Steven L. Beshear
Governor

Leonard K. Peters
Secretary
Energy and Environment Cabinet

Commonwealth of Kentucky
Public Service Commission
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David L. Armstrong
Chairman

James W. Gardner
Vice Chairman

March 15, 2012

TO: DIVISION OF FILINGS

RE: Case No. 2011-00375
Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity and Site Compatibility Certificate for the Construction of a Combined Cycle Combustion Turbine at the Cane Run Generating Station and the Purchase of Existing Simple Cycle Combustion Turbine Facilities from Bluegrass Generation Company, LLC in Buckner, Kentucky

Please file in the administrative record of the above-referenced case the enclosed public meeting notes, which were recorded by Commission Staff at the public meeting in Louisville, Kentucky on March 8, 2012.

Sincerely,

Jeff Derouen
Executive Director

QDN:kar
Enclosures

cc: Parties of Record

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

JOINT APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY AND SITE COMPATIBILITY CERTIFICATE FOR THE CONSTRUCTION OF A COMBINED CYCLE COMBUSTION TURBINE AT THE CANE RUN GENERATING STATION AND THE PURCHASE OF EXISTING SIMPLE CYCLE COMBUSTION TURBINE FACILITIES FROM BLUEGRASS GENERATION COMPANY, LLC IN BUCKNER, KENTUCKY	)	CASE NO. 2011-00375

MINUTES OF THE INFORMATION SESSION AND PUBLIC HEARING
SHACKLETTE ELEMENTARY SCHOOL
LOUISVILLE, KENTUCKY
MARCH 8, 2012 5:30 P.M.

A public information session and public hearing was conducted at Shacklette Elementary School in Louisville, Jefferson County, Kentucky on March 8, 2012. Andrew Melnykovych, Public Information Officer for the Public Service Commission, conducted the information session introducing the Commission and Commission Staff, and explained the procedure and protocol for the information session and the public hearing. Mr. Melnykovych then presented an overview of the legal basis, criteria and review process for the Commission's consideration of applications for new generating capacity. The presentation included a general overview of the instant application, explained which aspects of current and future operations at Cane Run are within the Commission's jurisdiction, and concluded with a question-and-answer period with Commission Staff.

At the conclusion of the information session and after a short intermission, Chairman David Armstrong initiated the public hearing portion of the meeting, providing a brief overview of the case at bar, the parties involved, and setting forth the procedure and protocol for the taking of comments. Chairman Armstrong then invited the public to make comments to the Commission regarding Kentucky Utilities Company's ("KU") and Louisville Gas and Electric Company's ("LG&E") application for a certificate of public convenience and necessity to construct a natural gas combined cycle combustion turbine at its Cane Run facility and to purchase natural gas simple cycle units from Bluegrass Generation Company, LLC located in Buckner, Kentucky. The following individuals spoke at the public meeting:

1. Richard Rosenberg – Mr. Rosenberg questioned why KU is proposing to construct the proposed gas-fired unit at Cane Run rather than at a site within KU's service territory.

2. Wallace McMullen – Mr. McMullen recommends that the existing Cane Run units be closed and convert to natural gas as expeditiously as possible. He states that KU and LG&E both need to diversify their generation portfolio to include renewable energy and increase demand-side management and energy efficiency spending. Lastly, Mr. McMullen states that coal ash effluents from Cane Run need to be mitigated and that the coal ash pile at the facility should be moved away from the main road.

3. Jeff Auxier – Mr. Auxier supports the companies' decision to convert Cane Run to a natural gas facility. He also states that the Commission should extend its jurisdiction over anticipated litigation costs and cleanup costs for coal waste. Mr. Auxier questions whether the price of natural gas will remain low as it currently is and suggests

that KU and LG&E need to more aggressively pursue conservation programs. Lastly, Mr. Auxier criticizes the companies' opposition to HB 187 and asserts that the Commission should grant KU's and LG&E's application condition upon the net metering bill being passed.

4. Terri Humphrey – Ms. Humphrey states that she is a resident of Riverside Garden and that she supports the building of the new gas fired unit.

5. Virginia Bush – Ms. Bush is a registered nurse and recommends that LG&E and KU need to make a faster conversion to natural gas generation due to the health impacts of coal ash. She states that four years is too long to allow the companies to continue utilizing the coal units at Cane Run. Ms. Bush also filed information on health impact assessments from exposure to coal combustion byproducts. The documents are attached hereto as Appendix A. Ms. Bush further states that the companies should ultimately transition to cleaner renewable energy generation.

6. Kathy Little – Ms. Little states that LG&E's and KU's transition to natural gas is good but that it needs to be done quickly. Ms. Little further states that LG&E needs to diversify its generation portfolio.

7. Mark Romines – Mr. Romines states that he is a Valley Village resident near the Mill Creek plant. Mr. Romines questions how much longer will the Mill Creek plant use coal and states that it needs to be converted to gas as well.

No other member of the public wished to make a comment. The public hearing was then adjourned. All persons in attendance were asked to sign in and provide their home address for the record. The sign-in sheet is attached hereto as Appendix B.

APPENDIX A

3/8/12

The transition away from coal and its waste product coal ash needs to be accomplished sooner than the proposed 2016 implementation date. The research connecting health risks to exposure to toxic coal ash has been known for more than 15 yrs. It's time to stop jeopardizing the population of Louisville

Virginia Bush, RN

Why Should We Be Concerned?

