

2015 November-December Compendium of Events, News, Resources, Funding Opportunities, and R&D Results for ROCIS Stakeholders

The themes for this edition of Tom Phillips' Compendium include, but are not limited to, energy efficient buildings, community development, fossil fuels, near-road pollution, and climate action. Both November and December are covered, so it is longer than usual. [Click here](#) to sign up for this monthly compendium, ROCIS event updates and briefs, and to learn more about the ROCIS stakeholder air quality initiative involving low cost monitoring and interventions.

In this compendium ...

EVENTS – REGIONAL AUDIENCE

- ✓ Dec. 10, 2015. [Master Builders' Association 2015 Young Contractors Holiday Party](#).
- ✓ Dec. 16, 2015. [Behind the Meter: The Internet of Things](#).
- ✓ Dec. 10, 2016. [Envisioning a Sustainable, Collaborative, and Inclusive Economy, with Jeremy Rifkin and Bill Generett](#).
- ✓ Dec. 15, 2015. [GBA Office LEED Platinum Tour](#).
- ✓ Jan. 7, 2016. [Envisioning Biophilic Pittsburgh](#).
- ✓ Ending Feb. 26, 2015. ["In the Air: Visualizing What We Breathe,"](#)

EVENTS – NATIONAL AUDIENCE

- ✓ Dec. 3, 2015. [Hydraulic Fracturing Research Advisory Panel](#). EPA Science Advisory Board.
- ✓ Dec. 3, 2015. [Resilience modeling webinar: Case studies in New York](#).
- ✓ Dec. 3, 2015. Webinar. [MCAN Resources for Successful Asthma Interventions](#).
- ✓ Dec. 10, 2015. Webinar. [Everything You Need to Know About Advanced Energy Policy in 2015](#).
- ✓ Dec. 7-9, 2015. Green & Healthy Housing Institute's Executive Leadership Institute. Baltimore, MD.
- ✓ Dec. 16, 2015. Abstracts due [NACHHO 2016 Annual Conference](#). Creating a Culture of Health Equity.
- ✓ Jan. 5-7, 2016. [10th Semiannual Air Quality Applied Science Team Meeting \(AQAST10\)](#).
- ✓ Jan. 14, 2016. [All Green Roofs Are Created Equal - Or Are They? An interdisciplinary and data-driven approach to assessing environmental performance](#).
- ✓ January and beyond, 2016. [Collaborative for High Performance Schools \(CHPS\)](#).
- ✓ Feb. 18-19, 2016. Net Positive Energy + Water Conference. San Diego, CA.
- ✓ Mar. 31-Apr. 1, 2016. [Green Schools Conference & Expo](#). Pittsburgh, PA.

REGIONAL NEWS

- ✓ [Clean Power Plan training and DEP listening session in Erie, PA](#). Nov. 12, 2015.
- ✓ [Erie Could Benefit from Energy Conservation](#). Nov. 14, 2015.
- ✓ [Met Coke Convention in Pittsburgh Addresses Health of the Industry—But What About the Health of the Community?](#) Nov. 17, 2015.
- ✓ [Pittsburgh's Smart Traffic Lights are Taking a Bite Out of Vehicle Pollution](#). Oct. 30, 2015.
- ✓ [Battle growing in Franklin Co. over Mountain Valley Pipeline](#). Oct. 20, 2015.
- ✓ [Can Pennsylvania Officials Do More to Address Crude Oil Train Safety?](#) Nov. 22, 2015.
- ✓ [Duquesne Light and Pitt partner on micro-grid installation](#). Nov. 16, 2015.
- ✓ [Why Chemical Transparency Matters](#). Nov. 2015.
- ✓ [App Lets Users Monitor Region's Air Pollution on the Go](#). Nov. 10, 2015.
- ✓ [Pittsburgh is hiring a Sustainable Business Program Manager](#). Nov. 6, 2015.
- ✓ [Brooklyn oil spill fines to fund NYC school environmental conservation program](#). Nov. 18, 2015.

OTHER NEWS

GREEN BUILDINGS

- ✓ [Resilient Design Pilot Credits Added to LEED](#). Dec. 2015.
- ✓ [California Climate Action Scoping Plan Update](#). Nov. 19, 2015.
- ✓ [Buildings Day a first at UN Climate Talks](#). Nov. 27, 2015.
- ✓ [Building Industry Has “Volkswagen” Moment Every Day](#). Oct. 14, 2015.
- ✓ [Sustainability in buildings makes for a better investment](#). Oct. 23, 2015.
- ✓ [Green office environments linked with higher cognitive function scores](#). Oct. 26, 2015.
- ✓ [Between Extremes: Health Effects of Heat and Cold](#). Nov. 2015.

