistent with EPA's statutory authority, long-standing EPA interpretations and policy, and judicial and Environmental Appeals Board decisions.

In the ways described above, among others, the preamble to the Tailoring Rule reads like a description of a wide-ranging and on-going policy discussion, a work-in-progress rather than a proposal for a huge new regulatory program set to go into effect next year. This further supports PCA's recommendation, as set out above, that EPA should defer entirely application of the PSD and Title V programs to GHG emissions at this time.

PSD and Title V should only apply once emissions of a GHG are actually limited by federal regulations.

While it is not entirely clear to us, it appears that the proposed Tailoring Rule is written so that GHG emissions above the thresholds would trigger PSD and Title V applicability as soon as the Tailoring Rule goes into effect. See, e.g., proposed 40 C.F.R. 52.21(b)(1)(i)(*d*)). That would be inconsistent with EPA's claim of statutory authority to apply these permitting programs to GHGs. In particular, EPA has asserted, in the preamble to the proposed Tailoring Rule and also in EPA's proposal to reaffirm the "Johnson Memo" interpreting when PSD and Title V apply to GHGs, 74 Fed. Reg. 51,535, that stationary source permitting requirements apply to GHGs once there is a limitation on emissions of the GHG imposed under federal law. Thus, until GHGs are subject to emission limitations under Title II of the CAA (for motor vehicles) or some other CAA authority, EPA cannot apply PSD and Title V permit requirements based on a source's GHG emissions. See, e.g., 74 Fed. Reg. at 51,547.

12-11

EPA needs to make the Tailoring Rule very clear that GHGs are not counted for purposes of determining whether a new source or modification will exceed PSD applicability thresholds, and whether a source needs a Title V permit, until the GHG is actually subject to an emission limitation issued under the CAA.[5] If GHG tailpipe emissions standards are the first such limitation, then PSD and Title V would begin to apply to the pollutant(s) regulated by such standards at the time motor vehicle manufacturers are required to demonstrate compliance with them. For similar reasons, EPA lacks authority to impose PSD and Title V requirements on emissions of a pollutant that is considered a greenhouse gas but is not yet subject to any promulgated emission limitation under the CAA.

EPA should disapprove State programs that expand PSD or Title V applicability beyond the extent of the final Tailoring Rule.

The Tailoring Rule, as proposed, has a huge gap that could totally frustrate the purposes for which EPA says it is proposing to adopt the Tailoring Rule. EPA is proposing to modify its approval of existing state PSD programs so that the States will not be *required* to apply PSD to sources that would be "major" only because they have GHG emissions greater than 100/250 tpy but less than 25,000 tpy. Under the approach to State Implementation Plan approval/disapproval EPA proposed in the Tailoring Rule, however, States would be free to include in their State PSD programs such smaller GHG sources. In fact, it appears that States would have to affirmatively amend their regulations to exempt such smaller sources, unless the regulations incorporate EPA's PSD regulations by reference (and the State rules on incorporation by reference allow updating to include the latest version of those EPA regulations).

It appears to us that the result of this approach will inevitably be mass confusion and, at least in the first months and years, requirements to apply for and obtain a PSD permit in many States for sources whose GHG emissions are over 100/250 tpy. That will produce exactly the kind of overload of permitting authorities and permitting gridlock that the Tailoring Rule is supposed to avoid. Applying the same principles of administrative necessity and avoiding absurd results on which EPA based the proposed Tailoring Rule, EPA could modify the Tailoring Rule to assure that State programs do not apply to the smaller sources of GHGs.

EPA explained in the preamble to the proposed Tailoring Rule how provisions of the CAA related to EPA review and approval of State Implementation Plans form a requirement

[5] Note that EPA states in the preamble to the proposed Tailoring Rule that PSD permitting requirements for GHGs would be triggered "when a rule controlling those pollutants is promulgated (and even before that rule takes effect)." 74 Fed. Reg. at 55,300 col. 2. EPA has proposed to change that interpretation in its reconsideration of the Johnson Memo, see 74 Fed. Reg. at 51,546. We agree it should be changed and indeed see no basis for that interpretation, since it is inconsistent with EPA's analysis (with which we agree) that a pollutant is not subject to regulation under the CAA until its emission is actually limited—which does not occur upon a rule's promulgation date, or even on the rule's effective date if compliance is not required until some later time.

12-12

that "EPA may approve the SIP PSD provisions only if EPA is satisfied that the State will have adequate personnel and funding to administer the PSD program, including conducting the appropriate analyses for new and existing sources, issuing the permits, conducting enforcement, and taking other necessary administrative action." 74 Fed. Reg. at 55,341 col. 1. EPA has enough information to conclude that states would not have adequate resources to implement their State PSD programs if the threshold for GHGs is 100/250 tpy, or anything near that level. Thus, EPA can disapprove state SIPs to the extent they require PSD permits for sources/modifications below the thresholds established in the Tailoring Rule. Failure to disapprove such SIPs will create great confusion for potentially regulated sources and will generate the kind of permitting gridlock (and "absurd results") that EPA is trying to avoid. Among other things, potentially regulated sources, especially those operating in numerous jurisdictions, will be unable to rely on compliance with the federal regulations and will face potential State or citizen suit enforcement actions if they fail to sort accurately through the myriad inconsistent permitting requirements.

EPA should exempt CO_2 emissions of biomass origin from PSD applicability thresholds.

EPA has in that past used its discretion to define the pollutants subject to PSD, with particular regard to their potential adverse impacts on environmental quality. For example, EPA has distinguished between total particulate matter and fine particulate matter. In a case even more analogous to GHGs, EPA has by regulation excluded certain compounds, which are in fact "volatile" and "organic," from the definition of VOCs that are subject to PSD applicability thresholds, based on those particular compounds' low potential for photochemical oxidation and generation of smog. See 40 C.F.R. §§ 51.100(s), 52.21(b)(2)(ii), and 52.21(b)(30).

For similar reasons, EPA should exclude from PSD applicability determinations that portion of a facility's CO_2 emissions that come from oxidation of carbon of biomass origin. Because of the natural carbon cycle (carbon in biomass having been extracted from the atmosphere through the plant's uptake of CO_2), CO_2 emissions generated by burning biomass do not add to atmospheric CO_2 loadings. The principle of neutrality of emissions from biomass combustion has been widely accepted by scientists and regulators in both the United States[6] and Europe.[7] Exempting those emissions from inclusion in calculations for

[6] For example, in determining the treatment of CO_2 emitted from combustion of biomass-based fuels during the processing of feedstock into transportation biofuels, in its proposed rule to implement the Energy Independence and Security Act of 2007 through a new Renewable Fuel Standard, EPA made clear that: "The emissions from combustion of biomass fuel source are not assumed to increase net atmospheric CO_2 levels. The CO_2 emitted from biomass-based fuels combustion does not increase the atmospheric CO_2 concentrations, assuming the biogenic carbon emitted is offset by the uptake of CO_2 resulting from the growth of new biomass. Therefore, the CO_2 emissions from biomass combustion as a process fuel source are not included in the lifecycle GHG inventory of the ethanol (and other biofuels) plant." 74 Fed. Reg. 24,904, 25,039 (May 26, 2009).

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determining whether a new or modified source requires a PSD permit would be consistent with their environmental impact (lack thereof). It also would create an important incentive for companies to try to use biomass-based fuels where possible, with the dual benefits of reducing atmospheric GHG loadings as compared to fossil-fuel combustion and increasing the use of renewable energy.

EPA should conduct a comprehensive analysis of the regulatory impact of expanding PSD and Title V permitting to major sources of GHGs.

In the preamble to the Tailoring Rule, EPA describes its assessment of the economic impact of the Tailoring Rule in terms of the regulatory burden that would be reduced as a result of the higher applicability thresholds proposed in the Tailoring Rule. On the other hand, the preamble to the proposed GHG tailpipe emission standards, the promulgation of which EPA says will trigger application of PSD and Title V permitting, addresses the economic impact of the tailpipe emission standards on motor vehicle manufacturers and others, while ignoring the huge impact on businesses, permitting authorities, and the public that would arise from the vast increase in sources and projects that would become subject to PSD and Title V permitting requirements, under the current permitting regulations, as a result of promulgation of those tailpipe standards.

EPA does not appear to have conducted a comprehensive analysis of the impacts resulting from the significant expansion of the PSD and Title V programs which the Tailoring Rule would allow, nor of the even much greater burden if PSD and Title V applicability for GHGs is determined using existing thresholds. PCA suggests, and has suggested in its comments on the proposed GHG tailpipe standards, that such an analysis is a legal prerequisite before EPA triggers PSD and Title V permitting for GHGs through its adoption of the tailpipe standards. To the extent that EPA ignores our comments above and issues a Tailoring Rule that makes GHGs subject to PSD and Title V independent of promulgation of GHG tailpipe emission standards, that kind of thorough review of the economic and social impact would be a legal prerequisite for the Tailoring Rule itself.

EPA also has failed to comply with its obligations under the Paperwork Reduction Act. Although EPA asserts that the Paperwork Reduction Act's requirement for creation and OMB review and approval of an Information Collection Request (ICR) does not apply because of prior approval of an ICR for the PSD program, this ignores the fact that there would be a huge increase in the paperwork burden as a result of applying PSD and Title V permitting requirements to sources that are "major" only because of their GHG emissions. Certainly if the Tailoring Rule is worded to take effect independently of promulgation of GHG tailpipe standards or other GHG emission limitations, then there is no question that a new ICR would be required, because promulgation of the Tailoring Rule would expand the PSD and Title V programs dramatically. But even if the Tailoring Rule were legitimately

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[7] The European Commission 2004 regulation on the European Union Emissions Trading Scheme, for example, states in section 4.2.2.1.6, Emission Factors: "Biomass is considered as CO_2-neutral. An emission factor of 0 [t CO_2/TJ or t or m3] shall be applied to biomass."

12-14

seen only as reducing the burden imposed as a result of current PSD and Title V applicability regulations and the promulgation of emission limitations for GHGs, there is still a tremendous paperwork burden that would remain after the Tailoring Rule went into effect, and it is EPA's consideration (or lack thereof) of ways to further reduce that huge burden, in the Tailoring Rule, that should be evaluated in the context of the Paperwork Reduction Act.

Conclusion

PCA appreciates the opportunity to comment on the proposed greenhouse gas Tailoring Rule. We would be happy to meet with EPA or communicate further, if additional explanation of our views would be helpful. If you have any questions about these comments, please contact me or Deidra Ciriello at (202) 408-9494, or aohare@cement.org or dciriello@cement.org.

Sincerely,

Andrew T. O'Hare

Andrew T. O'Hare
Vice President, Regulatory Affairs

cc: Desk Officer for EPA, OMB-OIRA

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EPA RICE NESHAP Rules

Joint Committee on Energy and Environmental Policy
September 9, 2010

Municipal Electric Utilities in Kansas

- Kansas Municipal Utilities (KMU) is the statewide trade association for 171 municipal electric, natural gas, water & wastewater utilities
- 119 municipal electric utilities in Kansas
- 62 operate municipal power plants
- 52 municipal power plants own an estimated 284 RICE units
- **Kansas**: estimated 550+ megawatts (MW) of municipal generating capacity
- Midwest: 2,000+ MW of municipal generating capacity

EPA RICE NESHAP Details

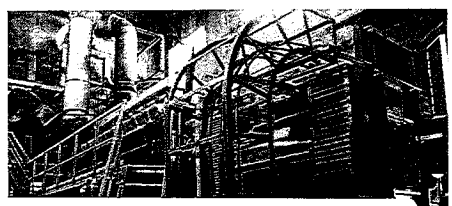
- RICE = Reciprocating Internal Combustion Engines
- NESHAP = National Emission Standards for Hazardous Air Pollutants
- Title 40, Part 63 of Code of Federal Regulations (CFR)
- Compression Ignition (CI)
  - Diesel, dual fuel engines
  - EPA Final Rule: March 2010
- Spark Ignition (SI)
  - Gasoline, natural gas engines
  - EPA Final Rule: August 2010
- Primary impact of rule is required installation of oxidation catalysts, emissions monitoring for each engine
- Majority of units operate fewer than 200 hours annually
- Significant cost impact for rural communities, particularly during difficult economic downturn

"Dual Fuel" Units

- Natural gas: primary fuel source to power engine, generator
- Diesel: provides ignition source, lubrication
- Typical operation: 5-8% diesel
- EPA regulations: > 2% diesel usage = CI engine

Retrofit, Replace or Retire?

