

A Citizens Guide to What Individuals and Communities Can Do to Help Meet the Goals of the Clean Air Act Amendments of 1990

Cover photos: Photos provided by the South Coast Air Quality Management District, an air quality agency serving the 13 million residents of the four county Los Angeles region. (Los Angeles, California, on a high pollution day, as compared to photo inset taken on a clear day when air pollutant levels were low.)

This publication was prepared by the United States Environmental Protection Agency to help people discover ways they can reduce air pollution. If you would like to learn more about air pollution in your state or your local area—or about indoor air pollution—telephone numbers are provided at the back of the pamphlet for your state's environmental agency and the EPA regional office in your area.

In this booklet you will learn about—

- Sources of outdoor air pollution
- Health effects of air pollution
- The federal effort—the Clean Air Act Amendments of 1990
- How air pollution is being fought on all fronts
- The difference YOU can make
- Additional sources of information



Air pollution affects everyone



A ir pollution threatens the health of human beings and other living things on our planet. While often invisible, pollutants in the air create smog and acid rain, cause cancer or other serious health effects, diminish the protective ozone layer in the upper atmosphere, and contribute to the potential for world climate change.



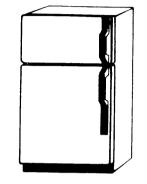
mog and other types of air pollution can lead to or aggravate respiratory, heart, and other health problems. It can be particularly harmful to people with existing lung or heart disease, the elderly, and the very young. Six of every ten Americans live in areas that fail to meet one or more federal air quality standards during some portion of the year. However, not everyone who lives in such areas will have health problems. Level, extent, and duration of exposure, age, individual susceptibility, and other factors play a significant role in determining whether or not someone will experience pollution-related health problems. Since polluted air can move from one area or region to another, it has the potential to affect virtually all of us.



A cid rain—caused by sulfur dioxide and nitrogen oxides combining with moisture in the air—limits the ability of lakes to support aquatic life, may damage trees and plants, and erodes building surfaces and national monuments. Pollutants in the air can also reduce visibility, obscuring the majestic vistas in national parks such as Grand Canyon and Shenandoah.

Other air pollutants—called "air toxics"—are known or suspected to cause cancer or other serious heath effects, such as damage to respiratory or nervous systems. Air toxics include metals, particles, and certain vapors from fuels and other sources.

Some chemicals used in refrigerators and air conditioners last a long time if released into the air, rising to the upper atmosphere where they destroy the protective layer. These and other air pollutants (like methane and carbon dioxide) also contribute to the suspected accelerated warming of the earth, known as the "greenhouse effect."



A ir pollution has many sources. Some sources are obvious—like industrial smokestacks, chemical plants, automobiles, trucks, and buses. Others are not so obvious—like gasoline stations; dry-cleaners; outboard motors; lawn, garden, farm, and construction equipment engines; certain paints; and various household products.



Everyone can play a role in preventing and reducing air pollution. This publication describes efforts already underway, provides you with some basic air pollution information, and suggests ways that you can do your part in helping to prevent and reduce air pollution.



Major Air Pollutants— What They Are, Where They Come From,

For six pollutants—ozone, carbon monoxide, nitrogen dioxide, particulate matter, sulfur dioxide, and lead-EPA has established air quality standards designed to protect the health and welfare of people, plants, and animals, as well as buildings, monuments, water resources, etc. These standards are based on currently available scientific data and health studies. Levels of concern vary from pollutant to pollutant.

Pollutant

Ozone. A colorless gas that is the major constituent of photochemical smog at the earth's surface. In the upper atmosphere (stratosphere), however, ozone is beneficial, protecting us from the sun's harmful rays.

Carbon Monoxide. Odorless and colorless gas emitted in the exhaust of motor vehicles and other kinds of engines where there is incomplete fossil fuel combustion.

Nitrogen Dioxide. Light brown gas at lower concentrations; in higher concentrations becomes an important component of unpleasant-looking brown, urban haze.

Particulate Matter. Solid matter or liquid droplets from smoke, dust, fly ash, and condensing vapors that can be suspended in the air for long periods of time.

Sulfur Dioxide. Colorless gas, odorless at low concentrations but pungent at very high concentrations.

Lead. Lead and lead compounds can adversely affect human health through either ingestion of lead-contaminated soil, dust, paint, etc., or direct inhalation. This is particularly a risk for young children, whose normal hand-to-mouth activities can result in greater ingestion of lead-contaminated soils and dusts.

Toxic Air Pollutants. Includes pollutants such as arsenic, asbestos, and benzene

Stratospheric Ozone Depleters. Chemicals such as chlorofluorocarbons (CFCs), halons, carbon tetrachloride, and methyl chloroform that are used in refrigerants and other industrial processes. These chemicals last a long time in the air, rising to the upper atmosphere where they destroy the protective ozone layer that screens out harmful ultraviolet (UV) radiation before it reaches the earth's surface.