A 2007 EPA report found that those living near coal ash dumps have a 1 in 50 chance of getting cancer.

Coal Ash Harms Our Health. Coal ash can cause a host of health problems, from skin rashes to cancer to death. The hazardous Mill Creek coal impoundment in Louisville sits within 1000 feet of an elementary school, putting children's health and lives at risk. *(Source: Louisville Courier-Journal)*

Coal Ash is Unregulated. There are no federal regulations for coal ash storage. It's cheaper and easier for utilities to store their ash on-site rather than properly dispose of it. Many coal ash impoundments are unlined and built with no consultation from engineers. As a result, toxic chemicals leach into our groundwater and drinking water. Uncovered dry ash impoundments spread toxic dust over nearby communities. Impoundment dams can break, spilling millions of gallons of toxic sludge into waterways. The EPA is considering rules that would regulate coal ash, but they are weak and full of loopholes.

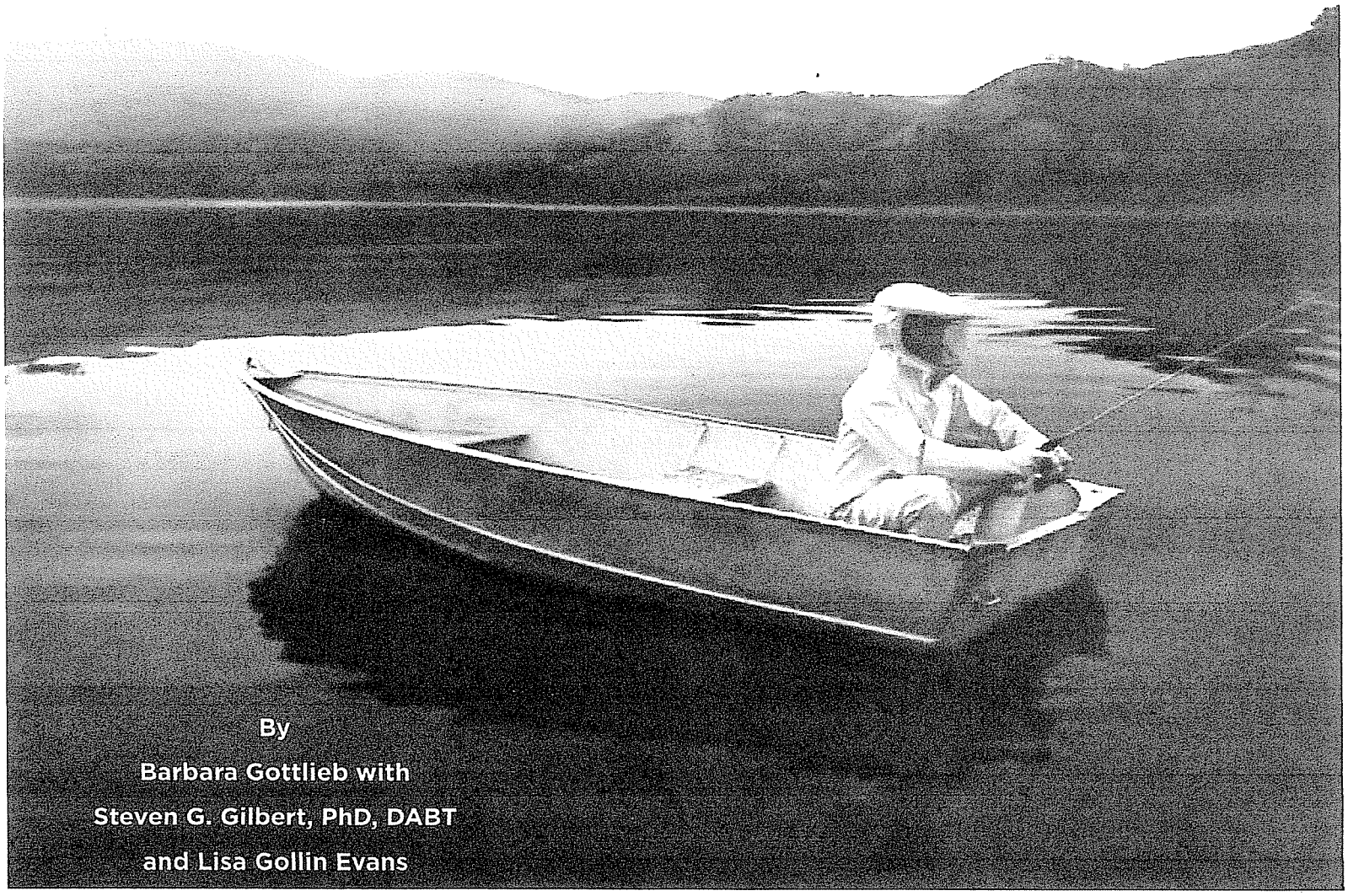
Antimony	Animal studies show rashes, weight loss, diarrhea, liver damage, anemia
Arsenic	Nausea, vomiting, fatigue, abnormal heart rhythm, impaired nerve function, death
Cadmium	Fragile bones, vomiting, diarrhea, kidney damage, death
Chromium	Anemia, ulcers, stomach cancer, male reproductive system damage
Cobalt	Animal studies show heart, liver, and kidney damage; behavioral problems
Copper	Nausea, vomiting, stomach cramps, diarrhea
Lead	Nervous system, brain & kidney damage; weakness; anemia; developmental delays
Mercury	Ulcers, brain damage, kidney damage
Selenium	Brittle hair and nails, numbness in arms and legs, rashes
Thallium	Hair loss, vomiting, nervous system, lung, heart, liver, and kidney damage, death
Vanadium	Nausea, vomiting, stomach cramps; possible carcinogen

