



# smokestacks, impacts and talkbacks

Open dialogues about Bush administration policies, air pollution, and what we can do about it.

## Discussion Guide:

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## Welcome!

We hope you find Smokestacks, Impacts and Talkbacks informative, thought-provoking and a real conversation starter. That's the point.

You're going to get a chance to both talk and listen, and hopefully gain new insight -- from the materials the Sierra Club has compiled for you and from what you learn from each other. You'll have a chance to start putting this new information into your own words, so that when you leave you can continue the conversation with other friends and family.

You'll have a chance to talk about:

- How air pollution is affecting both kids and adults in communities across America. . . like yours.
- How Bush administration policies are allowing major industries to keep on polluting. . . without installing up-to-date pollution controls.
- How today's technology along with real enforcement of clean air laws could put America back on track to healthy air.

Today, many Americans are simply unaware of just how much federal officials in the Bush administration have weakened environmental protections, even basic protections for our air, water and land. That's why the Sierra Club is working to start hundreds of Smokestacks, Impacts and Talkbacks discussions nationwide!

We're glad you're here, and hope you will be inspired to continue the conversation with your friends and family.

So let's talk!

**Today, many Americans are simply unaware of just how much federal officials in the Bush administration have weakened environmental protections, even basic protections for our air, water and land.**



## **Asthma on the Rise**

- Asthma is emerging as a national epidemic. From 1980 to 1996 the prevalence of asthma among Americans increased by nearly 74%. By 2001, more the 31 million people had been diagnosed with asthma at some point in their lives, and 12 million Americans (including 4.2 million children) had an asthma attack the previous year.
  
- Studies have demonstrated repeatedly that air pollution aggravates health problems, especially for children and the elderly. Smog levels in the eastern United States each summer cause an estimated:
  - 159,000 trips to the emergency room.
  - 53,000 hospital admissions
  - 6 million asthma attacks
  
- The Center for Disease Control reports that asthma accounts for 14 million lost school days annually.

### Key Sources:

National asthma statistics 1980-1996: Center for Disease Control. "Surveillance for Asthma-United States 1980-1999." March 29, 2002.

National asthma statistics 2001: National Center for Health Statistics. "Asthma Prevalence, Health Care Use and Mortality, 2000-2001." January 28, 2003.

Lost school days due to asthma: Mannino DM, Homa DM, Akinbami LJ, Moorman JE, Gwynn C, Redd S. Surveillance for Asthma—United States, 1980–1999. /Morbidity & Mortality Weekly Report Surveillance Summary/ March 29, 2002; 51(No.SS-1):1–13.

## **Philadelphia Case Study**

- For 15 days during the summer of 2003, smog levels in Philadelphia exceeded recommended safe levels. Andrew Altman, father of a 2 1/2 year-old with asthma lamented, "There were days when I just didn't take Berel out." After talking about their son's condition with friends and neighbors, they discovered that "practically everyone we spoke to had someone in their family with asthma. It was universal."
- In early 2003, Pennsylvania (and 14 other states and cities) sued the Bush administration to stop air pollution rule changes that make it easier for aging factories and coal-burning power plants to increase pollution without upgrading pollution controls.
- The editors of the Philadelphia Inquirer applauded the state's law suit. "Protecting the health of citizens means states standing up to President Bush's dismantling of environmental safeguards, particularly the landmark Clean Air Act, one of the crowning achievements of his Republican predecessors, including his father."

### Key Sources:

Days that smog exceeded safe levels in Philadelphia, summer 2003: Pennsylvania Department of Environmental Protection. "Ozone Levels Below Average in 2003." September 26, 2003.

Pennsylvania children diagnosed with asthma 2001-2002: PA Department of Health, Bureau of Community Health Systems, Division of School Health. "School Health Statistics." August 19, 2003.

Philadelphia Inquirer editorial titled, "New environmental rules deserve states' wrath," February 3, 2003.