FOSSIL FUELS

- ✓ [Fossil fuels, climate, and why we won’t just burn it all](#). Oct. 21, 2015.
- ✓ [Corporate and Financial World Reaches Tipping Point in Climate Action?](#) Nov. 11, 2015.
- ✓ [Unions from 12 Countries Call for a Global Moratorium on Fracking](#). Nov. 11, 2015.
- ✓ [EPA Report on Fracking’s Potential Groundwater Impacts is Found Lacking](#). Oct. 28, 2015.
- ✓ [Fracking Gag Rules Threaten Public Health](#). Oct. 14, 2015.
- ✓ [Unions and community unite to halt plans to build coal export terminal in Oakland, California](#). Oct. 9, 2015.
- ✓ [Enormous Northwest refineries would feed China exclusively](#). Nov. 17, 2015.
- ✓ [Natural gas leak sickens San Fernando Valley residents, could take months to fix](#). Nov. 20, 2015.
- ✓ [Duke symposium addresses toxicity of energy production](#). Dec. 2015.

POLLUTION PREVENTION AND PUBLIC HEALTH

- ✓ [The Rise of the Non-Toxic Buyer: Six Case Studies on Safer Chemistry](#). Nov. 12, 2015.
- ✓ [Learning Collaborative Grants for Urban Health Departments](#). Oct. 27, 2015.
- ✓ [EPA’s SmartWay Honor Green Leaders in the Freight Industry](#). Oct. 13, 2015.
- ✓ [New National Plan to Prevent Lung Cancer Deaths Due to Radon Exposure](#). Nov. 10, 2015.
- ✓ [EPA Awards Environmental Education Grants in 24 States, Puerto Rico, D.C.](#) Nov. 13, 2015.
- ✓ [HUD and Surgeon General Propose Smoking Ban in Public Housing](#). Nov. 12, 2015. **Public comments are due Jan. 19, 2016.**
- ✓ [EPA and NIEHS highlight children’s environmental health programs](#). Dec. 2015.
- ✓ [Innovative research and collaboration at Superfund Annual Meeting](#). Dec. 2015.

SENSORS

- ✓ [EPA, Google and Aclima discuss partnership for planetary health](#). Nov. 18, 2015.
- ✓ [NIH awards ~\\$144 million for new tools and environmental exposure measures for child health and development](#). Sept. 28, 2015.

RESOURCES

IEQ

- ✓ [Best Practices for Reducing Near-Road Air Pollution Exposure at Schools](#). Nov. 2015.
- ✓ [Asthma Environmental Intervention Guide for School-Based Health Centers](#). Aug. 2015.
- ✓ [Don't Mess with Mercury — A mercury spill prevention initiative for schools](#). 2015.
- ✓ [Drinking Water at Schools and Child Care Facilities](#). EPA, 2015.
- ✓ [Summit on Safe Drinking Water From Wells](#). NIEHS, Dec. 2015.
- ✓ [Integrated Pest Management Training](#).

COMMUNITY DEVELOPMENT AND URBAN PLANNING

- ✓ [Making the Case for Linking Health and Community Development to Build Stronger, Healthier Communities](#). Nov. 23, 2015.
- ✓ [Two Degrees — The Built Environment and Our Changing Climate A Practitioner's Perspective on the Research Agenda](#). July 2015.

RESOURCES COMMUNITY DEVELOPMENT AND URBAN PLANNING (Continued)

- ✓ [Sustainable Housing Research in Canada 2015](#). Nov. 24, 2015
- ✓ [Community Inspired Housing in Canada](#). 2015.
- ✓ [Multifamily Retrofit Demonstration and Marketing](#).
- ✓ [Metrics for Healthy Communities](#).
- ✓ [Health Equity and Social Justice](#).

AIR QUALITY AND HEALTH MONITORING

- ✓ [Health Diary Guidelines](#), [Medical Tool Kit](#), and [Fact Sheets](#). Southwest Pennsylvania Environmental Health Project (EHP).
- ✓ [Protocol for Speck Air Monitoring](#).
- ✓ [Protocol for Comparing PM2.5 monitoring results to the USEPA Air Quality Index](#).
- ✓ [Citizen Science 2015](#).