Coal Ash

The toxic threat to our health and environment

EXCERPT FROM REPORT ATTACHED

A REPORT FROM PHYSICIANS FOR SOCIAL RESPONSIBILITY AND EARTHJUSTICE



By
Barbara Gottlieb with
Steven G. Gilbert, PhD, DABT
and Lisa Gollin Evans

contaminated fish, or breathing "fugitive dust."[13] Yet as of late 2010, **no federal standards exist to regulate how coal ash is disposed or where and how it can be recycled.** Instead, a patchwork of insufficient state regulations allows widely disparate uses of and disposal methods for coal ash. This report examines the risks to public health that result from that inadequate regulation and highlights the damage that has occurred in the absence of strong, federally enforceable safeguards. The report concludes with recommendations for effective policy reforms that could significantly protect human health.

Given the high toxicity of coal ash's constituents, the growing number of proven and potential damage cases, and the prospect of more damage cases emerging as toxicants reach peak concentration in the coming years, the magnitude of coal ash as a threat to human health is likely only beginning to emerge.

WHAT IS COAL ASH AND HOW TOXIC IS IT?

Coal ash has different physical and chemical properties depending on the geochemical properties of the coal being used and how that coal is burned.

- "Fly ash" consists of the fine powdery particles of minerals, plus a small amount of carbon, that are carried up the smokestack by the exhaust gases.
- "Bottom ash" is a coarser material that falls to the bottom of the furnace.
- "Boiler slag" is created from the molten bottom ash that, when cooled in contact with water in wet-bottom boilers, forms pellets of a hard, glassy material.
- Flue gas desulfurization (FGD) waste is the by-product of air pollution control systems used to reduce the sulfur dioxide emissions from coal-fired power plants. "Scrubbers" spray lime or limestone slurry into the flue gas, where it reacts with the sulfur to form calcium sulfite that is processed to make FGD or synthetic gypsum.
- Fluidized bed combustion (FBC) wastes are generated by a specialized combustion technology in which a heated bed of sand-like material is suspended (fluidized) in a rising jet of air. FBC waste may include fly ash and bottom ash and tends to be more alkaline because of the limestone used in the process.

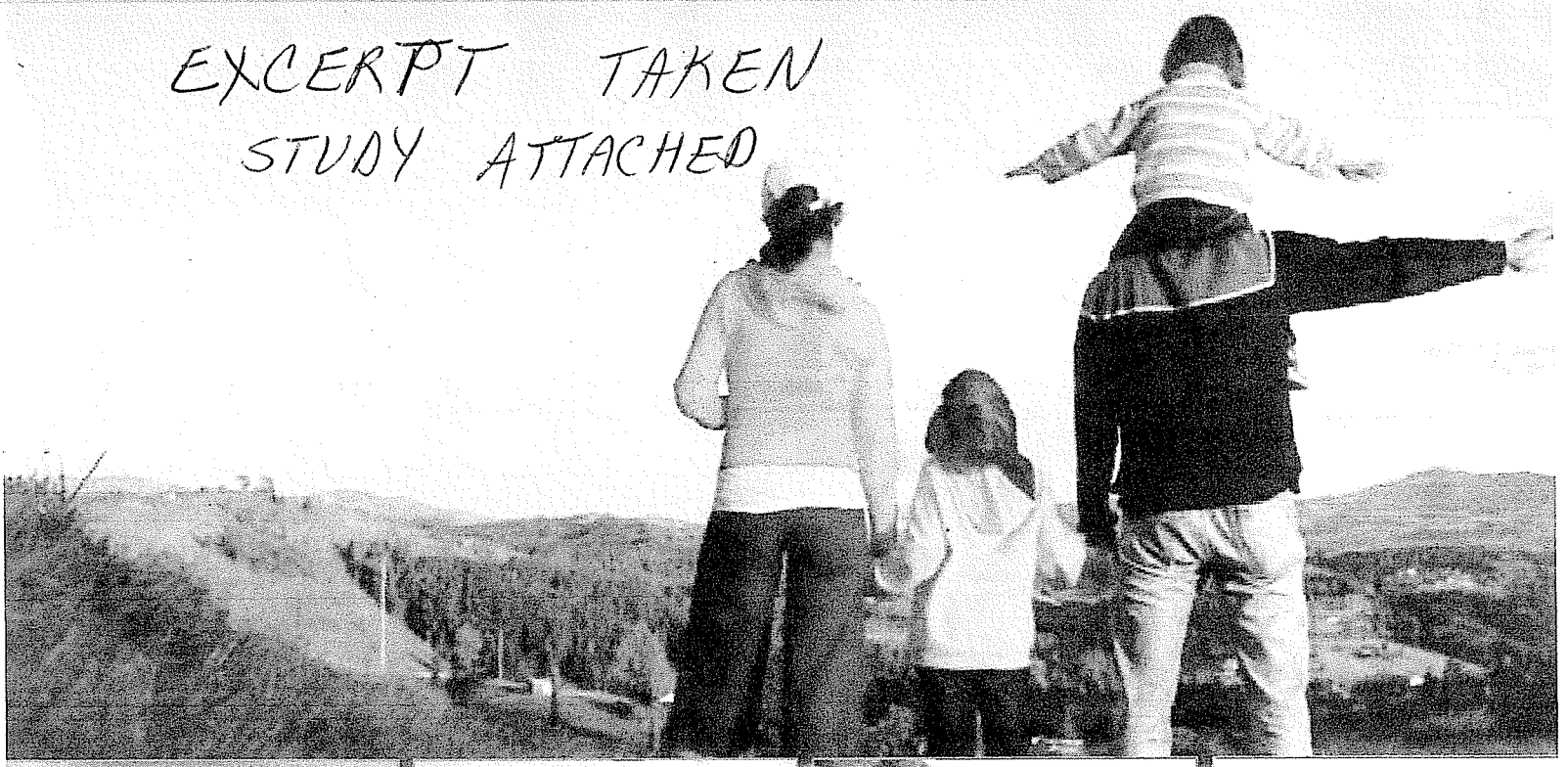
The EPA has found that living next to a coal ash disposal site can increase your risk of cancer or other diseases, especially if you live near an unlined wet ash pond that contains coal ash comingled with other coal wastes and you get your drinking water from a well. According to the EPA's peer-reviewed "Human and Ecological Risk Assessment for Coal Combustion Wastes," people in those circumstances have as much as a 1 in 50 chance of getting cancer from drinking water contaminated by arsenic, one of the most common and dangerous pollutants in coal ash.[14] This risk is 2,000 times greater than the EPA's goal for reducing cancer risk to 1 in 100,000. That same risk assessment says that living near ash ponds increases the risk of health problems from exposure to toxic metals like cadmium, lead, and other pollutants.