**Pennsylvania and 14 other states and cities have sued the Bush administration to stop rule changes that will make it easier for aging factories and coal-burning power plants to increase pollution without upgrading pollution controls:**

California  
Connecticut  
Illinois  
Maine  
Maryland  
Massachusetts  
New Hampshire  
New Jersey  
New York  
Pennsylvania  
Rhode Island  
Wisconsin  
City of Baltimore  
New York City  
District of Columbia

## **Toxic Mercury**

- New estimates from the Environmental Protection Agency indicate that one in six U.S. women of childbearing age have mercury levels in their blood high enough to put their babies at risk.
- The FDA and EPA issued a warning in March 2004 to all "pregnant women, women who may become pregnant, and nursing mothers" against eating mercury-laden fish.
- As many as 630,000 infants are born in the U.S. every year with unsafe mercury levels. A developing fetus is particularly sensitive to the effects of mercury on its rapidly developing brain.
- Coal-fired power plants are the single largest source of mercury pollution in the U.S. -- producing 48 tons annually or about 40% of the total mercury emissions from all man-made sources nationwide.
- Bush administration officials have proposed changes to mercury pollution standards that will allow power plants to emit three times *more mercury*, than if the current Clean Air Act was enforced.

### Key Sources:

Estimates of women and newborns with unsafe levels of mercury: U.S. Environmental Protection Agency, *Methylmercury: Epidemiology Update*, Presentation by Kathryn Mahaffey, PhD at the National Forum on Contaminants in Fish, San Diego, CA (January 25-28, 2004).

December 2003 FDA and EPA draft warning: "Overview of the Draft FDA/EPA Methylmercury Consumer Advisory," Food Advisory Committee Meeting. (December 10, 2003).

## **Mercury 'Hot Spots'**

- Mercury emitted by coal-fired power plants adheres to particulates which "fall out" in the geographic areas closest to the plants. This has the effect of creating local mercury "hot spots." Top "hot spot" states are Pennsylvania, Maryland, Michigan, Florida, Illinois, South Carolina, North Carolina, and Texas.
- The Bush administration proposes addressing mercury pollution with a cap-and-trade "pollution trading" plan. This allows some power plants to pollute more by buying the right to pollute from another plant. With pollution trading, some areas may get cleaner, but others will stay polluted for longer.
- Eating mercury-laden fish is the way most people are exposed to this known poison. Forty-five U.S. states and territories have issued fish consumption warnings due to mercury.
- Fifteen states have issued statewide fish consumption warnings for all their entire state's waters. Minnesota has issued 984 mercury advisories, including every lake in the "land of 10,000 lakes."

**Fifteen states have issued statewide mercury warnings for all their surface waters, which means all lakes and rivers in the state:**

Connecticut  
Florida  
Illinois  
Kentucky  
Massachusetts  
Maryland  
Maine  
Missouri  
North Dakota  
New Hampshire  
New Jersey  
Ohio  
Pennsylvania  
Rhode Island  
Vermont

### Key Sources:

Mercury "hot spots": U.S. Environmental Protection Agency, Office of Water, *Draft Mercury REMSAD Deposition Modeling Results*, 2003.

State mercury warnings: Update: National Listing of Fish and Wildlife Advisories, EPA-823-F-02-007 (May 2003)



### **'Clear Skies' or Dirtier Air, You Decide**

In his 2003 State of the Union address, President Bush touted his administration's plan to cut air pollution from power plants by 70 percent over the next 15 years. But the administration is bragging about a plan that could actually result in more pollution than if they simply enforced existing clean air laws. Ironically this downgrade of the Clean Air Act is called the "Clear Skies" initiative. It would:

- Delay enforcement of public health standards for smog and soot until the end of 2015, more than a decade away. Scientists increasingly believe soot to be the most dangerous air pollutant, blaming it for 64,000 deaths per year in the US, which is almost twice the number of deaths due to auto crashes.
- Expand air pollution trading systems that result in some communities getting cleaner, but many communities losing out when power plants in their area can buy the "right to pollute" for longer.
- Allow power plant operators to emit more mercury than if the existing Clean Air Act was simply enforced. EPA estimates that mercury pollution could be limited to 5 tons per year by 2008 under enforcement of the Clean Air Act, using existing and emerging technologies. In response to industry demands, the Bush Administration's plan would allow 15 tons of mercury pollution by 2018 – three times more. According to the *Los Angeles Times*, the proposed mercury rule, "contains numerous paragraphs of verbatim language supplied by two separate industry advocates."
- Restrict the power of states to call for an end to pollution from upwind sources in other states. The administration's plan prohibits any new petitions by states to the EPA before 2012.
- Allows our country's oldest, most polluting "grandfathered" power plant operators to continue to pollute their communities at high levels, using outdated pollution control technology, with no real requirement to install better, up-to-date pollution controls. This was the biggest goal of industry representatives who met in private sessions with the Cheney Energy Task Force.

