



WOMEN'S HEALTH & THE ENVIRONMENT

NEW SCIENCE, NEW SOLUTIONS

Thursday,
September 25, 2008
Pittsburgh, PA
David L. Lawrence
Convention Center

A Conference Sponsored by: Teresa Heinz | The Heinz Endowments | Magee-Womens Hospital of UPMC | www.womenshealthpittsburgh.org

“Science that Bridges the False Divide Between Ecological and Human Health”

Ecological and Human Health Risks from Coal Combustion Products

Conrad (Dan) Volz, DrPH, MPH

Director- Center for Healthy Environments and Communities

Director-Environmental Health Risk Assessment Certificate Program

Department of Environmental and Occupational Health, University of Pittsburgh,
Graduate School of Public Health

www.chec.pitt.edu



UNIVERSITY OF PITTSBURGH • GRADUATE SCHOOL OF
PUBLIC HEALTH

Coal-Powered Electrical Plant Stack Plume



Photograph Courtesy-Environmental Integrity Project

www.chec.pitt.edu



UNIVERSITY OF PITTSBURGH • GRADUATE SCHOOL OF
PUBLIC HEALTH

Forward Township Fly Ash Slide

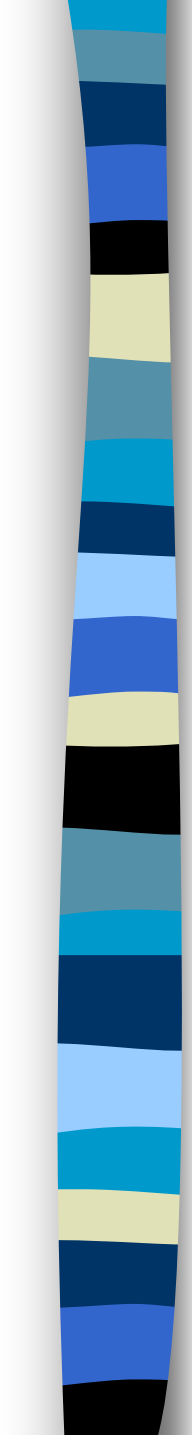


www.chec.pitt.edu

Photograph courtesy of Lisa Graves-Marcucci



UNIVERSITY OF PITTSBURGH • GRADUATE SCHOOL OF
PUBLIC HEALTH



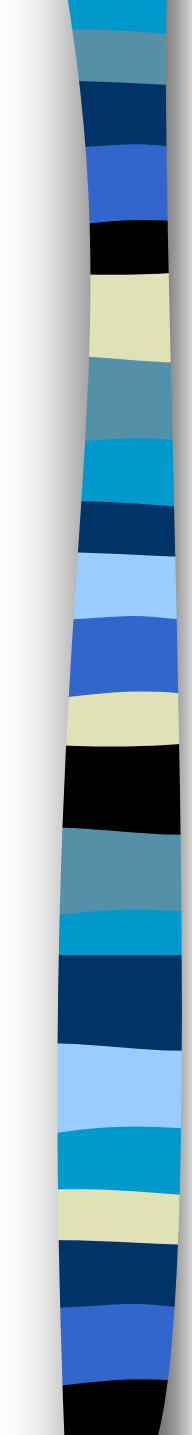
“Clean coal: Never was there an oxymoron more insidious, or more dangerous to our public health.... This slogan has blindsided any meaningful progress toward a sustainable energy policy.”

Biggers, Washington Post, Clean Coal Don't Try to Shovel That ; Sunday, March 2, 2008.

Little Blue Fly Ash Disposal Site, Beaver County, PA



Photograph Courtesy of Lisa Graves-Marcucci



“Thus the committee concludes that the presence of high contaminant levels in many CCR [coal combustion residue] leachates may create human health and ecological concerns at or near some mine sites over the long term.”

-National Academies of Science





Archives of Environmental Contamination and Toxicology, May 2008.

Accumulation and Depuration of Trace Metals in Southern Toads, *Bufo terrestris*, Exposed to Coal Combustion Waste.

Ward C, Hassan S, Mendonça M.

Department of Biological Sciences, Auburn University,
cward3@mail.aum.edu.

www.chech.pitt.edu



UNIVERSITY OF PITTSBURGH • GRADUATE SCHOOL OF
PUBLIC HEALTH



Environmental Toxicology and Chemistry, June 2005.

Influence of larval period on responses of overwintering green frog (*Rana clamitans*) larvae exposed to contaminated sediments.

Snodgrass JW, Hopkins WA, Jackson BP, Baionno JA, and Broughton J.

Towson University, jsnodgrass@towson.edu



**Comparative Biochemistry and Physiology,
Toxicology and Pharmacology. June, 2008.**

**Exposure to coal combustion residues during
metamorphosis elevates corticosterone
content and adversely affects oral
morphology, growth, and development in
*Rana sphenocephala***

**John D. Peterson , Vikki A. Peterson and Mary T.
Mendonca**

Department of Biological Sciences, Auburn University

www.chec.pitt.edu



UNIVERSITY OF PITTSBURGH • GRADUATE SCHOOL OF
PUBLIC HEALTH

The Science of the Total Environment, February, 2007

Effects of coal combustion residues on survival, antioxidant potential, and genotoxicity resulting from full-lifecycle exposure of grass shrimp (*Palaemonetes pugio* Holthius).

**Danika M. Kuzmick, Carys L. Mitchelmore ,
William A. Hopkins and Christopher L. Rowe**

University of Maryland Center for Environmental Science,
Chesapeake Biological Laboratory

www.chech.pitt.edu



UNIVERSITY OF PITTSBURGH • GRADUATE SCHOOL OF
PUBLIC HEALTH

Slurry of Fly Ash Flows Into the Monongahela River from the Forward Township Slide (A Major Drinking Water Source for Allegheny County, PA)



Photograph Courtesy of Lisa Graves-Marcucci

The Center for Healthy Environments and Communities CHEC

We encourage communities, organizations, and individuals to contact us to discuss your ecological and environmental health problems. Email us at chec@pitt.edu or call at 412-648-2342 to make an appointment.

Mailing Address; University of Pittsburgh

Graduate School of Public Health,
Department of Environmental and

Occupational Health

Bridgeside Point Building

100 Technology Drive

Suite 564 BRIDG

Pittsburgh, PA 15219-3130

www.chec.pitt.edu

<http://www.pitt.edu/~cdv5/>