Typically, coal ash contains arsenic, lead, mercury, cadmium, chromium and selenium, as well as aluminum, antimony, barium, beryllium, boron, chlorine, cobalt, manganese, molybdenum, nickel, thallium, vanadium, and zinc.[15] All can be toxic.[16] Especially where there is prolonged exposure, these toxic metals can cause several types of cancer, heart damage, lung disease, respiratory distress, kidney disease, reproductive problems, gastrointestinal illness, birth defects, impaired bone growth in children, nervous system impacts, cognitive deficits, developmental delays and behavioral problems. **In short, coal ash toxics have the potential to injure all of the major organ systems, damage physical health and development, and even contribute to mortality.**

Adding to the toxicity of coal ash is that some power plants mix coal with other fuels and wastes, such as used tires and even hazardous wastes. In addition, when coal ash is disposed with coal refuse, a highly acidic waste, the resulting mixture is

Health Impact Assessment of Coal and Clean Energy Options in Kentucky

EXCERPT TAKEN
STUDY ATTACHED



A Report from Kentucky Environmental Foundation

By Elizabeth Walker, PhD
Deborah Payne, MPH

KENTUCKY Environmental

Acknowledgements

The authors thankfully acknowledge the following experts for reviews and comments on drafts of this report:

Carla Baumann, MSN, RN
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Richard Futrell, PhD
Michael Hendryx, PhD
David Mannino, MD
John Patterson, MD, MSPH
Monica Unseld, PhD

Any remaining errors are entirely our own.

The authors also thank contributions of interviews carried out by students of Berea College's Health in Appalachia course (HEA/APS 210), Fall 2010 and 2011.

About Kentucky Environmental Foundation:

The Kentucky Environmental Foundation (KEF) is a non-profit organization dedicated to securing solutions to environmental problems in a manner, which safeguards human health, promotes environmental justice, preserves ecological systems and encourages sustainability.

KENTUCKY Environmental FOUNDATION

Design and layout: Rob Gorstein Graphic Design, Inc.

Health Impacts of Coal Combustion Waste

Coal ash, or coal combustion waste, is the byproduct of burning coal for electricity generation or industrial use. Types of ash include boiler slag, bottom ash and fly ash. Each contains varying levels of silicates, calcium and heavy metals. Individuals in the coal ash recycling industry believe that the substance is inert and does not pose a health risk.[160] However, because the presence of toxic metals such as arsenic, selenium and cadmium depend on the composition of the coal source, one cannot determine if a sample is toxic without individual testing.

Power plants in the U.S. produce about 130 million tons of coal ash annually much of which is stored in 431 wet impoundments. Kentucky's plants produce over nine million tons of coal combustion waste, ranking the state 5th highest in the nation for ash generation.[161] A significant portion of this waste is stored in 43 wet impoundment ponds or dry landfills across the state.[162]