- Potential retirement of municipal power plants statewide
  - Backup generation during emergency situations
  - Capacity credits (power supply contracts)
  - Transmission constraints
  - Voltage support of electric grid
- Unintended consequence: increased CO_2 emissions
- Bottom line: Increased cost to municipal utility customers



JOINT COMMITTEE ON ENERGY AND ENVIRONMENTAL POLICY
DATE: 9/9/10
ATTACHMENT 13

EPA's Clean Air Transport Rule

Briefing for the Joint Committee on Energy and Environmental Policy

September 9, 2010

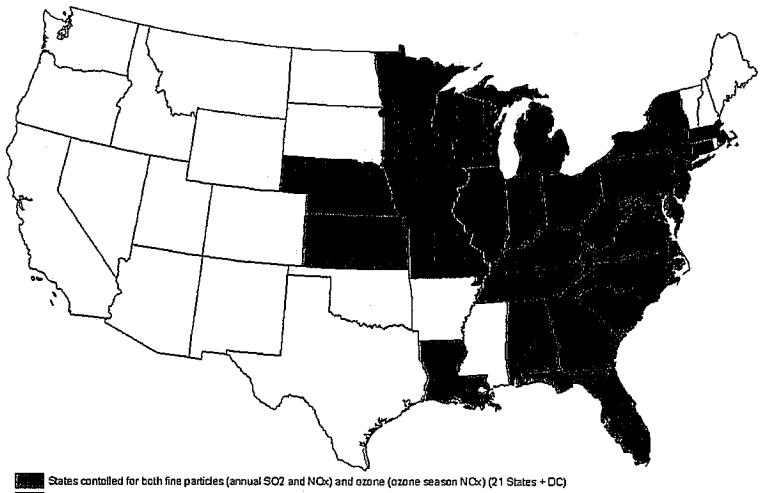
Miles Stotts
Kansas Department of Health and Environment
Bureau of Air

EPA's Proposed Clean Air Transport Rule (CATR)

- Replaces EPA's 2005 Clean Air Interstate Rule (CAIR)
  - Kansas not part of CAIR
  - CAIR overturned by federal court in 2008
- Reduces NO_x and SO_2 emissions that contribute to nonattainment (ozone, $PM_{2.5}$) in downwind states
  - SO_2 and NO_x contribute to $PM_{2.5}$
  - NO_x contributes to ozone
- States proposed for inclusion based on EPA photochemical modeling

2

31 States & D.C. Covered by Proposed Rule



3

Overview of Proposed Transport Rule

- States receive NO_x and SO_2 emissions budgets
- Emissions reductions from power plants
- NO_x emissions capped at 1.3M tons in 2012 & 2014 (52% reduction from 2005)
- SO_2 emissions capped at 3.4M tons in 2012; 2.6M tons in 2014 (71% reduction from 2005)
- Additional NO_x reductions will be needed to meet proposed ozone standard

4

Three Options in Proposed CATR

EPA proposing one approach; taking comments on two alternatives

- Preferred Approach
  - Allows intrastate trading and limited interstate trading of allowances, but assures each state will meet its budget
- First Alternative
  - Only intrastate trading
- Second Alternative
  - Emissions limits set for each power plant and allows averaging of emission rates

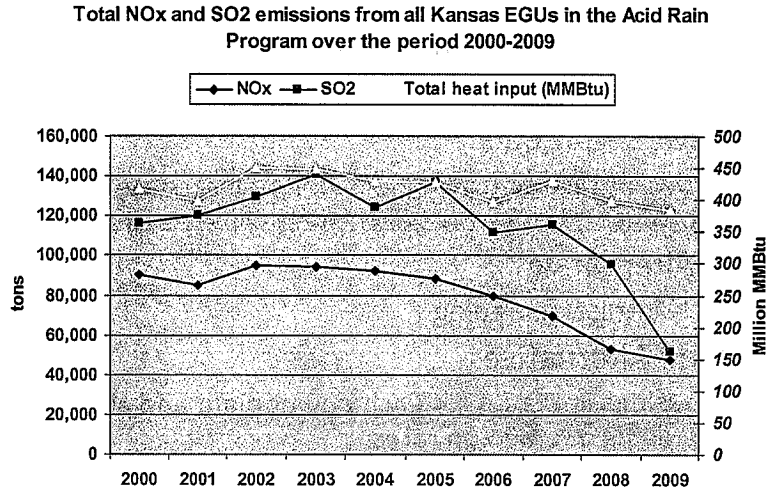
5

Kansas Included in Proposed CATR

- Kansas slightly exceeds ozone threshold for contribution
  - Kansas has EPA-approved ozone SIP that addresses transport
  - EPA will request modified ozone SIP
- Kansas moderately exceeds $PM_{2.5}$ threshold
  - Kansas has submitted $PM_{2.5}$ SIP (not yet approved)
  - EPA will request SIP $PM_{2.5}$ modification

6

Emission Reductions in Kansas



Questions about the Proposed Rule

- EPA proposed modeling based on 2005/2007 emissions inventory data
  - Significant reductions in Kansas since then
- Proposed CATR calls for reductions by 2012
  - Kansas sources have existing agreements with EPA for reductions by 2013-2014
  - EPA will not give credit for reductions in progress but not yet complete
- Very short timeframe to meet 2012 deadline

8

Kansas' Path Forward

- Actions already taken by KDHE
  - Meet with power plants
  - Review most recent emissions inventories
  - Talk with EPA
- Items to do
  - Decision on SIP submittals
  - Make existing emissions reductions federally enforceable

9

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SIERRA CLUB, KANSAS CHAPTER
9844 GEORGIA, KANSAS CITY, KS 66109

STATEMENT OF CHRIS CARDINAL, LEGISLATIVE COORDINATOR
SEPTEMBER 9TH, 2010
BEFORE THE JOINT COMMITTEE ON ENERGY AND ENVIRONMENTAL POLICY

EPA TRANSPORT RULE AKA "GOOD NEIGHBOR RULE"

Chairperson McGinn, and honorable members of the committee:

Coal-fired power plants dump millions of tons of pollution into the air. That pollution spreads from state to state, giving kids asthma, causing heart attacks, and sending thousands of people to the hospital, but the states need federal help to control pollution blowing in across state borders.

EPA is acting to help states be good neighbors with a rule that will systematically and efficiently cut pollution from dozens of coal plants that would otherwise spread across the country. This Good Neighbor Rule will step down pollution in thirty-one states, save lives, and help everyone breathe easier. Better yet, the rule's economic benefits outweigh its costs – by over 100 billion dollars.

The Clean Air Act's Good Neighbor provision (section 110(a)(2)(D)(i)(I)) gives the EPA the power to cut down interstate pollution that interferes with the attainment and maintenance of the national ambient air quality standards protecting public health. EPA is using that power in this new rule, officially called the Air Pollution Transport Rule, to remedy ongoing violations of the 1997 ozone standards, and the 1997 and 2007 fine-particle (PM2.5) standards. Ozone and fine particles aggravate asthma and cause heart and lung problems. The EPA will use the rule to cut pollutants, sulfur dioxide (SO_2) and nitrogen oxide (NOx) that pour out of smokestacks and form ozone and fine particles in the atmosphere. The Good Neighbor Rule replaces and strengthens the EPA's earlier Clean Air Interstate Rule (CAIR), which industry over-turned, but which remains in place pending EPA's efforts to develop an updated rule.

The Good Neighbor Rule will help clean the air in thirty-one states (Texas, Oklahoma, Kansas, Nebraska, Louisiana, Arkansas, Missouri, Iowa, Minnesota, Wisconsin, Illinois, Indiana, Ohio, Michigan, Mississippi, Alabama, Florida, Georgia, North Carolina, South Carolina, Tennessee, Kentucky, Virginia, West Virginia, Maryland, Delaware, Pennsylvania, New Jersey, New York, Massachusetts, and Connecticut) and the District of Columbia. It requires power plants in those areas to reduce their sulfur dioxide (SO2) and nitrogen oxides (NOx) emissions. The EPA has concluded that reducing pollution from such plants is the most cost-effective means by which to protect air quality in neighboring states.

EPA projects that without the Good Neighbor Rule, air pollution from power plants would result in 14,000 to 36,000 additional deaths. The Good Neighbor Rule will further prevent 23,000 non-

fatal heart attacks, 26,000 hospital and emergency department visits, 21,000 cases of acute bronchitis, and 240,000 episodes of aggravated asthma. EPA translates those benefits into a value of $110 to $270 billion nationally.

The Good Neighbor rule provides environmental and health benefits while minimizing any increases in electricity costs.

The proposed Good Neighbor Rule will increase utility prices very little (can be offset by using less energy, i.e. increasing the energy efficiency of homes, businesses, and manufacturing facilities) yet has the potential to save Kansans $4 billion dollars in health costs and other benefits and prevent the premature death of 1,000 Kansas citizens, all while keeping healthy our families and the Kansas economy. As fine particles and ozone cause millions of people to miss work each year – a particularly large burden if your job does not provide paid sick leave and/or calling in sick puts you at risk of losing your job.

Mrs. Chairman and Members of the Committee, we are moral agents capable of reflecting on our situation, forming intentions about how we will act, and then carrying out that action. The Good Neighbor Rule will reduce millions of Americans' exposure to fine particles and ozone which cause roughly one out of every 20 premature deaths in the U.S. and is a symbol of responsible environmental action by assuming responsibility for the health problems we are causing citizens of other states.

Estimated Number of Adverse Health Effects Avoided Due to Implementing the Proposed Transport Rule*

Health Effect	Number of Cases Avoided
Premature mortality	14,000 to 36,000
Non-fatal heart attacks	23,000
Hospital and emergency department visits	26,000
Acute bronchitis	21,000
Upper and lower respiratory symptoms	440,000
Aggravated asthma	240,000
Days when people miss work or school	1.9 million
Days when people must restrict their activities	11 million

* Impacts avoided due to improvements in PM2.5 and ozone air quality in 2014

Kansas Flint Hills Smoke Management Plan

Joint Committee on Energy and Environmental Policy
Topeka, Kansas
September 9, 2010

Rick Brunetti, Director, Bureau of Air
Kansas Department of Health and Environment

Overview

- History of Flint Hills air quality issues
- Recent Legislative Action
- Emissions data
- Ozone
- Air quality impacts
- Federal, state and local laws
- Smoke Management Plan Progress

Our Vision – Healthy Kansans living in safe and sustainable environments.

History of the Flint Hills Issue

- Burning has caused ozone exceedances in 2003, 2009 and 2010
- EPA and KDHE have met with Ag officials from late 2003 through present
- Research, education, outreach and field training have been primary outcomes to date
- EPA denied KDHE request to flag 2009 data due to the lack of a smoke management plan

Recent State Legislative Actions

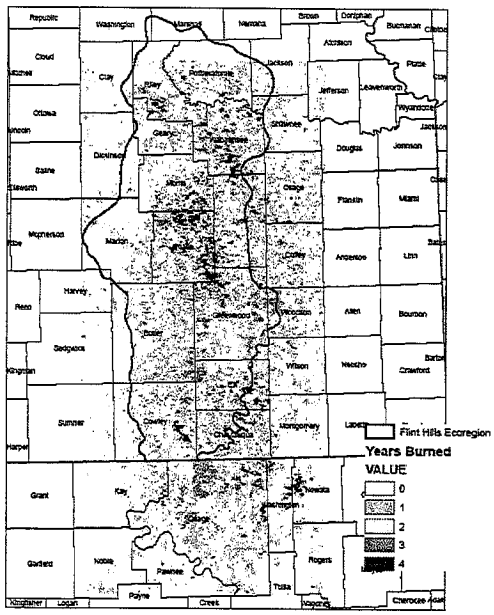
- Kansas Senate Concurrent Resolution 1623
  - Passed by Kansas House and Senate in 2010.
    - Urges U.S. Congress to require EPA to exclude air monitoring data from use in determination of exceedances and NAAQS violations when the emissions are as a result of prairie burning in the Flint Hills.
    - Treat data as exceptional under 40 CFR Part 50.14.

Recent Federal Legislative Actions

- United States House Resolution 5118
  - Introduced by Representative Moran on April 22, 2010.
  - Adds new Section 330 to the Clean Air Act.
    - Both State and EPA Administrator must exclude emissions data from prescribed fires in the Flint Hills region if the emissions cause a NAAQS violation.
    - If the data is excluded, neither the Administrator nor the State can find that a SIP violation has occurred.
    - Prohibits smoke management plans.
    - Fires may not be considered a stationary source.
    - No Title V permit required.