FUNDING OPPORTUNITIES

- ✓ [California Energy Commission: Environmental and Public Health Impacts of Climate Change](#). Due Dec. 18, 2015.
- ✓ [Northeast Integrated Pest Management \(IPM\) Center](#): Due Jan. 1, 2016.
- ✓ [NIH: Personalized Strategies to Manage Symptoms of Chronic Illness](#). Due Jan. 16, 2016.
- ✓ [The West Penn Power Sustainable Energy Fund](#): Due Jan 21, 2016.
- ✓ [CalEPA: \\$1 Million to Support Vulnerable Communities](#). Due Jan. 22, 2016
- ✓ [EPA: Environmental Justice Collaborative Problem-Solving Grants](#). Due Feb 12, 2016
- ✓ [Keystone Energy Efficiency Alliance: Energy Efficiency Award for K-12 Schools in PA](#). Due Mar. 4, 2016

RESEARCH AND DEMONSTRATION (Not repeated below)

IEQ

- ✓ Spengler et al., 2015. [Associations of Cognitive Function Scores with Carbon Dioxide, Ventilation, and Volatile Organic Compound Exposures in Office Workers: A Controlled Exposure Study of Green and Conventional Office Environments](#).
- ✓ Carillo et al., 2015. [Home-Based Educational Intervention Improves Asthma Among Hispanic Children](#). Free download until Dec. 10.
- ✓ Joie et al, 2015. [The IVAIRE project – a randomized controlled study of the impact of ventilation on indoor air quality and the respiratory symptoms of asthmatic children in single family homes](#).
- ✓ Howieson et al., 2014. [Building tight–ventilating right? How are new air tightness standards affecting indoor air quality in dwellings?](#)
- ✓ Phillips et al., 2011. [Ageing and Airtightness - How Dwelling Air Permeability Changes Over Time](#).
- ✓ BRE, 2012. [The Effect That Increasing Air-Tightness May Have on Air Quality Within Buildings](#).
- ✓ Du et al., 2015. [Air exchange rates and migration of VOCs in basements and residences](#).
- ✓ Angelon-Gaetz et al., 2015. [The effects of building-related factors on classroom relative humidity among North Carolina schools participating in the ‘Free to Breathe, Free to Teach’ study](#).
- ✓ Hospodsky et al., 2015. [Characterizing airborne fungal and bacterial concentrations and emission rates in six occupied children's classrooms](#).
- ✓ Verrielle et al., 2015. [The MERMAID study: indoor and outdoor average pollutant concentrations in 10 low-energy school buildings in France](#).
- ✓ Strom-Tejsen et al., 2015. [The effects of bedroom air quality on sleep and next-day performance](#).
- ✓ Wahlen et al., 2015. [Protein profiles of nasal lavage fluid from individuals with work-related upper airway symptoms associated with moldy and damp buildings](#).

RESEARCH AND DEMONSTRATION (Not repeated below) IEQ (Continued)

- ✓ Dooling et al., 2015. [Active Bacterial Core Surveillance for Legionellosis — US, 2011–2013.](#)
- ✓ Carlin et al., 2015. [Arsenic and Environmental Health: State of the Science and Future Research Opportunities.](#)
- ✓ Yang and Waring, 2015. [Secondary organic aerosol formation initiated by \$\alpha\$ -terpineol ozonolysis in indoor air.](#)
- ✓ Wu et al., 2015. [A simple method to measure the gas-phase SVOC concentration adjacent to a material surface](#)
- ✓ Liu et al., 2015. [Contribution of human-related sources to indoor volatile organic compounds in a university classroom](#)
- ✓ Khurshid et al., 2015. [Particulate Reactive Oxygen Species on Total Suspended Particles – Measurements in Residences in Austin, Texas](#)

CLIMATE CHANGE

- ✓ Bradford et al., 2015. [A Heat Vulnerability Index and Adaptation Solutions for Pittsburgh, Pennsylvania.](#)
- ✓ Westervelt et al., 2015. [Radiative forcing and climate response to projected 21st century aerosol decreases \(Open Access\).](#)
- ✓ BE-Exchange, 2015. [Retrofitting Affordability: Evaluating NYC's Multifamily Energy Use Data for Savings Opportunities.](#)

FOSSIL FUEL POLLUTION

- ✓ Torres et al., 2016. [A review on risk assessment techniques for hydraulic fracturing water and produced water management implemented in onshore unconventional oil and gas production.](#)

VEGETATION AND NEAR ROAD POLLUTION

- ✓ Paulson, Baldauf, Zhang, et al. June 2015. [Educational Conference on the Use of Vegetation as Near-Roadway Mitigation for Air Pollution.](#) Various presentations.
- ✓ Tong et al., 2015. [Quantifying the effect of vegetation on near-road air quality using brief campaigns.](#)
- ✓ Steffens, et al., 2014. [Effects of roadway configurations on near-road air quality and the implications on roadway designs.](#)
- ✓ Brantley et al., 2014. [Field assessment of the effects of roadside vegetation on near-road black carbon and particulate matter](#)
- ✓ Janhall, 2015. [Review on urban vegetation and particle air pollution – Deposition and dispersion.](#) See also: Recommended Articles.
- ✓ Hagler et al., 2012. [Field investigation of roadside vegetative and structural barrier impact on near-road ultrafine particle concentrations under a variety of wind conditions](#)
- ✓ Whitlow et al., 2011. [Impact of local traffic exclusion on near-road air quality: Findings from the New York City Summer Streets campaign.](#)
- ✓ Pataki, et al. 2011. [Coupling biogeochemical cycles in urban environments: ecosystem services, green solutions and misconceptions.](#)
- ✓ MacNeill et al., 2015. [Can changing the timing of outdoor air intake reduce indoor concentrations of traffic-related pollutants in schools?](#)
- ✓ Zolner et al., 2007. [Concentrations of particulate matter in schools in southwest Germany.](#)
- ✓ Bouvier-Brown et al., 2014. [A portable and inexpensive method for quantifying ambient intermediate volatility organic compounds](#)