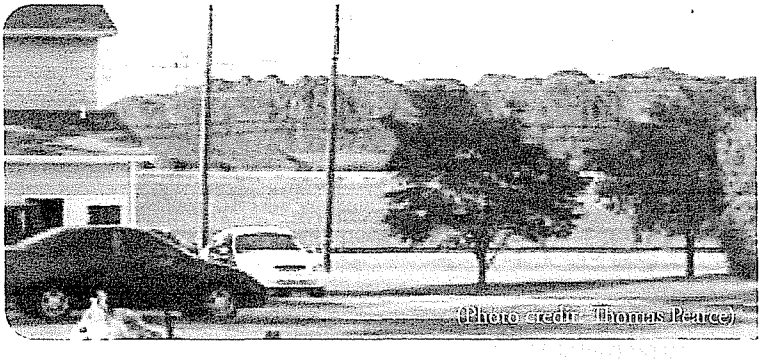
As coal ash is currently not legislated as a toxic waste, monitoring of coal ash disposal sites has been limited. Monitoring near unlined ponds in Kentucky has not been mandated even when there has been evidence of toxic metals releases.[163] Within the U.S. the EPA has indentified 63 "proven and potential" damage cases where drinking water, wet-lands, creeks or rivers have been contaminated by coal ash toxins.[164] Earthjustice and the Environmental Integrity Project, through monitoring and available state data, have identified 90 cases of coal ash based contamination. Four of these sites are present in Kentucky including Louisville Gas & Electric's (LG&E) Mill Creek Plant owned by E.ON U.S., the Tennessee Valley Authority's (TVA) Shawnee Fossil Plant in Paducah and Eastern Kentucky Power Cooperative's Spurlock Station in Maysville[165] and the TVA's Paradise Fossil Plant near Paradise, KY.[166]

The Spurlock Station plant had samples with arsenic that exceeded the EPA's maximum contaminant level (MCL) for safe drinking water by 16 times, 3.5 times for the Secondary MCL (SMCL) for sulfate, 11 times the SMCL for iron, and total dissolved solids (TDS) 4 times the SMCL. The Mill Creek Plant, 15 miles south of Louisville had groundwater that had been contaminated with arsenic at 1.5 times the federal MCL. Contaminants in the alluvial aquifer of the Shawnee Fossil Plant included selenium at concentrations almost twice the federal Maximum Contaminant Level (MCL), arsenic slightly exceeding the MCL, boron up to 2.5 times higher than the EPA Lifetime Health Advisory Level, total dissolved solids up to 4 times the Secondary MCL(SMCL), and sulfate up to 5.6 times the SMCL. At the Paradise Fossil Plant manganese was 203 times the Lifetime Health Advisory Level.

Additional ground water monitoring data available for eight different coal ash storage sites in Kentucky taken by the state and retrieved by Quarles and colleagues revealed that all eight were contaminated.[167]

The toxic compositions of coal ash can have a range of health affects on Kentucky's citizens. Effects can include increased risk of cancer, delayed mental development, reduced cognition and focus, and intestinal irritation. Heavy metals can contaminate the communities surrounding coal ash impoundments by leaching out of unlined ponds into local water supplies or blowing through the air in the form of fine particles and dust.[168] Coal fly ash less than 2.5 microns has been shown to increase inflammation in the lungs of mice particularly with increased sulfur and trace element content.[169] Significant concern persists for those consuming water from sources near coal ash impoundments.

Storage of coal ash in poorly maintained impoundments also poses threats to human life. In December 2008, the embankment of a coal ash pond at Tennessee Valley Authority's Kingston Fossil plant broke spilling 5.4 million cubic yards of coal combustion waste and released high levels of lead and thallium that can cause birth defects and nervous and reproductive system disorders if consumed through untreated well water.[170]


(Photo credit: Thomas Pearce)

EPA Identified High Hazard Coal Ash Impoundments in Kentucky

COMPANY	FACILITY NAME	UNIT NAME	CITY
Kentucky Utilities	E W Brown	Auxiliary Pond	Harrodsburg, KY
Kentucky Utilities	E W Brown	Ash Pond	Harrodsburg, KY
Kentucky Utilities	Ghent	Gypsum Stacking Facility	Ghent, KY
Kentucky Utilities	Ghent	Ash Pond Basin 1	Ghent, KY
Kentucky Utilities	Ghent	Ash Pond Basin 2	Ghent, KY
Louisville Electric	Cane Run	Ash Pond	Louisville, KY

Dust Kills
(Small Dust Kills Quicker)

Dr. Joel Schwartz,
Associate Professor of Environmental Epidemiology
Harvard School of Public Health

This paper is a summary of a seminar presentation by Dr. Joel Schwartz, Associate Professor of Environmental Epidemiology at the Harvard School of Public Health, given at the University of Louisville for the Kentucky Institute for the Environment and Sustainable Development on December 9, 1998.

Air pollution is a far more menacing health issue than most people believe. Of particular concern is urban air pollution since the concentrations of finer particles are not only greater because of the combustion of fossil fuels, there are also more people there to breathe them in. Contrary to common wisdom, air pollution doesn't just clog your furnace air filters, or spread a thin layer of dust on your car in the parking lot. The very tiny particles in most forms of urban air pollution are impacting public health, but not in the way we have believed for so long. One dramatic example of air pollution and health effects occurred December 4, 1952 in the city of London which experienced a protracted number of continuous days of heavy fog. The Great London Smog lasted for five days and led to around four thousand more deaths than usual. The deaths were attributed to the dramatic increase in air pollution during the period, with levels of sulfur dioxide increasing 7-fold, and levels of smoke increasing 3-fold. The peak in the number of deaths coincided with the peak in both smoke and sulfur dioxide pollution levels. This event established a link between high levels of airborne particles, sulfur dioxide, and increases in daily death rates. As this event was more carefully studied and compared to similar data in major large cities in the United States, it became clear that the high mortality rates were due to particles in the air, not the concentrations of sulfur dioxide.

So why do human defenses fail against air pollution generally, and very small particles in particular? The human lung is basically a large porous sack filled with thousands of small sacks interlaced with blood vessels. As one goes deeper into the lungs and to the outer periphery, the regions known as the alveolar, the structures become smaller and finer, so that the air we breathe can be more efficiently transferred as oxygen to the blood stream. In other words, the lungs are the filters for the air we breathe.