- Flint Hills Ecosystem has 6,267,000 acres
- 2,972,000 acres burned during the 4 year period
- Greenwood, Chase and Butler Counties burn the most acreage

Flint Hills Burn Frequency 2003-2006



Source: Rhett Mohler, Douglas Goodin Kansas State University

Factors That Contribute to Ozone Formation

- NOx and VOC emissions
  - Mass (correlates with biomass)
  - Height of release
  - Transport into region
- Meteorological Conditions
  - Temperature
  - Cloud cover
  - Solar intensity
  - Wind speed
  - Mixing height

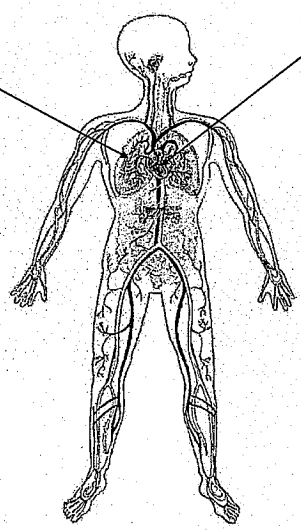
Ozone and Particulate Matter Health Effects

Respiratory:

Coughing, wheezing, reduced lung function

Reduced resistance to infection

Aggravation of asthma, emphysema and bronchitis



Cardiovascular:

Inflammation

Heart failure

Cardiac arrhythmia

Hardening of the arteries

Stroke

Heart attack

Ozone Standard History

- 1971 - EPA set 1-hour standard at 0.120 ppm
- 1997 - EPA set 8-hour standard at 0.085 ppm
- 2008 - EPA lowered 8-hour standard
  - Primary standard set at 0.075 ppm
  - Secondary standard same as primary
- 2009 – New standard under reconsideration
  - Proposed standard between 0.060-0.070 ppm

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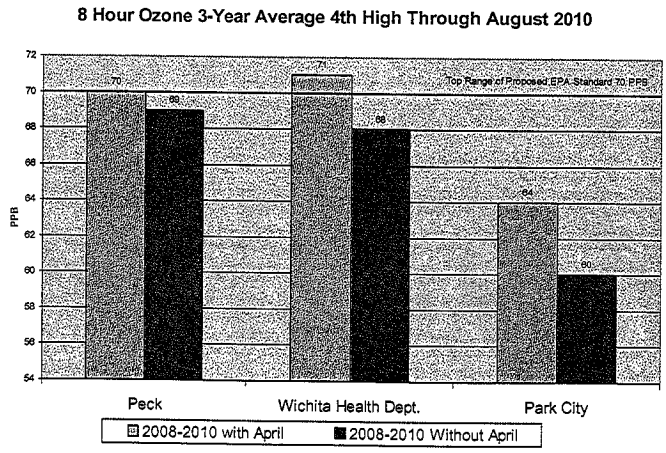
Flint Hills Burning Impact on Ozone Levels



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Nonattainment Impacts

- State Implementation Plan (SIP) preparation
  - Enhanced emissions inventory
  - Additional photochemical modeling
- Transportation plan conformity with SIP
- Curtails economic development
- New rules to reduce NOx and VOCs emissions
- Potential sanctions for failure to meet standard
- Increased cost for fuel, electricity, consumer products, etc.
- Citizens breathing polluted air

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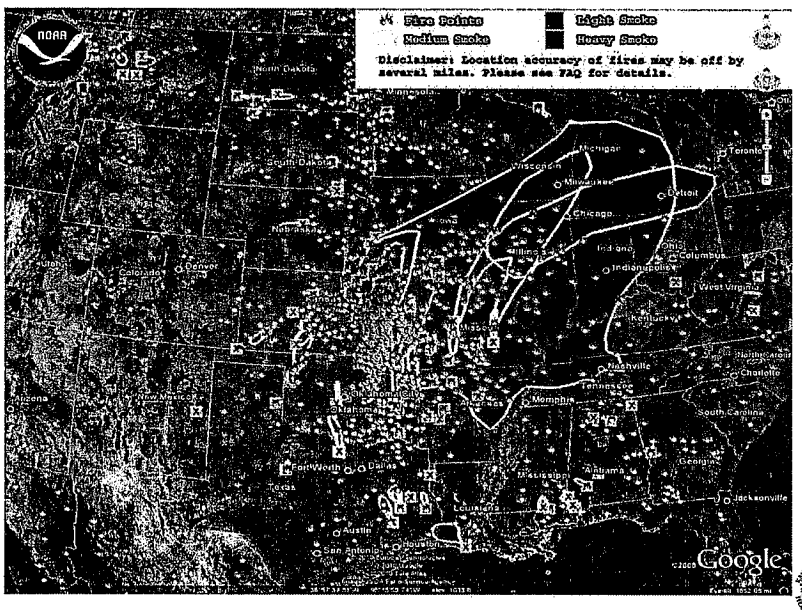
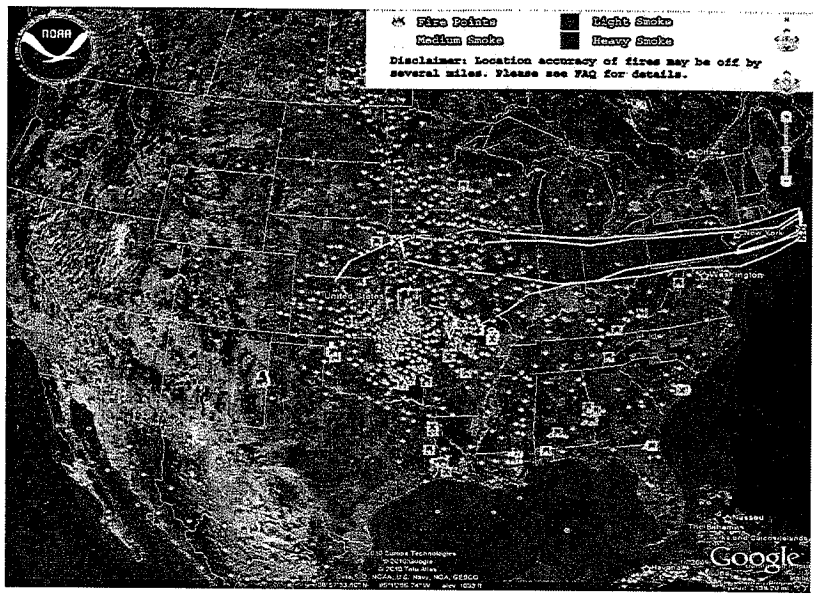
April 10, 2010 Fire and Smoke Plumes



April 11, 2010 Fire and Smoke Plumes



Smoke Management Plan Requirements

- Reduce impacts of prescribed fires on public health, safety and visibility
- Authorization/restrictions on burning
- Minimize Air Pollution Emissions
- Public Education and Awareness
- Enforcement provisions
- Program Evaluation

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Concepts So Far

- Public notice at start of season
- Ban on non-essential burning in Flint Hills and impacted areas during April
- Develop Best Management Practices for reduced air quality impacts
- Prepare outreach/education plan
- Burn/Air Quality Plan County Pilot Project
- Gather field data to characterize burn
- Year end summary and evaluation
- Contingencies in event the plan does not work

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MARC
Mid-America Regional Council

2010 Ozone Season Report for the Kansas City Region

Summary

From April 1 – September 13, 2010 in the Kansas City region:

- MARC issued 50 yellow SkyCasts and 4 Orange SkyCasts. There were 4 Ozone Alerts.
- The eight-hour ozone concentrations exceeded the 75 part-per-billion (ppb) standard within our Air Quality Maintenance Area four times.

Reconsideration of the 2008 Ozone National Ambient Air Quality Standards

On March 12, 2008, the U.S. Environmental Protection Agency issued a final rulemaking revising national standards for ground-level ozone. The new primary, or health-based, standard was designated as 75 ppb averaged over eight hours; replacing the previous standard of 84 ppb over an eight-hour period. The 84-ppb standard was expected to remain in place until mid-2011, which would have been one year after attainment designations, at which point the new standard would have become official. In the meantime, EPA requested that air quality forecasting programs begin to issue forecasts consistent with the 2008 standard.

In September 2009, the EPA announced that it was reconsidering the 2008 standard for ground-level ozone. The new standard will be between 60-70 ppb and is to be announced by August, 2010. Until we receive different direction from the EPA, we will continue to forecast using the 2008 standard of 75 ppb as issued in their final rulemaking.

Under that 2008 rulemaking, EPA has provided an updated Air Quality Index (AQI) – a public information tool that associates colors and health messages with ranges of air pollutant concentrations – to reflect the standard. Table 1 shows the ozone concentrations associated with each AQI color under the 2008 standards.

Table 1. Air Quality Index under the 2008 Ozone Standards

Category	AQI Value	2008 8-hour ozone (ppb)
Good (Green)	0 – 50	0 - 59
Moderate (Yellow)	51 – 100	60 - 75
Unhealthy for Sensitive Groups (Orange)	101 – 150	76 - 95
Unhealthy (Red)	151 - 200	96 - 115
Very Unhealthy (Purple)	201 - 300	116 - 374
Hazardous (Maroon)	301 – 500	> 374

To ensure consistency with forecasting efforts nationally, MARC will continue to issue Ozone Alerts this summer whenever ozone concentrations are expected to exceed 75 ppb averaged over eight hours. Eight ozone monitors in the region (including those at Leavenworth and Trimble) are used to verify forecasts in 2010, and forecast verification will be based on the 2008 standard AQI.

2010 Ozone Data & SkyCasts

Table 2 summarizes SkyCasts and eight-hour monitored ozone readings for the 2010 ozone season. The table lists days that were forecasted to be a yellow or Ozone Alert day *or* had a maximum eight-hour ozone reading greater than or equal to 60 ppb. *Green SkyCast days with maximum eight-hour ozone values less than 60 ppb—days that were accurately forecasted to be green—will not be listed.* The SkyCast categories are defined as follows: green corresponds to eight-hour ozone values less than 60 ppb, yellow is from 60 ppb to 75 ppb, and Ozone Alert is 76 ppb and above (orange is 76 - 95 ppb and red is 96 - 115 ppb).

Table 2. Summary of 2010 SkyCasts and Daily Maximum Eight-hour Ozone Values

April 1 – September 13, 2010

Date	Daily Max 8-Hr Value (ppb)*	Monitor(s) Recording Max Value	SkyCast	Date	Daily Max 8-Hr Value (ppb)*	Monitor(s) Recording Max Value	SkyCast
4/4	62J	Rocky Creek	Green	5/30	**78**	Rocky Creek	Orange
4/9	68	Watkins Mill	Green	5/31	59	Rocky Creek	Yellow
4/10	71	Watkins Mill, Heritage Park	Yellow	6/1	70D	Rocky Creek	Yellow
4/11	70	Watkins Mill	Yellow	6/2	60	Heritage Park	Yellow
4/12	70	Watkins Mill, Heritage Park	Yellow	6/3	71	Heritage Park	Yellow
4/13	73	Watkins Mill	Yellow	6/4	74	Watkins Mill	Yellow
4/14	67	Watkins Mill	Yellow	6/5	58	Liberty, Watkins Mill, Rocky Creek	Yellow
4/15	62	Watkins Mill	Green	6/16	57	Rocky Creek	Yellow
4/19	63	Heritage Park	Green	6/17	46	Watkins Mill	Yellow
4/20	71	Watkins Mill	Yellow	6/22	62	Watkins Mill	Green
4/21	62	Watkins Mill	Green	6/24	72	Heritage Park	Green
4/29	67	Watkins Mill	Yellow	6/25	**79**	Rocky Creek	Yellow
5/2	60	Watkins Mill	Green	6/26	58	Rocky Creek	Yellow
5/4	69	Watkins Mill	Green	6/28	53	Watkins Mill	Yellow
5/5	63	Watkins Mill, Heritage Park	Green	7/1	64D	Rocky Creek	Yellow
5/6	51	Watkins Mill	Yellow	7/2	75	Rocky Creek	Yellow
5/18	62	Heritage Park	Green	7/10	**76**	Rocky Creek	Yellow
5/22	50	Rocky Creek	Yellow	7/13	58	Rocky Creek	Yellow
5/25	64	Rocky Creek	Green	7/14	50	Rocky Creek	Yellow
5/27	69	Heritage Park	Green	7/15	63	Richards Gebaur	Green
5/28	66	Watkins Mill	Yellow	7/16	56	Rocky Creek	Yellow
5/29	73	Rocky Creek	Yellow	7/17	68	Rocky Creek	Orange

*The 2010 eight-hour monitored ozone readings have not been quality assured and may contain errors. Readings in **bold** represent eight-hour peak concentrations above the 75 ppb standard.

Table 2. (Cont.) Summary of 2010 SkyCasts and Daily Maximum Eight-hour Ozone Values

April 1 – September 13, 2010

7/18	58	Liberty	Yellow	8/11	**76**	Rocky Creek	Yellow
7/19	56	Liberty	Yellow	8/12	60	Rocky Creek	Orange
7/26	60	Rocky Creek	Yellow	8/13	75	Watkins Mill	Yellow
7/27	65	Rocky Creek	Yellow	8/14	62	Richards Gebaur	Yellow
7/28	64	Watkins Mill	Orange	8/18	74	Heritage Park	Yellow
8/2	65	Rocky Creek	Yellow	8/19	71	Rocky Creek	Yellow
8/3	67D	Watkins Mill	Yellow	8/21	61	Richards Gebaur	Yellow
8/4	60	Heritage Park	Yellow	8/23	52	Liberty	Yellow
8/5	62	Heritage Park	Green	8/26	68	Rocky Creek	Green
8/6	53	Rocky Creek	Yellow	8/27	63	Rocky Creek	Yellow
8/7	62	Rocky Creek	Yellow	8/28	71	Rocky Creek	Yellow
8/8	70	Rocky Creek	Yellow	9/5	63	Liberty, Rocky Creek, Richards Gebaur	Green
8/9	69	Rocky Creek	Yellow	9/6	67	Liberty	Yellow
8/10	63D	Rocky Creek	Yellow				

*The 2010 eight-hour monitored ozone readings have not been quality assured and may contain errors. Readings in **bold** represent eight-hour peak concentrations above the 75 ppb standard.

Table 3. Eight-Hour Ozone Exceedances
April 1 – September 13, 2010

Daily Maximum 8-Hour Value (ppb)								
Date	**Liberty**	**JFK**	**Rocky Creek**	**Richards-Gebauer**	**Watkins Mill**	**Heritage Park**	**Trimble***	**Leavenworth***
5/29								83
5/30			78				77	
6/25			79				82	
7/10			76					
8/11			76				88	
8/19							76	

*The Trimble and Leavenworth monitors are outside the maintenance area boundary but are used to verify SkyCast ozone forecasts due to their proximity to the boundary.