**'Grandfathered' Power Plants:  
The Worst Polluters**

- Today, there are more than 2500 coal-fired power plants in the U.S., and the many of them were built decades ago, some as many as 30-50 years ago. In passing the Clean Air Act in the late 1970s, Congress allowed older, "grandfathered" power plants to avoid meeting the modern pollution control standards that new facilities had to adopt. Many of these plants are still operating today and emit ten times more pollution than modern ones.
- Since 1977, the Clean Air Act has required that these old power plants install modern pollution control systems if they decide to expand or modify their facilities in a way that significantly increases pollution. Then they become a "new source" of pollution, and must install modern pollution control technology.
- The Bush administration is the first ever to change this rule and actually reverse progress to get the dirtiest power plants cleaned up.
- The Bush administration plan exempts old power plants from being held accountable to the Clean Air Act's New Source Review (NSR) standard, which requires plant operators to install "best available control technology" if they expand or significantly modify their facilities. The administration's plan redefines "routine maintenance," allowing older power plants to significantly expand their output (and pollution) without being considered a "new source" and without installing up-to-date pollution controls.
- Many of these changes to air pollution standards are being carried out by Bush administration officials within various government departments by rewriting rules and weakening how rules will be enforced. Many of these actions do not require a vote of the Congress.

# *Dialogue#3*

## **Today's Technology and Real Enforcement Can Greatly Reduce Dangerous Air Pollutants**

Review the information about ways to solve air pollution on pages 14 - 15 and discuss the following question with your group. Choose another "scribe."

### **Question:**

- What makes you most hopeful that air pollution can be cleaned up?

## DIALOGUE #3 READINGS 1-of-2

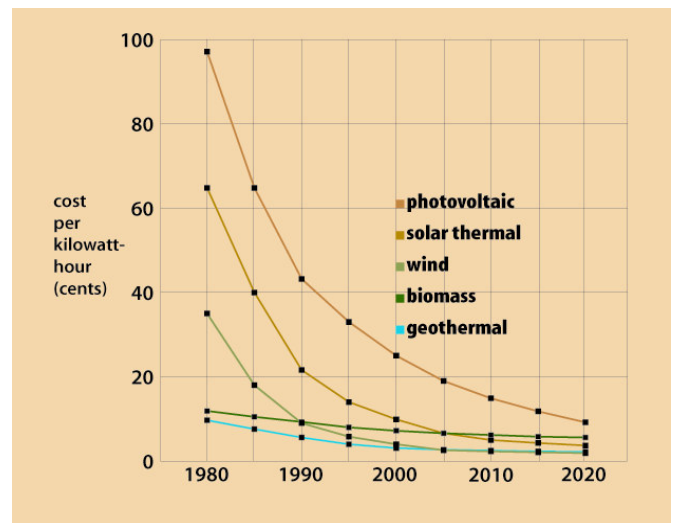
### Today's Technology Can Reduce Dangerous Air Pollutants

- Commercially available technologies and techniques in use today achieve up to 91 percent mercury emissions reductions from power plants over uncontrolled levels, and do so very cost-effectively (on the order of 1/50th of a penny per KWh).
- Since Congress passed the Clean Air Act in 1970, major types of air pollution have dropped by an aggregate of 48%.
- Renewable energy sources like wind and solar power are ready to meet new power demands and replace our need for dirty, fossil fuel power plants. Already, wind turbines in this country produce enough electricity to meet the needs of more than 1 million households.
- According to the Department of Energy, the United States can produce 20 percent of its electricity with renewable energy by 2020 without increasing consumer energy bills. This step, along with strong energy efficiency standards would cut smog and soot pollution from power plants 59% by 2020.
- Car makers already have the technology in hand to make all cars, trucks and SUVs average 40 miles per gallon within 10 years, while still offering consumers a wide array of vehicles. Taking this step would remove over 400 million pounds of smog-forming pollution out of the air.