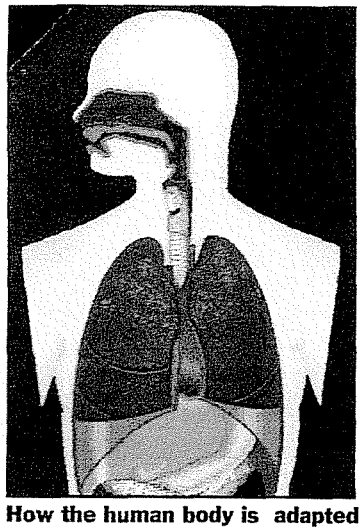
As we breathe in air, the larger particles suspended in it are caught by the mucus in the nose and upper bronchial tubes, however the smaller particles bypass these structures and move into the deeper, finer structures of the lungs and are subsequently deposited in the blood stream where they now move through the vascular system.

Since 1970 (a mere thirty years ago) air pollution regulations focused on large dust particles. Known as the PM_{10} standard (airborne dust 10 microns or larger in diameter), these regulations have only recently been modified to include the much smaller particles known as the $PM_{2.5}$ standard (particles 2.5 microns in diameter). Incidentally, the City of Louisville does not meet the more recent stringent $PM_{2.5}$ standards proposed by the Environmental Protection Agency (EPA).

A study in Philadelphia confirmed that on high air pollution days, risks were higher, especially among the elderly, for pneumonia and cardiovascular disease. This led Joel Schwartz to look more closely at data from Cincinnati, Ohio between the years 1977 to 1982. The data contained both the total suspended particulate (TSP) concentrations and the daily

City	Percent Increase	City	Percent Increase
Amsterdam	8 (-1-16)		
Athens	8 (6-10)	Minneapolis	9 (4-15)
Birmingham A	11(2-20)	Philadelphia	12(7-17)
Chicago	8 (1-10)	Provo	15(9-23)
Cincinnati	10(5-17)	Santiago	11(8-15)
Detroit	12(5-16)	Santa Clara	8 (2-16)
Erfurt	12(4-17)	Steubenville	8 (4-10)
Kingston	16(-12-57)	St Louis	16(1-34)
Los Angeles	5 (0-10)	Sao Paolo	14(7-21)

Percent Increase in Deaths for a 100 microgram/m³ Increase in PM_{10}



How the human body is adapted to remove larger dust particles

counts of non-accidental deaths, temperatures, and dew points. Schwartz sought to replicate the Cincinnati analysis but delete the factor of daily temperature extremes in order to establish the primary causes of increased deaths and to compare this data with the Philadelphia study. Schwartz found that the patterns established in the Philadelphia study were strikingly similar to those he found in Cincinnati, i.e., that the total suspended particulate (TSP) concentrations and age-specific daily deaths in the two cities were remarkably similar. In other words, dust particles in the air (ambient environment) have an effect on daily death rates. In the conclusion of this study, Schwartz states...

> "Although the mechanism by which airborne particles exacerbate illnesses and increases their mortality rates is not understood, neither is the mechanism by which tobacco smoking increases the risk of death from myocardial infarctions. This fact has not prevented a conclusion being drawn from the strong epidemiologic information in the case of smoking and it should not impede a similar conclusion in the case of respirable particles. Moreover, the London episode of 1952 provides ample demonstration of biological plausibility, it is clear that respirable particles increased mortality in that episode, although no mechanism was determined for that case either." (p. 189)

In conjunction with two other colleagues at the Harvard School of Public Health, Joel Schwartz continued his research into dust in the air by comparing the data from the Cincinnati and Philadelphia study with data collected in 1974 in the Harvard Six Cities study. The Harvard Six Cities study looked at respiratory symptoms and pulmonary function among adults and elementary school children in Watertown, Massachusetts; Kingston and Harriman, Tennessee; St. Louis, Missouri; Steubenville, Ohio; Portage, Wisconsin; and Topeka, Kansas. In 1979 air pollution monitoring stations were placed in each of these cities in a central location to collect ambient air samples every day for a 24 hour period, or every other day for the same period. These constant samples were collected for almost 10 years. For a two-year period between 1983 to 1984, the samples were analyzed for particle size in order to determine if particle size played any role in daily deaths.

Schwartz and his colleagues had four goals in their research, the first of which was to extend the findings from the previous six eastern cities study as well as an earlier study of St. Louis, Missouri and Harriman, Tennessee to four additional cities. Second, they sought to confirm the association between daily variations in airborne particles (PM_{10}) and daily variations in deaths in these six locations, with the intention of determining whether air pollution and the resulting deaths were specifically caused by fine particles. Third, they tried to see if there was a link between sulfate acidity and the fine particles and, finally, they tried to determine whether the health risks were elevated for specific causes of death or for the elderly.

In addition to measuring coarse and fine air particles, sulfates and acidity, they also collected daily weather information such as temperature, dew point, and precipitation. The daily mortality data was collected from the county in which the air monitoring equipment was located and included the date of the death, the county in which it occurred, the age and sex of the person, and the cause of death. Additional data was collected on those deaths of persons 65 and over on deaths caused by ischemic heart disease.