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Table 3 (on the previous page) lists area monitors that have recorded eight-hour peak values exceeding the 75 ppb standard and the dates on which the exceedances occurred.

Kansas City Ozone Design Values, 2005 - 2010

Table 4. Fourth-High Readings and Design Values, 2005-2010

	Fourth-High Eight-Hour Values						Design Values			
Missouri	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**05-07**	**06-08**	**07-09**	**08-10***
Liberty	88	93	81	66	72	70	87	**80**	73	69
Watkins Mill	79	91	73	69	74	73	81	**77**	72	72
Rocky Creek	87	87	89	69	72	76	87	**81**	**76**	72
Richards-Gebauer	81	78	72	66	64	67	77	72	67	65
Trimble	87	85	83	70	75	76	85	**79**	**76**	73
Kansas										
JFK (KCK)	79	81	73	63	62	58	77	72	66	61
Heritage Park	81	76	71	62	63	71	76	69	65	65
Leavenworth	78	74	80	64	63	70	77	72	69	65

*The 2010 eight-hour monitored ozone readings have not been quality assured and may contain errors. Readings in **bold** represent design values above the 75 ppb standard.

Compliance with the eight-hour ozone standard is based on the three-year average of the fourth-highest ozone reading from each monitor. Under the 2008 eight-hour standard, violations will occur when the three-year average is 76 ppb or higher. **Table 4** on bottom of the previous page shows the fourth-high eight-hour readings for 2005 – 2010, as well as the design values, or three-year averages, for 2005 through 2010.

Table 5. 2010 Fourth-High Values That Would Trigger a Violation Of the 75-ppb standard

Missouri	8-Hr Value (ppb)	Kansas	8-Hr Value (ppb)
Liberty	90	JFK (KCK)	103
Watkins Mill	85	Heritage Park	103
Rocky Creek	87	Leavenworth	101
Richards Gebauer	98		
Trimble	83		

For full rule text: http://www.kdheks.gov/bar/download/KS_AQ_REGS.pdf

K.A.R. 28-19-63 Automobile and light duty truck surface coating
K.A.R. 28-19-64 Bulk Gasoline Terminals (BGT)
K.A.R. 28-19-65 Volatile Organic Compounds (VOC) Liquid Storage in a Permanent Fixed Roof Type Tanks
K.A.R. 28-19-66 Volatile Organic Compounds (VOC) Liquid Storage in External Floating Roof Tanks
K.A.R. 28-19-67 Petroleum Refineries
K.A.R. 28-19-68 Leaks from Petroleum Refinery Equipment
K.A.R. 28-19-69 Cutback Asphalt
K.A.R. 28-19-70 Leaks from Gasoline Delivery Vessels and Vapor Collection Systems
K.A.R. 28-19-71 Printing Operations
K.A.R. 28-19-72 Gas Dispensing Facilities (GDF)
K.A.R. 28-19-73 Surface Coating of Miscellaneous Metal Parts and Products and Metal Furniture
K.A.R. 28-19-74 Wool Fiberglass Manufacturing
K.A.R. 28-19-76 Lithography Printing Operations
K.A.R. 28-19-77 Chemical Processing facilities that Operate Alcohol plants or Liquid Detergent Plants
K.A.R. 28-19-712 Idle Reduction Rule
K.A.R. 28-19-714 Solvent Metal Cleaning
K.A.R. 28-19-717 Control of volatile organic compounds (VOC) emissions from commercial bakery ovens in Johnson and Wyandotte Counties.
K.**A.R. 28-19-719** Fuel Volatility

Volatile Organic Compound Emission Regulations

K.A.R. 28-19-63
Automobile and light duty truck surface coating

This rule applies to automobile or light duty truck top coat and primer surface coating operations and all other automobile or light duty truck surface coating application systems at those facilities which have a VOC potential contaminant emission rate equal to or greater than three tons per year.

For the purposes of this rule, surface coating operation means the combination of all coating application systems which apply the specific class of surface coatings (top coat or primer). The VOC potential contaminant emission rate of a facility shall be determined by the maximum hourly production rate of each coating application and the assumption that the facility operates 24 hours per day, 365 days per year provided that the facility's operating hours are not otherwise limited by federally enforceable permit conditions.

K.A.R. 28-19-64
Bulk Gasoline Terminals (BGT)

No owner or operator of any bulk gasoline terminal (BGT) with a gasoline throughput of 20,000 gallons or greater daily shall cause or permit loading of gasoline into any gasoline delivery vessel (GDV) from any loading rack unless it meets one of the exceptions listed in this rule (ex: the loading rack includes a vapor collection system and a vapor processing system or an equivalent vapor control system approved by the director; and the GDV driver provides documentation showing the GDV owner or operator has complied with *K.A.R. 28-19-70 Leaks from Gasoline Delivery Vessels and Vapor Collection Systems*).

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VOC emissions to atmosphere shall be limited to 0.67 pound per 1,000 gallons of gasoline loaded.

K.A.R. 28-19-65
Volatile Organic Compounds (VOC) Liquid Storage in a Permanent Fixed Roof Type Tanks

This rule restricts any person from placing, storing or holding more than 40,000 gallons of any VOC liquid having a vapor pressure of 1.5 pounds per square inch (psi) or greater under in any stationary tank, reservoir or other container. This does not apply if the tank, reservoir, or other container is a pressure tank capable of maintaining working pressures sufficient to prevent vapor loss to the atmosphere or is designed and equipped with an approved vapor loss control device.

K.A.R. 28-19-66
Volatile Organic Compounds (VOC) Liquid Storage in External Floating Roof Tanks

This rule restricts any person from placing, storing or holding more than 40,000 gallons of any VOC liquid having a vapor pressure of 1.5 pounds per square inch (psi) or greater under in any stationary tank, reservoir or other container. This does not apply if the container is equipped with an external floating roof having a primary seal system (secondary seals extending from the floating roof to the container may also be equipped it is meets one of the requirements in this rule).

K.A.R. 28-19-67
Petroleum Refineries

This regulation bans the use of any vacuum producing system at a petroleum refinery unless the vapor emission from the condensers, hot wells or accumulators of the system is reduced by:

- Piping the non-condensable vapors to a firebox or incinerator
- Compressing the vapors and adding them to the refinery fuel gas
- Other equipment or means of equal efficiency for purposes of air pollution control as may be approved by the department

It also restricts any person from the use of waste water (oil and water) separator at a petroleum refinery unless covers and seals approved by the department and are equipped with lids or seals that are in the closed position at all times except when in actual use. A process unit turnaround at a petroleum refinery should not be performed unless a detailed procedure for minimization of VOC emissions during process has been developed and approved by the department.

K.A.R. 28-19-68
Leaks from Petroleum Refinery Equipment

This rule requires that VOC concentration leaks exceeding 10,000 parts per million (ppm) from the following sources, be repaired within 15 days.

- Pump seals, compressor seals, seal oil, degassing vents, pipeline valves, flanges, and other connections, pressure relief devices, process drains, and open ended pipes

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It also outlines the procedure if leaks cannot be repaired within the 15 day timeframe and the method for monitoring leaks—weekly, quarterly, and annually.

K.A.R. 28-19-69
Cutback Asphalt

This regulation restricts the use or application of cutback asphalt for the purposes of paving, without the approval of the department; those seeking approval must submit a request. Emulsified asphalt shall be an acceptable substitute for cutback asphalt.

The use or application of cutback asphalt may be approved where the liquefied cutback asphalt is used to produce a plant-mix for sale and use outside the areas, for filling potholes on emergency road repair or, only as an asphalt prime coat or an asphalt seal coat or absorbent surfaces.

K.A.R. 28-19-70
Leaks from Gasoline Delivery Vessels and Vapor Collection Systems

This rule disallows any person from loading or permitting the loading of gasoline from any bulk gasoline terminal (BGT) loading rack into any gasoline delivery vessel (GDV) unless the BGT loading rack is equipped with a vapor collection system that is connected to a vapor processing system and unless this person complies with the requirements of this regulation.

K.A.R. 28-19-71
Printing Operations

The provisions of this regulation apply to all packaging rotogravure, publication rotogravure and flexographic printing facilities with potential contaminant emission rate of volatile organic compounds (VOC) equal to or more than 100 tons per year. The potential contaminant emission rate calculations may include federally enforceable permit restrictions.

An owner or operator of an affected facility may not operate, allow or permit the operation of the facility unless:

- The ink contains:
    - a volatile content of 25% or less by volume VOC and 75% or more by volume water (for a water borne ink)
- The owner or operator installs and operates a vapor processing system which uses a carbon absorber or an incinerator as a VOC emissions control device or other types of VOC emissions control devices may be used upon department approval. The vapor processing system shall provide an overall emissions reduction of at least:

    - Printing Rotogravure 75%
    - Packing Rotogravure 65%
    - Flexographic 60%

K.A.R. 28-19-72
Gas Dispensing Facilities (GDF)

This regulation limits owners or operators of gasoline dispensing facilities (GDF) or gasoline delivery vessels (GDV) from permitting the transfer of gasoline from any GDV into any

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stationary storage container with a capacity greater than 2,000 gallons unless such container is equipped with a submerged fill pipe and a vapor balance system properly installed and in good working order.

K.A.R. 28-19-73
Surface Coating of Miscellaneous Metal Parts and Products and Metal Furniture

The provisions of this regulation shall be applicable to miscellaneous metal parts and products and metal furniture coating application system at those facilities which have a VOC potential contaminant emission rate equal to or greater than three tons per year on a facility-wide basis. The VOC potential contaminant emission rate of a facility shall be determined by the maximum hourly production rate of each coating application and the assumption that the facility operates 24 hours per day, 365 days per year provided that the facility's operating hours are not otherwise limited by federally enforceable permit conditions.

This regulation is not applicable to automobiles and light duty trucks (see K.A.R. 29-19-63), metal cans, customized top coating of automobiles and trucks (if less than 35 vehicles per day are processed), and automobile refinishing. Each facility subject to this regulation shall remain subject so long as this regulation remains in effect or until the facility's VOC potential contaminant emission rate is demonstrated, to the satisfaction of the department, to be always less than three tons per year.

K.A.R. 28-19-74
Wool Fiberglass Manufacturing

This regulation applies to wool fiberglass manufacturing facilities that have a VOC potential contaminant emission rate equal to or greater than 100 tons per year on a facility-wide basis. The VOC potential contaminant emission rate of a facility shall be determined by the maximum hourly production rate of each coating application and the assumption that the facility operates 24 hours per day, 365 days per year provided that the facility's operating hours are not otherwise limited by federally enforceable permit conditions.

No owner or operator of a wool fiberglass manufacturing line shall cause or allow VOC to be discharged into the atmosphere in excess of five pounds of VOC per ton of glass pulled.

K.A.R. 28-19-76
Lithography Printing Operations

The provisions of this regulation apply to all lithography printing facilities with a potential contaminant emission rate of VOCs equal to or more than 100 tons per year. It does not apply to printing on fabric, metal or plastic, sheet fed lithographic presses with cylinder widths of 26 inches or less or web lithographic presses with cylinder widths of 18 inches or less.

K.A.R. 28-19-77
Chemical Processing facilities that Operate Alcohol plants or Liquid Detergent Plants

This regulation applies to any facility that uses, produces or stores ethanol or methanol, or has a volatile organic compound potential contaminant emission rate of 100 tons per year or greater. For purposes of this regulation, the potential contaminant emission rate shall be

determined as the sum of all potential VOC emissions from point (*process tanks, alcohol storage tanks, wastewater vents, wastewater VOC removal devices*) and fugitive sources (*all sources of VOC emissions other than point sources, including leaking valves, compressors, pumps, gauges, open-ended lines, and sample flanges*). Any VOCs present in the wastewater stream are also included as 100% of which are presumed to be emitted to the atmosphere.

Volatile Organic Compound Emission Regulations (RACT)

K.A.R. 28-19-712
Idle Reduction Rule (EFFECTIVE JUNE 25, 2010)

The Idle Reduction rule applies in Johnson and Wyandotte counties to any person who owns or operates any heavy duty diesel vehicle that is also a commercial vehicle, institutional vehicle, or public vehicle at any load or unload location. Vehicles within the provisions of this regulation may not idle for more than five minutes in any 60 minute period or longer than 30 minutes in any 60-minute period while waiting to load or unload.

For exemptions to this rule, see **28-19-712d Exemptions.**

K.A.R. 28-19-714
Solvent Metal Cleaning

The provisions of this regulation shall apply to cold cleaning, open-top vapor degreasing, and conveyorized degreasing operations located in Johnson and Wyandotte counties, and to the sale of cold cleaner solvents for use within either Johnson or Wyandotte County, or both. The regulation specifies definitions for terms used in the regulation (air cleaning system, air tight cleaning system, aqueous solvent, electronic component, and medical device) and requirements for meeting the standards.

K.A.R. 28-19-717
Control of volatile organic compounds (VOC) emissions from commercial bakery ovens in Johnson and Wyandotte Counties.