Key Sources:

Cost reductions for renewable energy sources: National Renewable Energy Laboratory, Energy Analysis Office

Soot and smog reduction of 59%: Clemmer et al. "Clean Energy Blueprint: A Smarter National Energy Policy for Today and the Future." Union of Concerned Scientists. October, 2001.



**Technological advances have brought the cost of electricity generated by the wind down by 82 percent since 1981. Solar energy technology has made remarkable progress as new, more efficient photovoltaic cells have been developed.**

## **DIALOGUE #3 READINGS 2 of 2**

### **Standards and Enforcement Work to Bring Needed Changes**

- The conservative White House Office of Management and Budget reported in 2003 that the benefits of protecting our health and environment, particularly reducing air pollution, far outweigh the costs. The changes brought by enforcement of environmental laws benefited the economy by as much as \$230 billion, yet cost between \$36 and \$42 billion to achieve.
- Enforcement actions with power plants, refineries, and other big polluters that began under the Clinton administration will reduce soot and smog-forming pollution by almost a million tons a year when fully implemented. (Most, if not all, of these settlements would no longer be possible under changes the Bush administration has proposed.)
- Historically, polluters have overstated the costs of pollution controls. In the late 1980s, industry leaders complained that reductions in sulfur dioxide emissions, which cause acid rain, would cost \$1,000 a ton. The actual cost has been about \$150 a ton, far lower than exaggerated industry predictions.
- The EPA has estimated that costs to meet the Clean Air Act amendments of 1990 have been half to one fourth of what industry claimed they would be.
- States with air pollution problems don't want the Bush administration to reduce clean air standards or enforcement, especially for the dirtiest, oldest "grandfathered" power plants. Law suits brought by fourteen states and cities have temporarily stopped this Bush administration change, but only until a final court decision is issued.



# *Your Thoughts. . .*

## **Putting It All Together**

Take a few minutes to think about what has been discussed today and how you would personally answer the question below. Make some brief notes if you'd like.

### **Question:**

- What insight have you gained from today's dialogue that you are going to take away with you and share with others?

NOTES:

# Next Steps. . .

Make a personal commitment to start conversations.

## **Start Conversations: One-At-A-Time**

TELL FRIENDS AND FAMILY what you learned and talked about today. It's one of the most important things you can do to bring attention to what's going on with air pollution and the Bush administration. Why? Because with today's political sound bites and :30 second ads, many American's don't know who to believe. They don't want to hear from "experts" or public officials because they don't know who to trust. What they value most is talking with people like them, especially those who have taken the time to learn and think about what's going on. That can be you, if you make a commitment to do it.

- Will you talk with friends and family about this gathering and what you learned? Who will you talk to first?

**Yes, I will**

## **Start Conversations: In Groups You Belong To**

OFFER TO BRING THE MATERIALS that we've used today to another group you're part of. If you found value in this information and dialogue approach, chances are your church study group, parenting group, book club, civic club, you name it, will find it valuable too. Or host a gathering with friends and neighbors in your home. To help you, there's a Facilitator's Guide to show you exactly how to do it.

- Would you be willing to host a discussion like this, or take these materials to another group you're part of?

**Yes, I will**

## **Start Conversations: In Your Community**

WRITE A LETTER TO THE EDITOR of your local paper. Think writing letters to the editor is only for cranks? Think again. The letters-to-the-editor section is always one of the most highly read in every paper. It's an excellent way to make sure that thousands of people in your community have a chance to hear about what's going on from the perspective of an everyday American. Letters to the editor are best if they are commenting on something specific in the paper, an article or opinion piece for example, either with praise or alarm. They're also best if short, and focussed on a particular point.

- Will you write a letter to the editor about air pollution and what the Bush administration is doing to America's air pollution standards?

**Yes, I will**