ABSTRACTS FOR THE ABOVE ITEMS

EVENTS – REGIONAL AUDIENCE

Dec. 10, 2015. [Master Builders' Association 2015 Young Contractors Holiday Party](#). Pittsburgh.

Dec. 16, 2015. [Behind the Meter: The Internet of Things](#). Pittsburgh. Learn about trends in the "Internet of Things", including controls of natural and mechanical ventilation and lighting, and what's happening right here in Pittsburgh.

Dec. 10, 2016. [Envisioning a Sustainable, Collaborative, and Inclusive Economy, with Jeremy Rifkin and Bill Generett](#). Inspire Speakers Series: Hear about an economic model built on connectedness, collaboration, innovation, and empathy, both globally and locally.

Dec. 15, 2015. [GBA Office LEED Platinum Tour](#). Pittsburgh. Discover how a building tenant can achieve its sustainability goals by using LEED for commercial interiors, and how employee wellness and productivity can be improved.

Jan. 7, 2016. [Envisioning Biophilic Pittsburgh](#). Phipps Conservatory, Pittsburgh.

Ending Feb. 26. ["In the Air: Visualizing What We Breathe,"](#) The exhibit at Pittsburgh Filmmakers in North Oakland attempts to raise our consciousness about the progress we have yet to make.

EVENTS – NATIONAL AUDIENCE

Dec. 3, 2015. [Hydraulic Fracturing Research Advisory Panel](#). EPA Science Advisory Board. Public teleconference to continue discussion from Oct. 28-30 meeting on the EPA draft report on potential impacts on **drinking water resources**. [Public comments](#) are due Nov. 25 or later.

Dec. 3, 2015. [Resilience modeling webinar: Case studies in New York](#). Survivability or resilience to utility outages is the one of the touted benefits of passive building design. The webinar will review the results of dynamic modeling in WUFI Plus to quantify the benefit for NYC homes and apartment s.

Dec. 3, 2015 webinar. [MCAN Resources for Successful Asthma Interventions](#). Learn about the effective MCAN implementation and evaluation tools, guidance documents and methodologies available on [AsthmaCommunityNetwork.org](#), a community-based website.

Dec. 10, 2015 webinar. [Everything You Need to Know About Advanced Energy Policy in 2015](#).

Dec. 7-9, 2015. Green and Healthy Housing Institute's Executive Leadership Institute. Baltimore, MD. A forum for interactive learning and discussion, highlighting national best practices and tools to advance healthy, safe and energy efficient housing. Invitation only. Contact GHHI at ghhi@ghhi.org.

Dec. 16, 2015. Abstracts due [NACHHO 2016 Annual Conference](#). Creating a Culture of Health Equity.

Jan. 5-7, 2016. [10th Semiannual Air Quality Applied Science Team Meeting \(AQAST10\)](#). RTP, NC. Air quality management and science; US regional issues; climate change topics.

EVENTS – NATIONAL AUDIENCE (Continued)

Jan. 14, 2016. [All Green Roofs Are Created Equal - Or Are They? An interdisciplinary and data-driven approach to assessing environmental performance](#). Liat Margolis, U. of Toronto, Canada. Lecture and webcast.

January and beyond, 2016. [Collaborative for High Performance Schools \(CHPS\)](#). Webinars on best practices for inspecting school facilities and operations.

Feb. 18-19, 2016. [Net Positive Energy + Water Conference](#). San Diego, CA.

Mar. 31-Apr 1, 2016. [Green Schools Conference & Expo](#). Pittsburgh, PA.

REGIONAL NEWS

[Clean Power Plan training and DEP listening session in Erie, PA](#). Nov. 12, 2015. Free training was held for the public before a public meeting on the Plan. The Green Building Alliance testified on how the Plan can encourage high performance and healthy buildings, as well as real progress in reducing fossil fuel usage and promoting cleaner alternatives.

[Erie Could Benefit from Energy Conservation](#). Nov. 14, 2015. At least \$200,000 per day could be saved by comprehensive strategy to improve energy efficient buildings in the county.