This regulation applies to new, modified, or existing commercial bakery oven facilities operating in either Johnson or Wyandotte county and have bakery ovens with a total potential for volatile organic compounds (VOCs) equal to or greater than 100 tons per year. For calculating the potential emissions, it is assumed that each facility production line is operating 24 hours a day, 365 days a year at maximum capacity and is producing with the highest level of VOC emissions of those products that is may produce.

Each commercial bakery over facility subject to this regulation is required to install and operate VOC emission control devices for each bakery oven to achieve at least 80% total removal efficiency on the combined VOC emissions of all baking ovens.

K.A.R. 28-19-719
Fuel Volatility

This rules applies to any person that dispenses, supplies, exchanges in trade, offers for sale of supply, sells or stores gasoline, or that sells, supplies, distributes, or provides gasoline to be sold within Johnson or Wyandotte County.

17-9

From June 1st though September 15th of each year, no person shall dispense, supply, exchange in trade, offer for sale or supply, sell, or store gasoline that is to be used as a fuel for motor vehicles in either Johnson or Wyandotte County and has a Reid Vapor Pressure (RVP) greater than these levels:

- 7 pounds per square inch (psi); or
- 8.0 psi for gasoline containing ethanol in an amount to at least 9% by volume but not more than 10% by volume

19-10

For the Full Text: http://www.sos.mo.gov/adrules/csr/current/10csr/10c10-2.pdf

10 CSR 10-2.040 Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating
10 CSR 10-2.070 Restriction of Emission of Odors
10 CSR 10-2.205 Control of Emissions from Aerospace Manufacture and Rework Facilities
10 CSR 10-2.210 Control of Emissions from Solvent Metal Cleaning
10 CSR 10-2.215 Control of Emissions from Solvent Cleanup Operations
10 CSR 10-2.220 Liquefied Cutback Asphalt Paving Restricted
10 CSR 10-2.230 Control of Emissions from Industrial Surface Coating Operations
10 CSR 10-2.260 Control of Petroleum Liquid Storage, Loading and Transfer
10 CSR 10-2.290 Control of Emissions from Rotogravure and Flexographic Printing Facilities
10 CSR 10-2.300 Control of Emissions from the Manufacturing of Paints, Varnishes, Lacquers, Enamels and Other Allied Surface Coating Products
10 CSR 10-2.310 Control of Emissions from the Application of Automotive Underbody Deadeners
10 CSR 10-2.320 Control of Emissions from Production of Pesticides and Herbicides
10 CSR 10-2.330 Control of Gasoline Reid Vapor Pressure (RVP)
10 CSR 10-2.340 Control of Emissions from Lithographic Printing Installations
10 CSR 10-2.360 Control of Emissions from Bakery Ovens
10 CSR 10-2.385 Control of Heavy Duty Diesel Vehicle Idling Emissions

10 CSR 10-2.040
Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating

This rule tightens the emission limitations on indirect heating sources, differentiates between new and existing sources and changes the method of compliance determination. It applies to installations that have indirect heating sources. The heat content of solid fuels and liquid hydrocarbon fuels shall be determined as specified in *10 CSR 10-6.040 Reference Methods*.

For the purpose of this rule only, 'existing' means any source which was in being, installed or under construction on February 15, 1979, except that if any source subsequently is altered, repaired or rebuilt at a cost of thirty percent (30%) or more of its replacement cost, exclusive of routine maintenance, it shall no longer be existing, but shall be considered as new; and 'new' means any source which is not an existing source.

Maximum allowable particulate Emission Rate (ER) for an installation of existing indirect heating sources with a heat input rate of:

- Less than ten million BTUs per hour shall be 0.60 pounds per million BTUs of heat input.
- Equal to or Greater than ten million BTUs per hour and less than or equal to five thousand million BTUs per hour shall be determined by the following equation: $E = 1.09(Q)^{-0.259}$
- Greater than five thousand million BTUs per hour shall be 0.12 pounds per million BTUs of heat input.

10 CSR 10-2.070
Restriction of Emission of Odors

17-11

This rule restricts the emission of excessive odorous matter, stating that no person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that the odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than fifteen minutes apart within the period of one hour.

The provisions of this rule shall not apply to the emission of odorous matter from the raising and harvesting of crops nor from the feeding, breeding and management of livestock or domestic animals or fowl except as described in *Section 4* of this rule.

10 CSR 10-2.205
Control of Emissions from Aerospace Manufacture and Rework Facilities

This rule will reduce volatile organic compound (VOC) emissions from aerospace manufacture and/or rework facilities located in the Kansas City ozone maintenance area. It is required to comply with the Clean Air Act Amendments of 1990. The rule applies to all aerospace manufacturing and/or rework facilities with potential VOC emissions exceeding 25 tons per year. It also contains definitions of individual specialty coatings and solvents and general provisions outlining limitations of use of those components.

10 CSR 10-2.210
Control of Emissions from Solvent Metal Cleaning

This regulation specifies equipment, operating procedures and training requirements for the reduction of hydrocarbon emissions from solvent metal cleaning operations.

This rule shall apply to all installations which emit volatile organic compounds (VOC) from solvent metal cleaning or degreasing operations and applies to any process that uses waterless solvents to clean and remove soils from metal parts including spray gun cleaners, cold cleaners with a solvent reservoir or tank, open-top vapor or degreasers or air-tight or airless cleaning systems. *For full list exemptions see the regulations.*

10 CSR 10-2.215
Control of Emissions from Solvent Cleanup Operations

This rule will reduce volatile organic compound (VOC) emissions from solvent cleanup operations in Clay, Jackson, and Platte Counties.

The rule applies to any person who performs or allows the performance of any cleaning operation involving the use of a VOC solvent or solvent solution. The provisions of this rule do not apply to any stationary source at which cleaning solvent VOCs are emitted at less than 500 pounds per day. *Any person performing any industrial cleaning operation must demonstrate a 30% reduction in plant-wide industrial VOC cleaning solvent emissions by May 1, 2003.*

10 CSR 10-2.220
Liquefied Cutback Asphalt Paving Restricted

17-17

This regulation restricts volatile organic compounds emissions from cutback asphalt paving operations in Clay, Jackson and Platte Counties, limiting the use or application of liquefied cutback asphalt in paving and maintenance operations on highways, roads, parking lots and driveways.

No person may cause or permit the use or application of liquefied cutback asphalts on highways, roads, parking lots and driveways during the months of April, May, June, July, August, September and October (see rule for exemptions).

10 CSR 10-2.230
Control of Emissions from Industrial Surface Coating Operations

This regulation restricts volatile organic compound (VOC) emissions from industrial surface coating operations in Clay, Jackson and Platte Counties.

It applies to any installation with an uncontrolled potential to emit greater than 6.8 kilograms per day (kg/day) or 2.7 tons per year of VOCs from industrial surface coating operations covered under this rule. This includes any installation which does not have an allowable VOC emission limit or legally enforceable state implementation plan revision and has uncontrolled potential emissions greater than or equal to 6.8 kg/day or 2.7 tons per year. The uncontrolled potential emit is the potential emissions plus the VOC removed by emission control devices.

10 CSR 10-2.260
Control of Petroleum Liquid Storage, Loading and Transfer

This rule restricts volatile organic compound emissions from the handling of petroleum liquids in three specific areas:

- Petroleum storage tanks with a capacity greater than forty thousand gallons
- Loading of gasoline into delivery vessels
- The transfer of gasoline from delivery vessels into stationary storage containers.

It is required in order to reduce hydrocarbon emissions that contribute to the formation of ozone, and applies in Clay, Jackson, and Platte counties.

10 CSR 10-2.290
Control of Emissions from Rotogravure and Flexographic Printing Facilities

This regulation restricts volatile organic compound emissions from rotogravure and flexographic printing facilities in Clay, Jackson and Platte Counties. It applies to installations with uncontrolled potential emissions equal to or greater than two hundred fifty kilograms (250 kg) per day or one hundred tons per year of VOCs from the combination of rotogravure and flexographic printing presses.

17-13

No owner or operator shall use or permit the use of any of the following printing presses unless they are equipped with a control device. The control device shall remove, destroy or prevent the emission of VOCs into the ambient air by at least the percentage indicated by weight of the uncontrolled VOC emissions on a daily basis.

- Flexographic (60%)
- Publication Rotogravure (75%)
- Other Rotogravure (65%)

10 CSR 10-2.300
Control of Emissions from the Manufacturing of Paints, Varnishes, Lacquers, Enamels and Other Allied Surface Coating Products

This regulation specifies operating equipment requirements and operating procedures for the reduction of volatile organic compounds from the manufacture of paints, varnishes, lacquers, enamels and other allied surface coating products in Clay, Jackson and Platte Counties.

It applies to those installations which have the uncontrolled potential to emit more than two hundred fifty kilograms per day (250 kg/day) or one hundred tons per year of VOCs from the manufacture of paints, varnishes, lacquers, enamels and other allied surface coating products.

10 CSR 10-2.310
Control of Emissions from the Application of Automotive Underbody Deadeners

This regulation restricts emissions of volatile organic compounds from the application of automotive underbody deadeners in Clay, Platte and Jackson Counties. It applies to all installations which have the uncontrolled potential to emit more than one hundred tons per year or two hundred fifty kilograms per day (250 kg/day) of VOCs from the application of automotive underbody deadeners. The emission limit shall be based on a daily weighted average of all deadeners delivered to the coating applicator.

10 CSR 10-2.320
Control of Emissions from Production of Pesticides and Herbicides

This regulation restricts emissions of volatile organic compounds from the production of pesticides and herbicides. It applies in Clay, Jackson, and Platte Counties to any pesticide or herbicide manufacturing installation with an uncontrolled potential to emit equal to or greater than two hundred fifty kilograms per day (250 kg/day) or one hundred tons per year of VOC.

10 CSR 10-2.330
Control of Gasoline Reid Vapor Pressure (RVP)

This rule limits the volatility of motor vehicle gasoline in Clay, Platte, and Jackson Counties. By reducing the amount of gasoline that evaporates into the atmosphere, VOC emissions

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will be reduced, resulting in a decrease of ambient ozone levels as well. It restricts any person from selling, dispensing, supplying, offering for sale, transporting or exchanging in trade for use gasoline intended for final use in areas that exceeds the Reid Vapor Pressure (RVP) limit of 7.0 pounds per square inch (psi) or less.

Gasoline blends having at least 9% (but not more than 10%) ethyl alcohol by volume of the blended mixture shall have an RVP limit of one pound per square inch (psi) higher than the limit contained in subsection

10 CSR 10-2.340
Control of Emissions from Lithographic Printing Installations

This regulation restricts volatile organic compound emissions from lithographic printing facilities in Clay, Jackson and Platte Counties and applies to installations that have actual VOC emissions for a known number of crewed hours, increased by the amount by weight of VOCs whose emission into the atmosphere is prevented by the use of air pollution control devices and extrapolated to eight thousand seven hundred sixty (8,760) hours per year equal to or greater than one hundred (100) tons per year from offset lithographic printing presses.

10 CSR 10-2.360
Control of Emissions from Bakery Ovens

This regulation restricts the emission of volatile organic compounds from bakery ovens at large commercial bakeries in Clay, Platte and Jackson Counties.

The rule applies to existing commercial bakeries whose potential VOC emissions are greater than one hundred tons per year and new or modified commercial bakeries whose potential emissions of VOCs is greater than one hundred tons per year upon start-up. Existing or new commercial bakeries are required to install VOC emissions control device(s) in order to achieve at least ninety percent (90%) destruction and capture efficiencies or achieve at least eighty percent (80%) total removal efficiency on the combined emissions of all baking ovens.

10 CSR 10-2.385
Control of Heavy Duty Diesel Vehicle Idling Emissions

The purpose of this rule is to implement restrictions on the idling of heavy duty diesel vehicles in the Kansas City Ozone Maintenance Area. The rule requires that all commercial, public, and institutional diesel vehicles with a Gross Vehicle Weight Rating (GVWR) of over 10,000 in the affected counties limit their idling to 30 minutes while waiting to load or unload at a location. Passenger load and unload locations are prohibited from causing or allowing vehicles covered by these regulations to idle for more than five minutes in any 60 minute period. Vehicles are also limited from idling for more the five minutes in any 60 minute period when not waiting to load or unload, unless the vehicle meets one of the exemptions.

17-15

This regulation applies throughout Clay, Platte, and Jackson Counties to owners or operators of commercial, public and institutional heavy duty diesel vehicles that are designed to operate on public streets and highways. For a full list of exemptions see the regulations.

17-16

SIERRA CLUB
FOUNDED 1892

SIERRA CLUB, KANSAS CHAPTER
9844 GEORGIA, KANSAS CITY, KS 66109

STATEMENT OF CHRIS CARDINAL, LEGISLATIVE DIRECTOR
SEPTEMBER 9TH, 2010
BEFORE THE JOINT COMMITTEE ON ENERGY AND ENVIRONMENTAL POLICY

KANSAS SMOKE MANAGEMENT PLAN

Chairperson McGinn, and honorable members of the committee:

My name is Chris Cardinal, and I am here on behalf of the Kansas Chapter of the Sierra Club, the nation's largest and oldest grassroots environmental organization.