Of the six cities studied, all except Topeka, Kansas had air particles in the fine range ($PM_{2.5}$) As the authors state, "The principle analysis of this paper was to compare different size ranges of PM_{10} to see whether the association was specifically with the fine mass particles." (p.931) As suspected, $PM_{2.5}$ was associated with daily deaths. By statistically isolating numerous variables, Schwartz and his colleagues found that weather and sulfate acidity were not as significant in death rate correlations as was fine particle size. One surprising finding was that the relative risk for persons 65 and older was only slightly larger than for deaths of all ages, and the risk of dying from ischemic heart disease, primarily heart attack, was greater than all other causes of death, with chronic obstructive pulmonary disease and pneumonia running second, ahead of all other causes. Based on these findings, Schwartz and his colleagues concluded that

> "Day-to-day changes in airborne particle concentrations were consistently associated with increased risk of death in six eastern U.S. metropolitan areas. The estimated effect was similar in magnitude to that seen in other U.S. cities. The particle associations were specifically with fine particle mass concentrations, with little additional

contribution from the coarse particle mass fraction." (p.934)

Studies using animals have shown similar results. Rats exposed to urban air pollution with high PM_{10} concentrations experienced more heart disease mortality than rats in cleaner rural environments. In a study by Dreher (1966), rats were exposed to urban air from Washington, D.C. The toxicity was shown to be substantially eliminated if the particles were first washed to remove surface transition metals. And similar toxic effects were noted if transition metals were instilled in lungs in solution instead of on fine particles. Other studies have shown what occurs in animals with induced respiratory illnesses, specifically healthy rats and dogs did not have elevated death rates whereas animals who already were ill, experienced elevated death rates.

One form of toxicity associated with air pollution in the pulmonary system is the release of cytokines, cell tissue enzymes, some of which are specifically associated with hardening of the arteries and blood clots in the heart which lead to arrhythmia and death. These research findings tend to point to a stronger link between heart disease and fine particles in polluted air than to respiratory problems, a mildly counterintuitive conclusion.

> Hence, while much remains to be learned, toxicologic evidence is beginning to accumulate supporting the role of fine particles in inflammatory lung damage and other reactions that may increase the risk of hospitalization or death for sensitive individuals, such as those with chronic lung disease. (p.936)

References:

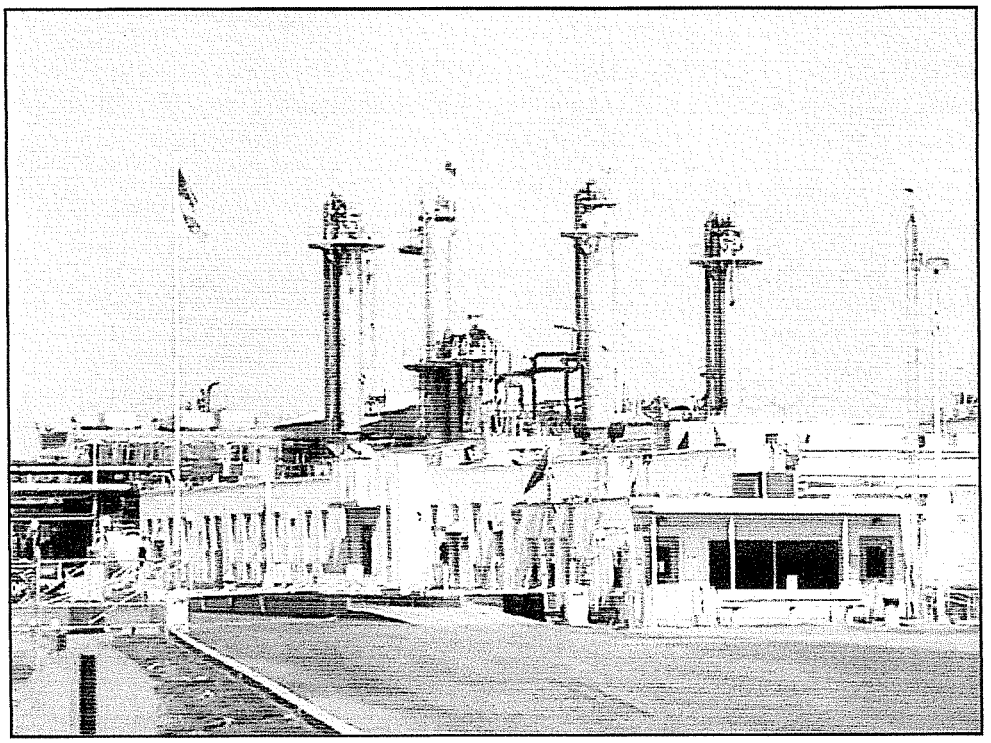
Schwartz J., Dockery DW, and Neas LM. Is Daily Mortality Associated Specifically with Fine Particles? Air Waste Management Assoc, 1996; 46:927-939

Schwartz J., Nonparametric Smoothing in the Analysis of Air Pollution and Respiratory Illness. Canadian J Stat, 1994, 22:471-87

Schwartz J., Total Suspended Particulate Matter and Daily Mortality in Cincinnati, OH. Environmental Health Perspectives, 1994; 102:186-189

The biographical sketch and a synthesis of the research of Joel Schwartz was written by Allan Dittmer, Editor, Sustain.