[Met Coke Convention in Pittsburgh Addresses Health of the Industry—But What About the Health of the Community?](#) Nov. 17, 2015. In late October, leaders in the coking industry gathered in Pittsburgh for a multi-day conference. Environmental groups showed up as well, reminding the industry of the harm their toxic emissions cause and petitioning them to use this gathering as an opportunity to share ways to reduce their pollution.

[Pittsburgh's Smart Traffic Lights are Taking a Bite Out of Vehicle Pollution](#). Oct. 30, 2015. New-age traffic lights can assess, plan, and perform to improve traffic flow, increase efficiency, and reduce pollution. Successes so far include a 25% reduction in travel time, 40% less waiting time, and 21% less emissions

[Battle growing in Franklin Co. over Mountain Valley Pipeline](#). Oct. 20, 2015. An anti-pipeline group continues to demand public records about the Mountain Valley Pipeline in Franklin County, VA. This after outrage over a nearly \$5,000 estimate for the request. The country adopted an environmental oversight plan.

[Can Pennsylvania Officials Do More to Address Crude Oil Train Safety?](#) State senators have been exploring oil train safety issues, including legislative and funding actions taken by other states for inspection and emergency response. Nov. 22, 2015.

[Duquesne Light and Pitt partner on micro-grid installation](#). Nov. 16, 2015. Duquesne Light Co. and the [University of Pittsburgh's](#) Swanson School of Engineering will join forces to install a micro-grid system on the North Shore and to invest \$500K in sustainable power research and test potential new products and services at Pitt.

REGIONAL NEWS (Continued)

[Why Chemical Transparency Matters](#). Nov. 2015. Building Green presents a series of articles on series of shorter articles focusing on a Health Product Declarations for building materials, consumer products, etc. Examples from a furniture manufacturer and discussion of legal risks are included.

[App Lets Users Monitor Region's Air Pollution on the Go](#). Nov. 10, 2015. A network of Speck Sensors developed by CMU enable smart phone users to check the Air Quality Index (AQI) nearest to them and to compare their town, city or neighborhood to others. As of 2014, there were about 20 such monitors in and around Pittsburgh.

[Pittsburgh is hiring a Sustainable Business Program Manager](#). Nov. 6, 2015. The manager will advance programs and projects that are integrated with overall organizational strategies for sustainable businesses, in alignment with existing business sustainability programs.

[Brooklyn oil spill fines to fund NYC school environmental conservation program](#). Nov. 18, 2015. [Proposed projects](#) include air quality monitoring & healthy green homes.

OTHER NEWS

GREEN BUILDINGS

[Resilient Design Pilot Credits Added to LEED](#). Dec. 2015. Three new pilot credits encourage resilience in the new reality of climate change: Assessment and Planning for Resilience; Design for Enhanced Resilience; and Passive Survivability and Functionality During Emergencies. More information at [Resilient Design Institute](#).

[California Climate Action Scoping Plan Update](#). Nov. 19, 2015. Green buildings and retrofit of existing buildings will be a key part of the new 2030 GHG reduction strategy. The plan will seek to [improve energy efficiency in buildings](#) by addressing market demand, real estate valuation, and affordable financing. Existing buildings, green building rating systems, and incentives will be emphasized. Public workshops will be held through Spring 2016, when a draft update will be released for comment.

[Buildings Day a first at UN Climate Talks](#). Nov. 27, 2015. For the first time “Buildings Day” is to be held as part of the official program at this year’s United Nations Climate Change Conference (COP 21) in Paris. It’s a dedicated event to present how the building and construction sector, which are major contributors to global energy demand, is able to tackle climate change. A new [Global Alliance](#) for the building sector was also announced. Case studies from the EU [DIRECTION project](#) for demonstrating low energy new construction are provided and from [other projects](#) are available.

[Building Industry Has “Volkswagen” Moment Every Day](#). Oct. 14, 2015. The building sector that is responsible for around 30% of global greenhouse gas emissions (almost twice as much as road transport) is not effectively regulating the energy performance and efficiency of buildings. If for example, full compliance were achieved in U.S. buildings it would save \$37 billion in life-time energy savings. Post COP21 we need to prioritize helping governments create the regulatory environments for buildings that are as effective as those for vehicles, as tough to cheat, and as disastrous to those who try.

OTHER NEWS GREEN BUILDINGS (Continued)

[**Sustainability in buildings makes for a better investment.**](#) Oct. 23, 2015. A panel of UK's leading experts on sustainable buildings conclude that convincing the property industry to think differently about sustainability will lead to better long-term returns. The importance of working with tenants and actually achieving good building performance were mentioned as well.