As you know the concentrated burning of range land in the Flint Hills has caused a number of ozone exceedances in recent years at monitors in the major urban areas of Kansas, including Topeka, Kansas City, and Wichita. It is our understanding that Region 7 EPA turned down a request by KDHE to "flag the data" related to some of these exceedances so that these incidences would not count toward a violation of the ozone standard. The EPA's decision was based on the fact that KDHE had not developed a Smoke Management Plan (SMP). So the current effort appears to be mainly about laying the groundwork for the next request by KDHE for an exemption for the Flint Hills burning when it causes unhealthy air in our state.

At the first pubic meeting of the Smoke Management Advisory Committee, a representative from the EPA said that one basis for flagging the data might be that the burning is necessary to "preserve the prairie." The problem is that the wholesale burning of the Flint Hills is also linked to the decline of the prairie chicken and other grassland birds. Thus it is the position of the Sierra Club that the Smoke Management Plan must address the scale and frequency of the burning in a manner that eliminates destruction of grassland bird habitat. Otherwise, in their next request to flag the data, KDHE cannot make the claim on behalf of Flint Hills landowners that the burning is necessary to "preserve the prairie."

So far, after two public meetings of the Smoke Management Committee, we are concerned that the committee is not adequately addressing this part of the issue. It will continue to be our position that one cannot be "preserving the prairie" while at the same time engaging in practices that are destroying habitat and thereby inhibiting the reproduction of the prairie chickens and other grassland birds.

Fire In the Kansas Flint Hills

Clenton Owensby
Kansas State University

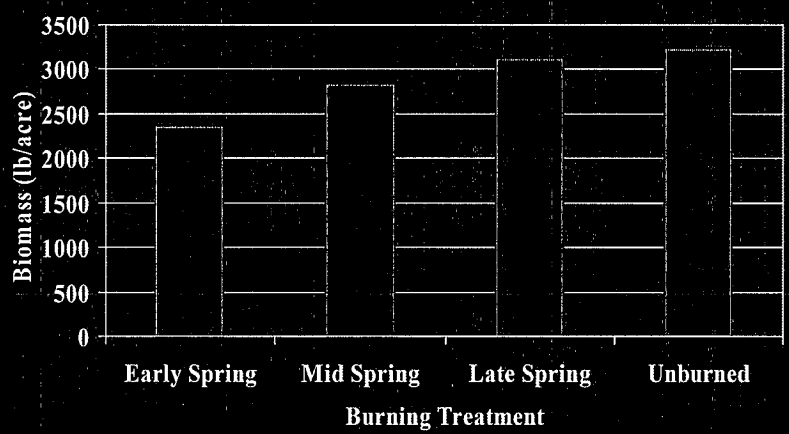
Reasons for Burning

- Maintenance of Tallgrass Prairie plant communities
- Control woody plant invasion
- Increase livestock gain
- Improve grazing distribution
- Improve wildlife habitat

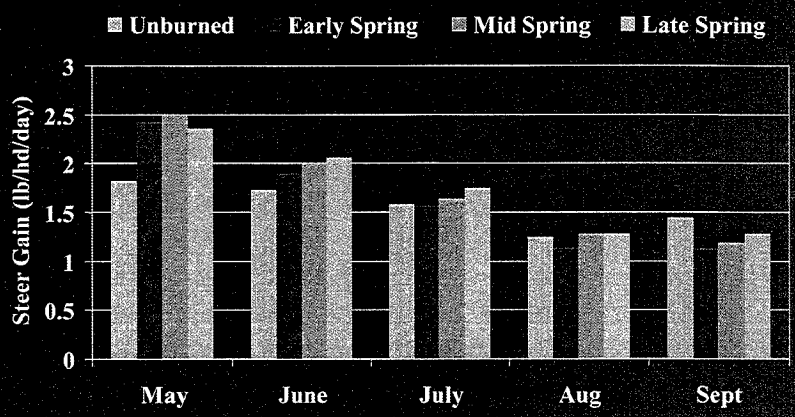
Time of Burning

- Highest forage yield with late spring burning
- Highest livestock gain with late spring burning
- Best woody plant control with late spring burning

Date of Burning Effects on Grazed Range

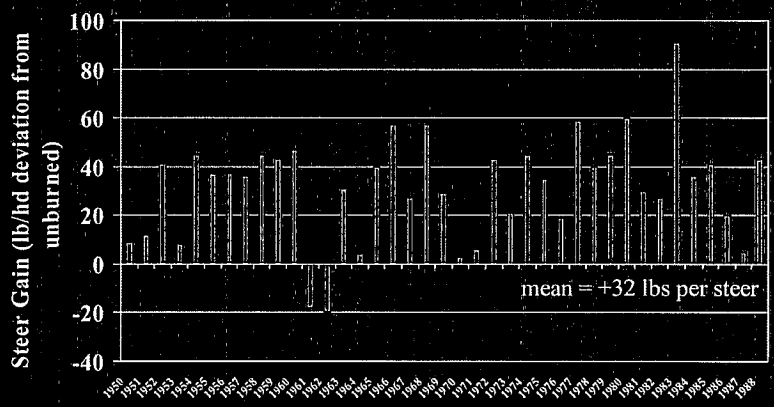


Impact of Time of Burning on Steer Gain

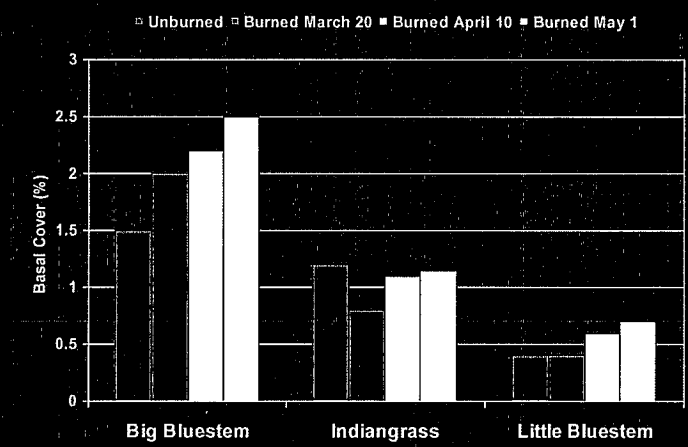


Effect of Time of Burning on Total Gain

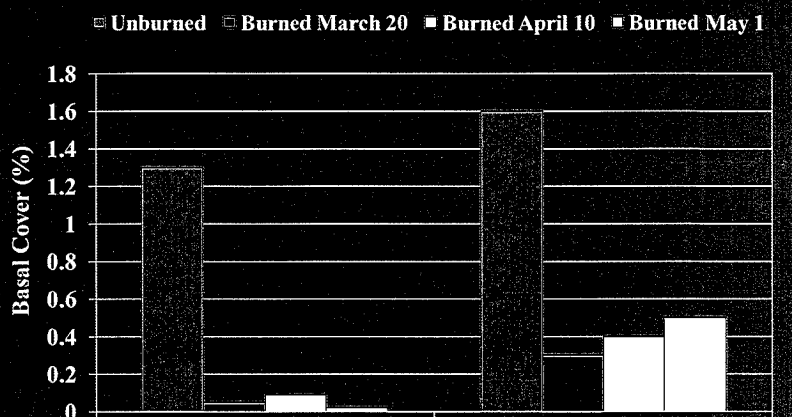
Steer Gains - Late Spring Burned minus Unburned