About the Author:
Among his many accomplishments, Joel Schwartz is credited with the research that led the Environmental Protection Agency in 1997 to tighten the regulations on the size of allowable microscopic particles from 10 microns in diameter to 2.5 microns or less, a change that has yet to be completely implemented. His doctorate is in theoretical solid-state physics and mathematics. He assumed a policy position as an energy economist with the Environmental Protection Agency. It was during this stint in Washington that he influenced the decision to eliminate lead in gasoline even as then President Regan and petroleum industry lobbyists were trying to halt the regulations. Schwartz received a prestigious MacArthur award in 1991. The $250,000 cash bonus that goes to MacArthur award recipients allowed Schwartz to detach himself from the intense negative political pressure that surrounded him and his research while a federal agency employee, and assume a full-time position at the Harvard School of Public Health were he continues his research to this day.



APPENDIX B

(1)

PUBLIC MEETING - SIGN-IN SHEET

Louisville Gas & Electric Co./Kentucky Utilities Co. – Case No. 2011-00350

Louisville – March 8, 2012

PLEASE PRINT LEGIBLY

	Name	Address	DO YOU WISH TO SPEAK?
1	Charley Spears		YES (NO)
2	William Biedinger	6620 Dayton	YES (NO)
3	CHIP KEELING	3308 BRENNER PASS	YES (NO)
4	Erica Peterson	619 S. 4th St, Lan, KY	YES (NO)
5	WILLIAM & PATRICIA GIBSON	5203 VENUS DR	YES (NO)
6	Paul Thompson	220 W MAIN ST Louisville Ky 40202	YES (NO)
7	Larry Davis	1500 Kentucky Av Paducah KY 42003	YES (NO)
8	Lonnie Bellar	220 W MAIN ST Louisville Ky 40202	YES (NO)
9	RICK LOVEKAMP	220 W. MAIN ST LOUISVILLE Ky 40202	YES (NO)
10	Virgil Hahn	7124 Denver Ln Louisville Ky 40258	YES (NO)

(2)

PUBLIC MEETING - SIGN-IN SHEET

Louisville Gas & Electric Co./Kentucky Utilities Co. – Case No. 2011-00350

Louisville – March 8, 2012

PLEASE PRINT LEGIBLY

	Name	Address	DO YOU WISH TO SPEAK?
1	Benita Meyer	4903 Fielding Way Lou. KY 40216	YES (NO)
2	Lindsey Ingram	SIGO Lex, KY	YES (NO)
3	Allyson Sturgeon	Lotz/KU	YES (NO)
4	Larry Cook	1024 Capital Center Dr. Frankfort	YES (NO)
5	Dennis G. Howard	" " "	YES (NO)
6	Wallace McMullen	12907 Sunnybrook P. Prospect KY	(YES) NO
7	Drew Foley	7406 Springvale Dr Lou. Ky 40241	YES (NO)
8	Joan Findley	12907 Sunnybrook	YES (NO)
9	RICHARD Rosenberger	3603 Birchwood ct 40258	YES NO
10	Gary Revlett	~~LGE~~/KU	YES (NO)

(3)

PUBLIC MEETING - SIGN-IN SHEET

Louisville Gas & Electric Co./Kentucky Utilities Co. – Case No. 2011-00350

Louisville – March 8, 2012

PLEASE PRINT LEGIBLY

	Name	Address	DO YOU WISH TO SPEAK?	
1	Sam Halloway	701 Kathy Lee Ct Maysville, Ky	YES	NO
2	Joseph Lord	525 W. Broadway Louville Ky	YES	NO
3	Ron Gruzesky	200 Fair Oaks Frankfort, Ky	YES	NO
4	Terri Humphrey	4323 Wilmoth Ave Lou. Ky.	YES	NO
5	Monika Butthead	6625 Kenmore Ave Lou Ky	YES	NO
6	JEFF AUXIER	2056 S. PRESTON ST LOUISVILLE 40217	YES	NO
7	Jeff Bittel	14905 Huntridge Cir Louisville	YES	NO
8	Brian Phillips	722 So Bates Ln	YES	NO
9	Aaron Barber	C-A	YES	NO
10	VIRGINIA BUSH	1111 FORREST ST. LOU, KY. 40217	YES	NO

(4)

PUBLIC MEETING - SIGN-IN SHEET

Louisville Gas & Electric Co./Kentucky Utilities Co. – Case No. 2011-00350

Louisville – March 8, 2012

PLEASE PRINT LEGIBLY

	Name	Address	DO YOU WISH TO SPEAK?	
1	KATHY LITTLE	5307 CANE RUN Rd	YES	NO
2	Hannah Byland	850 Barret Ave.	YES	NO
3	Drew Tucker	1939 Payne St. Apt 3	YES	NO
4	Colette Henderson	10 " "	YES	NO
5	Mark Paluta	6558 Apache Ct.	YES	NO
6	THOMAS NORD	AIR POLLUTION CONTROL DIST.	YES	NO
7	LAUREN ANDERSON	AIR POLLUTION CONTROL DIST	YES	NO
8			YES	NO
9			YES	NO
10			YES	NO

5

PUBLIC MEETING - SIGN-IN SHEET

Louisville Gas & Electric Co./Kentucky Utilities Co. – Case No. 2011-00350

Louisville – March 8, 2012

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	Name	Address	DO YOU WISH TO SPEAK?
1	Mark Romines	7105 Rainbow Dr. Lou. Ky	YES ○ NO
2			YES NO
3			YES NO
4			YES NO
5			YES NO
6			YES NO
7			YES NO
8			YES NO
9			YES NO
10			YES NO