[**Green office environments linked with higher cognitive function scores.**](#) Oct. 26, 2015. People who work in well-ventilated offices with below-average levels of either indoor VOCs or CO₂ have significantly higher cognitive functioning scores -- in crucial areas such as responding to a crisis or developing strategy -- than those who work in offices with typical levels. In a double blind study, 24 adults were exposed in a test room.

[**Between Extremes: Health Effects of Heat and Cold.**](#) Nov. 2015. Complex relationships between temperature and health, and the effectiveness of building and community adaptation and human behavior in reducing temperature-related mortality, are discussed.

FOSSIL FUELS

[**Fossil fuels, climate, and why we won't just burn it all.**](#) Oct. 21, 2015. We are experiencing a Black Swan event, where fossil fuel prices plummet and renewable energy booms. The new math has emerged that provides hope for meaningful climate action -- and, incidentally, gives über-efficient buildings a starring role in climate solution-making by reducing and flattening the overall electricity demand.

[**Corporate and Financial World Reaches Tipping Point in Climate Action?**](#) Nov. 11, 2015. A new report indicates that 89 percent of major companies have activities that reduce GHG emissions, compared to less than 50 percent five years ago. Other reports show that clean energy investments have increased greatly, and fossil fuel divestment has continued.

[**Unions from 12 Countries Call for a Global Moratorium on Fracking.**](#) Nov. 11, 2015. Thirty trade union bodies representing tens of millions of workers have called for a "global moratorium on hydraulic fracturing (fracking) for shale gas, coal seam gas, and shale oil." The two Global Union Federations represent education and public service workers, and key unions in health care, energy and water utilities.

[**EPA Report on Fracking's Potential Groundwater Impacts is Found Lacking.**](#) Oct. 28, 2015. The Clean Water Action NGO recommended that the draft EPA report include additional research data and revise the misleading wording.

[**Fracking Gag Rules Threaten Public Health.**](#) Oct. 14, 2015. The collaborative report, [*Politics in the Exam Room: A Growing Threat*](#), includes a chapter--"Toxic Exposures" -- that looks at laws that protect corporate secrets at the expense of patients potentially exposed to the hazardous chemicals used.

[**Unions and community unite to halt plans to build coal export terminal in Oakland, California.**](#) Oct. 9, 2015. The Coal Free Oakland campaign to stop plans to build a coal export terminal in the Oakland Port resulted in a packed Oakland City Council [meeting](#) on September 21, and a vote requiring a public health impact study to guide the Council's action, up to and including a moratorium on coal.

OTHER NEWS FOSSIL FUELS (Continued)

[Enormous Northwest refineries would feed China exclusively.](#) Nov. 17, 2015.

China is seeking to tap the flood of cheap natural gas coming from the interior of North America by converting it to methanol at three huge refineries in Washington and Oregon. The processing plants, collectively called Northwest Innovation Works, have received little attention despite their head-snapping impact.

[Natural gas leak sickens San Fernando Valley residents, could take months to fix.](#) Nov. 20, 2015. A leaking gas well more than a mile from the nearest homes in the Los Angeles neighborhood of Porter Ranch has elicited hundreds of complaints from residents for weeks. The very large leak also raises concerns about the impact of the natural gas infrastructure on climate change. Southern California Gas Co. warns that it might need several months to plug the leak.

[Duke symposium addresses toxicity of energy production.](#) Dec. 2015. Speakers addressed toxicological issues caused by energy production and highlighted ways to reduce public health impacts. Public health implications of mountaintop coal mining, hydraulic fracturing, mercury emissions from power plants, and wastes from energy production were addressed

POLLUTION PREVENTION AND PUBLIC HEALTH

[The Rise of the Non-Toxic Buyer: Six Case Studies on Safer Chemistry.](#) Nov. 12, 2015. Environmentally preferable purchasing (EPP) programs are increasingly taking into account the issue of toxicity, nudging buyers toward the purchase of products with less toxic chemistries, e.g., products without chemical fire retardants. Supply chains are shifting towards safer, more sustainable products.

[Learning Collaborative Grants for Urban Health Departments.](#) Oct. 27, 2015. The Public Health Institute awarded 13 grants to urban local health departments to build capacity in urban local health departments to address climate change, health, and equity, using various approaches in collaboration with community partners. Philadelphia and Columbus are among the grantees.

[EPA's SmartWay Honor Green Leaders in the Freight Industry.](#) Oct. 13, 2015. The awards honor the top performing SmartWay partner companies that demonstrate how businesses can shrink their carbon footprints and contribute to healthier air all while saving on fuel costs as they move goods across America.

[New National Plan to Prevent Lung Cancer Deaths Due to Radon Exposure.](#) Nov. 10, 2015. Strategies to reduce exposure to radon include requiring radon testing and reduction systems as a standard practice in housing finance and insurance programs, and institutionalizing radon risk reduction through building code requirements.