Effects of Date of Burning on Basal Cover



Fire Effects on Cool-Season Grasses

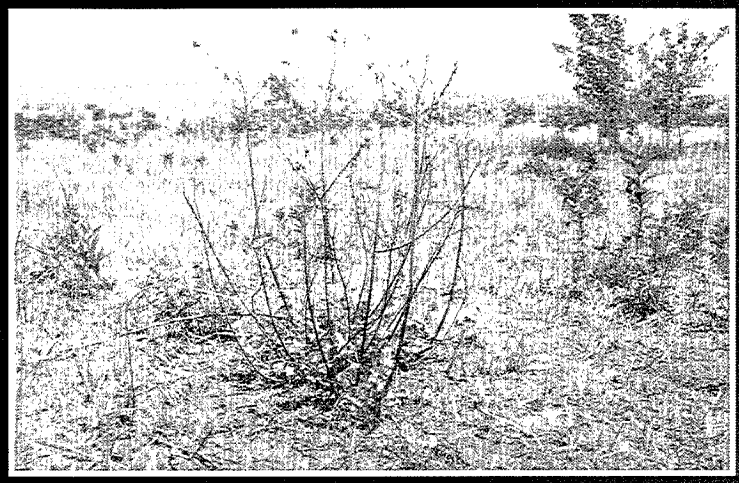


Fenceline Between Burned and Unburned

Partial Burning of Dogwood

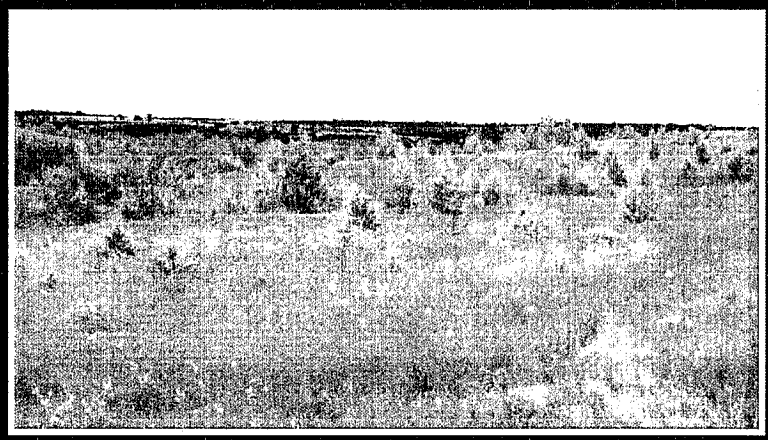
Burned Buckbrush

Resprouting Following Burning

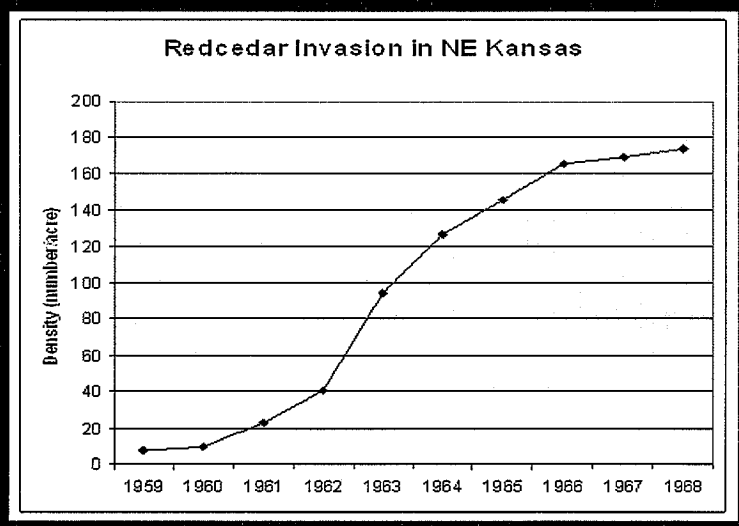


Fenceline - Redcedar and Grassland

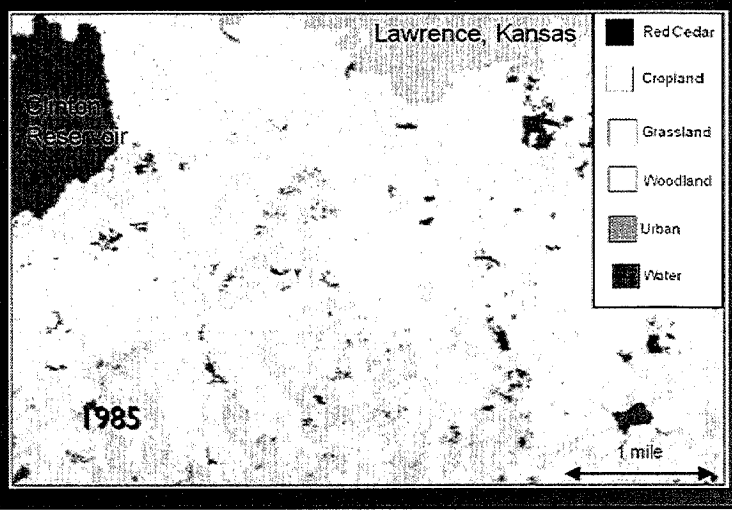
Redcedar Kill from Fire



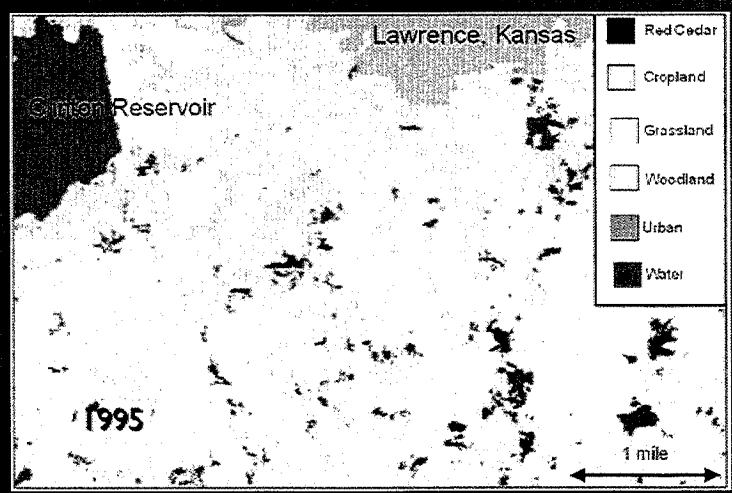
Redcedar Invasion Rate



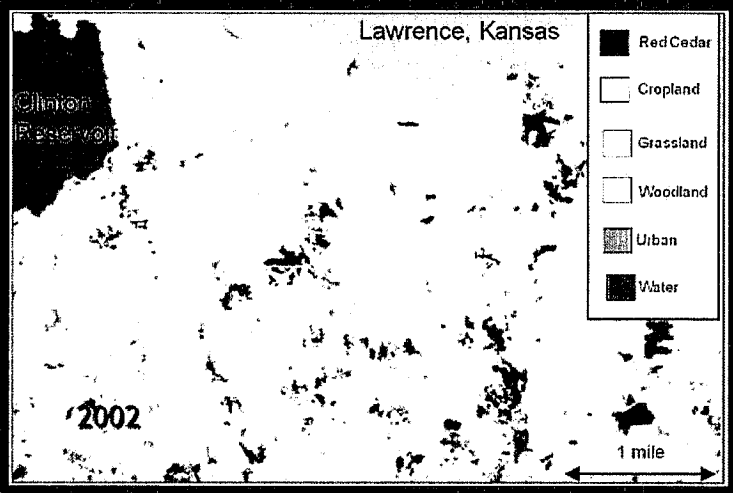
Redcedar Satellite Image



Redcedar Satellite Image



Redcedar Satellite Image



Economic and Ecological Impacts

- Burning in the Flint Hills has an economic impact of 35-40 million dollars annually through increased livestock gain and weed and brush control
- Absence of fire on a frequent basis will lead to a loss of the Tallgrass prairie ecosystem

Current Burning Regulations

- Notification of local fire control authorities before commencing the burn
- Burning operations shall not create a traffic safety hazard
- Burning operations shall not create an airport safety hazard
- Burning is to be supervised until the fire is extinguished

Additional County Regulations

- Inform immediate neighbors as to the intent to burn and when the fire has been extinguished
- Local fire control authority be notified when the burn has been completed
- Persons wishing to burn obtain a burning permit on an annual basis

Additional County Regulations

- Burning restricted to certain wind speeds, typically with a minimum of 5 mph and a maximum of 15-20 mph
- Reserve the right to ban burning at any time.

Factors Impacting When Ranchers Burn

- North/South Location in Kansas
- State and County Regulations
- Weather
  - Wind Direction and Speed
  - Rain
- Smoke management Plan????

Mike Collinge
Rancher from Hamilton, KS in Greenwood County

My wife and I own or manage approximately 20,000 acres of grassland. We have 44 different landowners who expect us to take care of their grass in a manner that keeps it a sustainable tallgrass prairie ecosystem. Fire is, by far, the most valuable tool we have to keep the Flint Hills a tallgrass prairie. Along with burning the acreage we are responsible for, we also help burn 10-18,000 acres with our neighbors, depending on the year.

We do not burn just to make the ground black. We do it for several reasons. The month of April is the time we can accomplish most of the goals we have when we burn. That, however, presents some real challenges. We feel fortunate if we can safely and effectively burn 15-20 days out of the 30. Public safety is our top priority, but we have many other variables to consider. One of these variables is the weather. We have to take into consideration the temperature and humidity as well as the wind speed and direction (very important). We have to coordinate schedules with neighbors. We consider the direction of the smoke and whether it will travel toward highways or towns. We also take into consideration if Mrs. Cummins has her washed clothes drying on the clothesline or if Mrs. Beal's grandkids, one of which has asthma, are coming for the weekend. We now have to work at keeping the ozone monitors from going off in Kansas City and Wichita. There is also some real pressure to get everything burned as it can easily be a $10-$20 per acre difference between the pastures that did get burned and the ones that did not.

I am a member of the smoke management plan sub committee that has been meeting frequently this summer. In my opinion, up to this point, KDHE has done an excellent job coordinating the smoke management plan. The representatives from Wichita, Kansas City, and Kansas State have really helped us work on compromises that we should all be able to live with. Thanks for letting me appear before you.
I could answer a few questions if you would like, now or later.

K-State Research and Extension
Greenwood County
Courthouse
311 N. Main
Eureka, KS 67045-1321
620-583-7455
http://www.oznet.ksu.edu/greenwood

September 9, 2010

Greenwood County, Kansas

With approximately 500,000 acres of tallgrass prairie, Greenwood County ranks in the top 2 counties of the state in terms of acres of grass. The county has the largest acreage of prescribed fire each year (normally).

It's estimated that over 60% of the Greenwood County grassland acres are burned at least once every three years, with most of these acres burned annually, except during drought periods.

The county has from 25 to 30 thousand beef cows with calves, with an estimated value of over $79 million.

An estimated 75,000 head of stocker cattle graze in the county each summer, valued at over $60 million.

Cattle grazing grass following a prescribed fire will gain a conservative estimate of 25 pounds more than if grazing grass not burned.

Greenwood County Extension has sponsored 5 prescribed fire schools in the last 6 years, with an estimated average attendance of 30.

Jeff Davidson
Greenwood County Extension Agent
Agriculture & Natural Resources
jdavidso@ksu.edu
cell 620-583-4437

Greenwood County
Kansas State University Agricultural Experiment Station and Cooperative Extension Service
K-State, County Extension Councils, Extension Districts, and U.S. Department of Agriculture Cooperating.
K-State Research and Extension is an equal opportunity provider and employer.

CITY OF WICHITA

TESTIMONY

JOINT COMMITTEE ON ENERGY AND ENVIRONMENTAL POLICY

Concerns about air quality standards and verifiable local data

Sept. 9, 2010

Air quality issues continue to be a major concern for the City of Wichita and the surrounding region. That concern is heightened by the prospects of more stringent standards enforced by the federal Environmental Protection Agency (EPA) regarding the presence of ground level ozone.

The current standard for "attainment" is .075 ppm. EPA is expected to lower that minimum to .070 or less by October.

Our community has been precariously close to the existing "non-attainment" level throughout this summer. In response, the City of Wichita has led an informational campaign to change local practices to minimize the creation of ozone.

Falling out of attainment would have dramatic negative economic consequences, requiring corrective action by local business, industry and government. Failure to take corrective action carries additional consequences, including the potential loss of federal transportation funding.

The City of Wichita places a high value on the environmental quality of our community. Clean air and clean water are among our highest priorities and we have aggressively pursued strategies that preserve those environmental elements.

The prospects of non-attainment are extremely troubling. The City of Wichita acknowledges the importance of a healthy environment, but also must assure its citizens that regulatory impositions are justified and appropriate.

To that end, the City of Wichita is supportive of efforts by the state government, including the Kansas Legislature, to ensure a reasonable and appropriate response to clean air issues. The causal relationship between a particular ozone measurement and the incidence of respiratory distress among the affected population needs to be clearly identified.

There is no doubt that ground level ozone is a health hazard. However, the specific impact of a specific measurement level must be substantiated before a community is asked to make the economic compromises required of a "non-attainment" designation.

The position of the City of Wichita mirrors the concerns expressed in the Kansas League of Municipalities Statement of Municipal Policy: **State and federal environmental regulations should be based on sound science and technology and should not be imposed without a cost/benefit analysis.**

The City of Wichita presented testimony to the 2010 Kansas Legislature in response to concerns about range burning in the Flint Hills and its impact on local air quality. We explained our precarious situation with regard to the EPA's National Ambient Air Quality Standard for ozone.

Any increase in emissions that drift into the Wichita area such as what happened in April of 2009 from wildfires and agricultural burning will further degrade our quality of life and

(OVER)

CITY OF WICHITA

It is well known that the Wichita MSA is not entirely responsible for the ozone measured by local air monitors. Ozone is transported from areas in Oklahoma and other states as well from the Flint Hills burning. A special exemption for the Flint Hills will not alleviate ozone issues that threaten our part of the state and community.

EPA has made it abundantly clear that the only solution to our continued problem with agricultural burning is to develop and implement a smoke management plan. An effective smoke management plan must be formulated with input from all affected parties, and the City of Wichita has expressed interest in participating in that process.

In support of those practices, the City of Wichita is working closely with the U.S. Environmental Protection Agency (EPA), state legislators, the Kansas Department of Health and Environment, other state agencies and universities, the Kansas Livestock Association, the Kansas Farm Bureau and others to develop a plan that can be beneficial to all parties.

TESTIMONY PROVIDED TO THE KANSAS STATE SENATE JOINT COMMITTEE ON ENERGY AND ENVIRONMENTAL POLICY CONCERNING THE FLINT HILLS SMOKE MANAGEMENT PLAN

John S. Neuberger, DrPH, MPH, MBA
Professor
Department of Preventive Medicine and Public Health
University of Kansas School of Medicine
MS 1008, 3901 Rainbow Boulevard
Kansas City, KS 66160

September 9, 2010

Madame Chair and Members of the Kansas Senate Joint Committee on Energy and Environmental Policy:

I appreciate the opportunity to provide individual written testimony concerning the annual burning conducted in the Flint Hills. Unfortunately, my schedule is such that I do not have the time to travel to Topeka to testify.

One potential health effect resulting from widespread burning of grass and brush in the Flint Hills is childhood asthma. Consequently, if the current method of annual burning in the Flint Hills is allowed to continue for another year, a study of childhood asthma rates should be conducted in 2011. Such a study would include an appropriate time frame in urban and rural areas impacted by the resultant air pollution (fine particulates, ozone, and ozone precursors).

Thank you.

Sincerely,

Dr. Neuberger

23-2

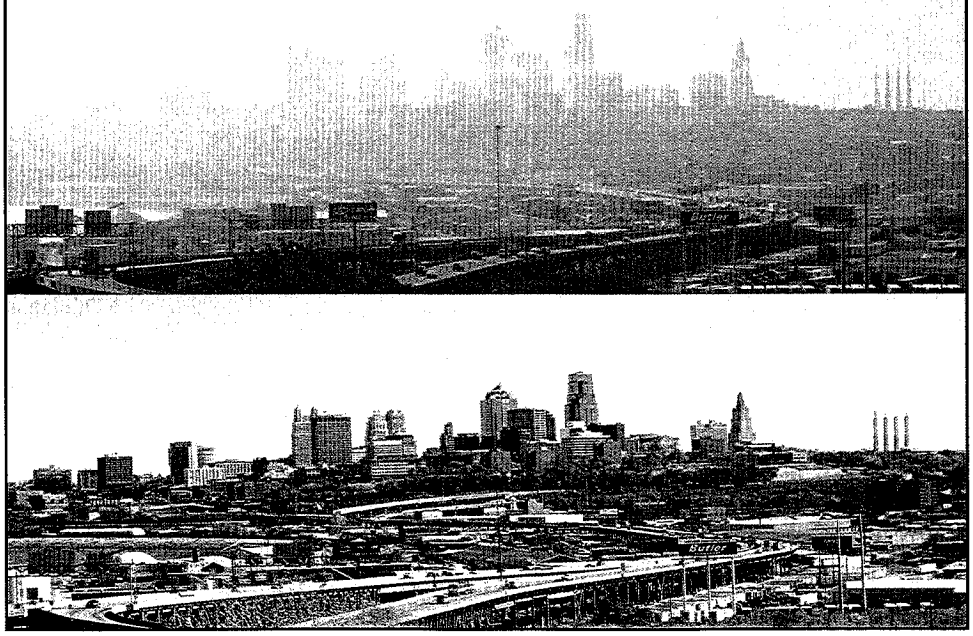
Health Effects of Ozone Pollution

Senate Natural Resources Committee

March 4, 2010

Thomas Gross, Bureau of Air
Kansas Department of Health and Environment

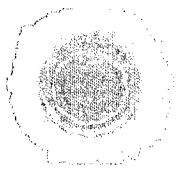
Kansas City on bad and good air quality days



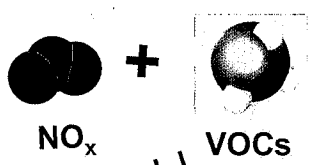
JOINT COMMITTEE ON ENERGY AND ENVIRONMENTAL POLICY
DATE: 9/9/10
ATTACHMENT 24-1

Overview

- Ozone formation
- Ozone standard history
- Ozone health effects
- Establishing and revising air pollutant standards
- Air pollutant standard benefits and costs
- Health studies associated with establishing the ozone standard



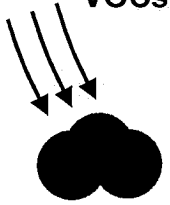
Ground level ozone is formed through chemical reactions in the atmosphere



NO_x + VOCs

- Fires
- Solvents
- Vegetation
- Vehicle Exhaust & Evaporation
- Industrial Processes

- Power plants
- Fossil Fuel Burning
- Vehicle exhaust



(UV sunlight + Heat + NO_x + VOCs $\longrightarrow$ O_3)

Ozone (O_3)

Ozone Standard History

- Ozone NAAQS originally established in 1971
  - 1-hour level of 0.08 ppm
- Revised in 1979
  - 1-hour level of 0.12 ppm
- Revised in 1997
  - 8-hour standard of 0.08 ppm
- Revised in 2008
  - 8-hour standard of 0.075 ppm
- Proposed Revision in 2010
  - 8-hour ozone standard in the range of 0.060 - 0.070 ppm
  - Distinct cumulative, seasonal secondary standard at a level in the range of 7-15 ppm-hours

Ozone and Health

- Breathing ozone can:
  - Reduce lung function, making it difficult for people to breathe as deeply and vigorously as normal,
  - Irritate the airways, causing coughing, sore or scratchy throat, pain when taking a deep breath and shortness of breath,
  - Inflame and damage the airways,
  - Increase frequency of asthma attacks,
  - Increase susceptibility to respiratory infection, and
  - Aggravate chronic lung diseases such as asthma, emphysema and bronchitis.