[EPA Awards Environmental Education Grants in 24 States, Puerto Rico, D.C.](#) Nov. 13, 2015. 35 grants were awarded to projects that included community-based, school-based, after-school and non-formal programs focusing on a range of environmental issues, from air quality to recycling, from stream monitoring to climate negotiations. A Pennsylvania group was one of the grantees.

OTHER NEWS POLLUTION PREVENTION AND PUBLIC HEALTH (Continued)

[HUD and Surgeon General Propose Smoking Ban in Public Housing.](#) Nov. 12, 2015. The proposed rule would require more than 3,100 public housing agencies to go smoke-free within several years. The agencies must design policies prohibiting lit tobacco products in all living units, indoor common areas, and administrative offices and in all outdoor areas near housing and administrative office buildings. Some public housing agencies have already adopted such policies, and some [local ordinances](#) are moving that way. **Public comments are due Jan. 19, 2016.**

[EPA and NIEHS highlight children's environmental health programs.](#) Dec. 2015. NIEHS and EPA staff and center grantees discussed new research on topics ranging from obesity, reproductive health, and neurodevelopmental disorders, to air pollution, nutrition, stress, and poverty. Grantees also discussed how to make their research findings useful for the development of health policies. Agency staff also briefed Congress on the various programs for children's environmental health.

[Innovative research and collaboration at Superfund Annual Meeting.](#) Dec. 2015. The NIEHS Superfund Research Program annual meeting brought together researchers, trainees, administrators, and partners to share findings and discuss research translation, community engagement, and training. Topics include improved technologies to measure and cleanup contaminants, citizen science, sustainable communities, big data management, and modeling.

SENSORS

[EPA, Google and Aclima discuss partnership for planetary health.](#) Nov. 18, 2015.

The joint effort will monitor and map air pollution, using sensors and web cloud data. Pilot studies in Denver and [California](#) have mapped indoor, outdoor, and in-vehicle levels of pollution, noise, etc. Sensor drift was also corrected.

[NIH awards ~\\$144 million for new tools and environmental exposure measures for child health and development.](#) Sept. 28, 2015. Researchers will be able to investigate more effectively environmental exposures from the womb through later years in a child's life. These projects will enhance the next phase of research on the effects of environmental exposures on child health and development. One of the three initiatives, [PRISM](#), includes several projects to develop monitors for environmental pollutants, asthma triggers, and breath air in asthmatic children.

RESOURCES

IEQ

[Best Practices for Reducing Near-Road Air Pollution Exposure at Schools.](#) EPA and STI, November 2015. Building design and operation and site-related strategies to reduce pollutant intrusion are summarized.

[Asthma Environmental Intervention Guide for School-Based Health Centers.](#) RAMP, Aug. 2015. This guide supports centers in leading or supporting evidence-based strategies and promising practices to reduce exposure to environmental asthma triggers.

[Don't Mess with Mercury — A mercury spill prevention initiative for schools.](#) ATDSR, 2015. Clean-up how-to, games, interactive lesson plans, resources.

RESOURCES IEQ (Continued)

[Drinking Water at Schools and Child Care Facilities](#). EPA, 2015. Testing guidance for lead in drinking water, and information on sources, laws, and regulations

[Summit on Safe Drinking Water From Wells](#). NIEHS, Dec. 2015. Private wells are common in some states and can contain various contaminants, but federal law does not regulate them. Scientists, community members, and public health professionals, with representatives from industry, local health departments, and local, state, and federal agencies all met to develop recommendations for improving access to safe drinking water from private wells.

[Integrated Pest Management Training](#). Stop Pests in Housing Program has worked with more than 30 housing authorities (HAs) nationwide. Participating rental housing providers work with a Stop Pests Consultant to go through [the steps it takes to implement IPM](#). Qualifying sites have the opportunity to host a free, on-site IPM in Multifamily Housing Training. [Previous presentations](#) are posted online. [Webinars and discussions](#) are also posted.

COMMUNITY DEVELOPMENT AND URBAN PLANNING

[Making the Case for Linking Health and Community Development to Build Stronger, Healthier Communities](#). Nov. 23, 2015. The report summarizes recent research and policy, provides an array of promising current and recent examples of collaborative initiatives, and explores barriers to such efforts as well as lessons learned about how to overcome them. Examples of healthy housing, home asthma interventions, and other preventive measure are included from Pennsylvania, Boston, Minneapolis, etc. See also: webinar on [Healthy Places](#).

[Two Degrees — The Built Environment and Our Changing Climate A Practitioner's Perspective on the Research Agenda](#). Cole Roberts, LBNL Distinguished Lecture video, July 2015. A clear framework for research spanning communities, policy makers, planners, designers, developers, builders and operator is discussed. The importance of human connections, behavior, and synergies is stressed. Zero and positive carbon **communities**, resilient design, and future climate projections are addressed. The [book](#) is available online.

[Sustainable Housing Research in Canada 2015](#). Three presentations on zero energy and passive housing (multi- and single-family) demonstration projects were made in the November 24 session (all [presentations](#) will be posted soon). Dew point in exterior walls was modeled and measured in one project to avoid condensation problems in buildings with low air leakage and high insulation levels. Healthy, affordable community design was featured in several projects using integrated systems design (see next item below).

[Community Inspired Housing in Canada](#). Pearl and Wentz, 2015. The authors share insights into the complexities of new green technologies, subsidy programs, nonprofit utility co-ops, working with co-ops and government agencies, managing the challenges of building affordable green social housing, “future proofing,” provoking change in legislation and in the construction industry, and breaking away from standard procedures. Clients, builders, and residents were involved and educated from the beginning to create and maintain durable housing of high environmental and social quality. An overview is provided in the 2015 lecture, [Moving Toward Passivhaus](#), and in the [summary](#).

RESOURCES COMMUNITY DEVELOPMENT AND URBAN PLANNING (Continued)

[Multifamily Retrofit Demonstration and Marketing](#). The BEEM-UP Project (Building Energy Efficiency for Massive market Uptake) is a public private partnership in the EU that aims to demonstrate the economic, social and technical feasibility of retrofitting initiatives for drastically reducing the energy demand in existing residential buildings. It will also lay the ground for massive market uptake of such initiatives. [Preliminary estimates](#) in three multinational case studies indicate energy savings of 78-87%.

[Metrics for Healthy Communities](#). This site can help you develop and evaluate community health improvement initiatives, especially cross-sector initiatives. The two Housing modules address indoor asthma triggers, but outdoor pollution is not addressed.

[Health Equity and Social Justice](#). National Assoc. of County and City Health Officers. Roots of Inequity, an online course featuring cases such as environmental pollution in Manhattan, plus networks, a toolkit, and publications.

AIR QUALITY AND HEALTH MONITORING

[Health Diary Guidelines](#), **[Medical Tool Kit](#)**, and **[Fact Sheets](#)** on pollutant exposures and health risks from shale gas. Southwest Pennsylvania Environmental Health Project (EHP).

[Protocol for Speck Air Monitoring](#). EHP has developed protocols for monitoring the air quality (indoor and outdoor) of residents' homes, in an effort to answer the question of public health effects brought on by poor air quality around shale gas activities. EHP is specifically concerned about the direct toxicity of fine particulate matter (PM_{2.5}) and potential synergistic actions resulting from the simultaneous transport of other emitted toxic chemicals.

[Protocol for Comparing PM2.5 monitoring results to the USEPA Air Quality Index](#)

When EHP helps residents monitor the air quality, particle monitors are placed both inside and outside residences. Each monitor records minute-by-minute levels of PM_{2.5} in ug/m³. Hourly averages are calculated for analysis of human health impacts and comparisons to the EPA Air Quality Index for the same location.

[Citizen Science 2015](#). Abstracts and contacts on various projects. See p. 9 on re: air pollutant monitoring, and p. 14 re: personal exposure monitoring.

FUNDING OPPORTUNITIES

[California Energy Commission: Environmental and Public Health Impacts of Climate Change](#). Grants up to \$1.5 M for major projects and \$200K for small projects to address IAQ, adaptation and resilience, public health roadmap, etc. Due Dec. 18, 2015.

[Northeast Integrated Pest Management \(IPM\) Center](#) RFA to address or identify regional [IPM stakeholder priorities](#), and benefit the region at large. Due Jan. 1, 2016.

[NIH: Personalized Strategies to Manage Symptoms of Chronic Illness](#). Due Jan 16, 2016

FUNDING OPPORTUNITIES (Continued)

[The West Penn Power Sustainable Energy Fund](#) Financing programs are focused on innovative energy efficiency and conservation technologies, renewable and clean energy and public outreach and education. Due Jan. 21, 2016

[CalEPA: \\$1 Million to Support Vulnerable Communities.](#) Due Jan. 22, 2016.

[EPA: Environmental Justice Collaborative Problem-Solving Grants.](#) Due Feb. 12, 2016.

[Keystone Energy Efficiency Alliance: Energy Efficiency Award for K-12 Schools in PA.](#) Due Mar 4, 2016.

That's it for the November/December Compendium!

Please send us event information, news, resources, research results for next month's compendium. Visit the [ROCIS website](#) for current and past compendiums, as well as the ROCIS white papers, and archives from meetings and webinars.

Cheers,
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