Ozone and Health

- These effects can lead to:
  - Increased medication use among asthmatics,
  - More frequent doctors visits,
  - School absences,
  - Increased emergency room visits and hospital admissions, and
  - Increased risk of premature death in people with heart and lung disease

Ozone and Health

- At-risk groups include:
  - People with lung disease such as asthma or chronic obstructive pulmonary disease (COPD)
  - Children
  - Older adults
  - People who are more likely to be exposed, such as people who are active outdoors, including children and outdoor workers

Air pollution health effects

Respiratory:

Coughing, wheezing, reduced lung function

Reduced resistance to infection

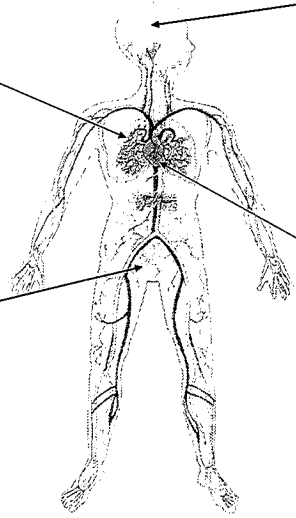
Exacerbation of asthma, COPD

Lung Cancer and Respiratory Mortality

Reproductive:

Low birth weight

Potential for preterm births and intrauterine growth retardation



Central Nervous:

Cerebrovascular impairment

Stroke

Cardiovascular:

Systemic inflammation

Autonomic system disorders

Atherosclerosis

Myocardial Infarctions

Cardiovascular Mortality

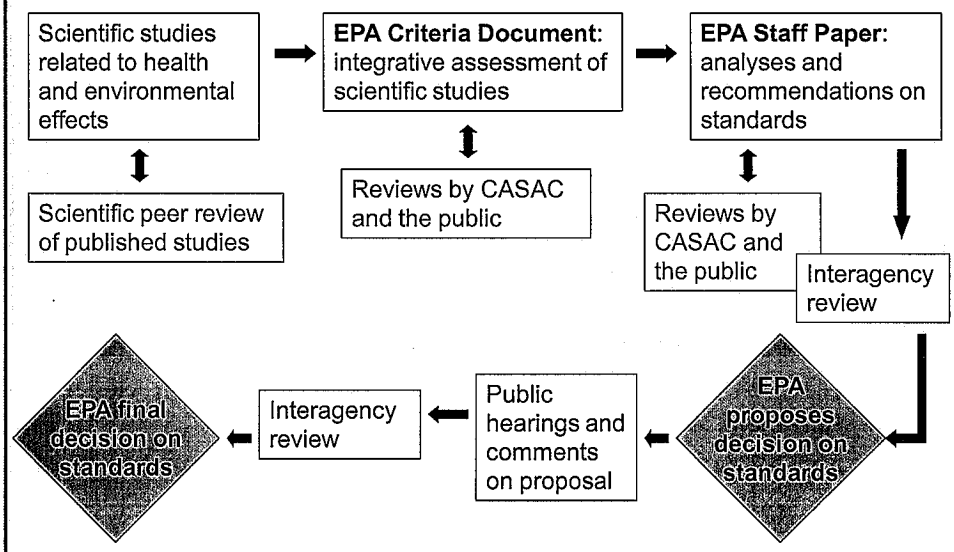
Establishing Ozone Standard Regulations

- **Section 109 of the Clean Air Act requires EPA to set national ambient air quality standards (NAAQS) for pollutants harmful to public health and the environment.**
  - There are two types of NAAQS:
    - *Primary standards* protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly.
    - *Secondary standards* protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings.
  - The EPA has established NAAQS for six principal pollutants
    - Ground-level ozone (smog)
    - Carbon monoxide
    - Nitrogen dioxide
    - Particulate matter
    - Lead
    - Sulfur dioxide

Revisions to the NAAQS

- The Clean Air Act requires EPA to review each pollutant ***every 5 years,*** and obtain advice from the Clean Air Scientific Advisory Committee (CASAC).
  - The EPA Administrator is not required to follow the recommendations of the CASAC
- Different considerations apply to setting NAAQS than to achieving them:
  - Setting: health and environmental effects
  - Achieving NAAQS: cost, technical feasibility, time needed to attain

EPA Process for Establishing NAAQS



Compliance Costs and NAAQS

- CAA Sec. 109(b)
  - EPA's task is to establish standards that
    - protect public health and welfare
    - are neither more nor less stringent than necessary
  - Costs not addressed in Sec. 109
    - Whitman v. America Trucking Associations
      - in establishing standards, EPA may **not** consider the costs of implementation

How are Benefits Evaluated by EPA?

- Multiple analyses are used
  - Nature of sources of ozone
  - Current and future precursor emissions
  - Available control strategies
  - Incremental costs and benefits
  - Uncertainties
  - Health benefits
    - Premature mortality and morbidity
  - All combinations used to get a range of cost and economic benefits

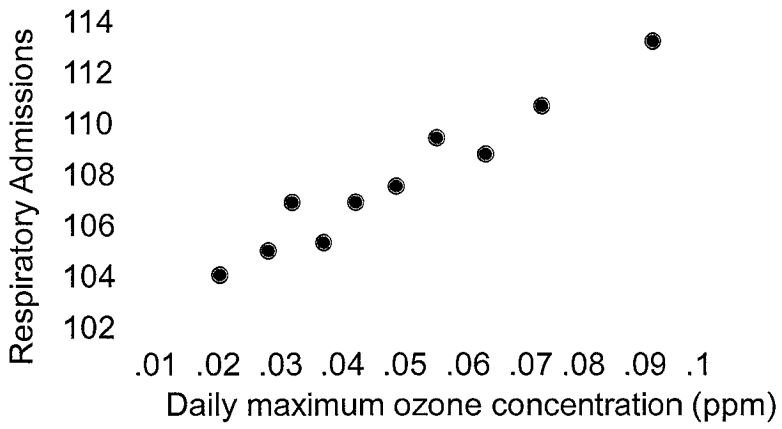
Ozone Health Studies

- More than 1,700 new scientific studies show:
  - ***Adverse respiratory responses at level of 1997 standard and below:***
    - Clinical studies provide clearest and most compelling evidence of an array of effects, including adverse respiratory responses in healthy adults at a level of 0.080 ppm
    - Lung function decrements and respiratory symptoms
    - Biomarkers of lung injury including inflammation, increased airway permeability, and increased susceptibility to respiratory infection
    - Increased airway responsiveness (airway hyperreactivity)
- Very limited evidence of lung function and respiratory symptom responses in healthy adults at lower exposure levels (i.e., 0.060 ppm)

Ozone Health Studies

- ***New evidence about ozone and mortality:***
  - Large numbers of new epidemiological studies, including new multi-city studies, reinforce the links between ozone exposure and respiratory morbidity effects
  - Observed effects supported by new animal toxicological studies that provide new information regarding mechanisms of actions and biological plausibility
- ***Asthmatics have stronger response:***
  - Studies of people with asthma – especially children -- indicate they experience larger and more serious effects that last longer than responses in healthy individuals

Respiratory Hospital Admissions and Ozone



Source: Burnett, et al, (1994) Effects of low ambient levels of ozone and sulfates on the frequency of respiratory admissions to Ontario hospitals. Environ. Res. 65: 172-194. [44876]

Ozone & Mortality in 95 Urban Communities

- **Objective**
  - To investigate whether short-term exposure to ambient ozone is associated with mortality in the United States
- **Results**
  - A 10-ppb increase in the previous week's ozone was associated with
    - 0.52% increase in daily mortality
    - 0.64% increase in cardiovascular and respiratory mortality
  - Effect estimates for aggregate ozone during the previous week were larger than for models considering only a single day's exposure.
- **Conclusions**
  - A statistically significant association between short-term changes in ozone and mortality on average for 95 large US urban communities, which include about 40% of the total US population.

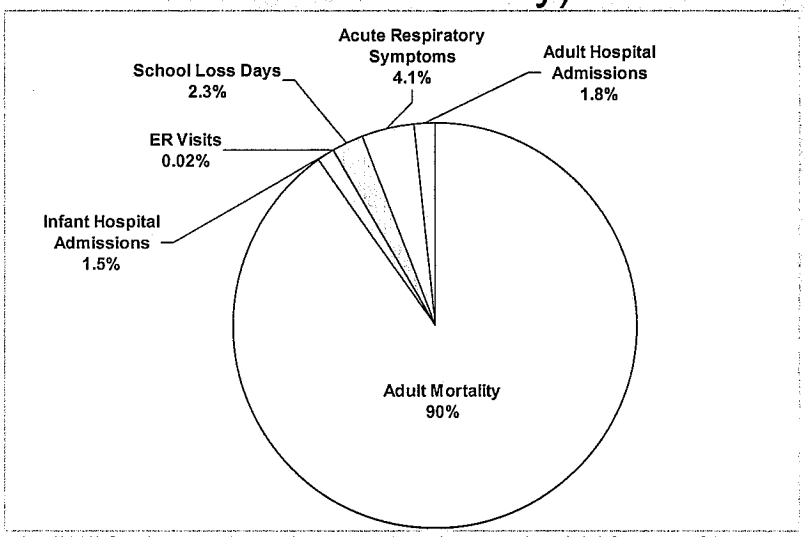
Source: Bell, et al, *JAMA*. 2004;292:2372-2378

Projected Adverse Health Effects Avoided Under Alternate Standards in 2020

	0.070 ppm	0.060 ppm
Chronic bronchitis	880	2,200
Nonfatal heart attacks	2,200	5,300
Hospital and emergency room visits	6,700	21,000
Acute bronchitis	2,100	53,000
Upper and lower respiratory symptoms	44,000	111,000
Aggravated Asthma	23,000	58,000
Avoided premature mortality	1,500 to 4,300	4,000 to 12,000

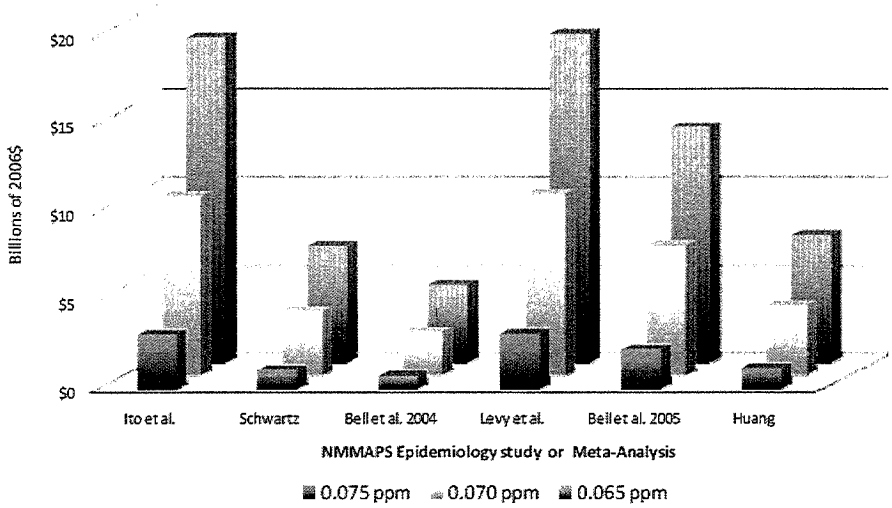
Source: EPA (2010) Supplement to the March 2008 Regulatory Impact Analysis (RIA) Summary of the updated RIA for the Reconsideration of the 2008 Ozone NAAQS [http://www.epa.gov/air/ozonepollution/actions.html

Projected Ozone Health Benefits (using Bell 2004 study)



Source: EPA (2010) Supplement to the March 2008 Regulatory Impact Analysis (RIA) Summary of the updated RIA for the Reconsideration of the 2008 Ozone NAAQS [http://www.epa.gov/air/ozonepollution/actions.html]

Health Cost Benefits Related to Alternate Ozone Standards from Six Studies



Source: EPA (2010) Supplement to the March 2008 Regulatory Impact Analysis (RIA) Summary of the updated RIA for the Reconsideration of the 2008 Ozone NAAQS [http://www.epa.gov/air/ozonepollution/actions.html]

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