Greenhouse Gases. Gases that build up in the atmosphere that may induce global climate change—or the "greenhouse effect." They include carbon dioxide, methane, and nitrous oxide.

and Their Potential Effects

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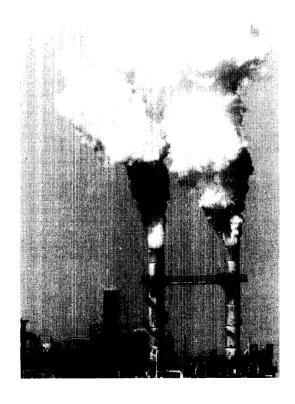
 Sources	Effects
Ozone is formed in the lower atmosphere as a result of chemical reactions between oxygen, volatile organic compounds, and nitrogen oxides in the presence of sunlight, especially during hot weather. Sources of such harmful pollutants include vehicles, factories, landfills, industrial solvents, and numerous small sources such as gas stations, farm and lawn equipment, etc.	Ozone causes significant health and environmental problems at the earth's surface, where we live. It can irritate the respiratory tract, produce impaired lung function such as inability to take a deep breath, and cause throat irritation, chest pain, cough, lung inflammation, and possible susceptibility to lung infection. Smog components may aggravate existing respiratory conditions like asthma. It can also reduce yield of agricultural crops and injure forests and other vegetation. Ozone is the most injurious pollutant to plant life.
Automobiles, buses, trucks, small engines, and some industrial processes. High concentrations can be found in confined spaces like parking garages, poorly ventilated tunnels, or along roadsides during periods of heavy traffic.	Reduces the ability of blood to deliver oxygen to vital tissues , affecting primarily the cardiovascular and nervous systems. Lower concentrations have been shown to adversely affect individuals with heart disease (e.g., angina) and to decrease maximal exercise performance in young, healthy men. Higher concentrations can cause symptoms such as dizziness, headaches, and fatigue.
Result of burning fuels in utilities, industrial boilers, cars, and trucks.	One of the major pollutants that causes smog and acid rain. Can harm humans and vegetation when concentrations are sufficiently high. In children, may cause increased respiratory illness such as chest colds and coughing with phlegm. For asthmatics, can cause increased breathing difficulty.
Industrial processes, smelters, automobiles, burning industrial fuels, woodsmoke, dust from paved and unpaved roads, construction, and agricultural ground breaking.	These microscopic particles can affect breathing and respiratory symptoms, causing increased respiratory disease and lung damage and possibly premature death. Children, the elderly, and people suffering from heart or lung disease (like asthma) are especially at risk. Also damages paint, soils clothing, and reduces visibility.
Emitted largely from industrial, institutional, utility, and apartment-house furnaces and boilers, as well as petroleum refineries, smelters, paper mills, and chemical plants.	One of the major pollutants that causes smog. Can also, at high concentrations, affect human health, especially among asthmatics (who are particularly sensitive to respiratory tract problems and breathing difficulties that SO ₂ can induce). Can also harm vegetation and metals. The pollutants it produces can impair visibility and acidify lakes and streams.
Transportation sources using lead in their fuels, coal combustion, smelters, car battery plants, and combustion of garbage containing lead products.	Elevated lead levels can adversely affect mental development and performance, kidney function, and blood chemistry. Young children are particularly at risk due to their greater chance of ingesting lead and the increased sensitivity of young tissues and organs to lead.
Chemical plants, industrial processes, motor vehicle emissions and fuels, and building materials.	Known or suspected to cause cancer, respiratory effects, birth defects, and reproductive and other serious health effects. Some can cause death or serious injury if accidentally released in large amounts.
Industrial household refrigeration, cooling and cleaning processes, car and home air conditioners, some fire extinguishers, and plastic foam products.	Increased exposure to UV radiation could potentially cause an increase in skin cancer, increased cataract cases, suppression of the human immune response system, and environmental damage.
The main man-made source of carbon dioxide emissions is fossil fuel combustion for energy-use and transportation. Methane comes from landfills, cud-chewing livestock, coal mines, and rice paddies. Nitrous oxide results from industrial processes, such as pulon fabrication.	The extent of the effects of climate change on human health and the environment is still uncertain, but could include increased global temperature, increased severity and frequency of storms and other "weather extremes," melting of the polar ice cap, and sea-level rise.

Goals of the Clean Air Act Amendments of 1990

The overall goal of the Clean Air Act Amendments is to reduce the pollutants in our air by 56 billion pounds a year—224 pounds for every man, woman, and child—when the law is fully phased in by the year 2005. The new law builds on the strengths of the Clean Air Acts of 1970 and 1977 and the environmental lessons learned over the past twenty years. As the provisions of the new law are implemented, we will be breathing cleaner air every year.

Goal: Cut Acid Rain In Half

Acid rain is caused in large part by power plant emissions of sulfur dioxide and nitrogen oxides. These pollutants, which combine with moisture in the atmosphere to produce acid rain, will be dramatically reduced. A two-phase cost-effective system will reduce sulfur dioxide emissions from power plants by more



than half. By the year 2000, total annual emissions will be reduced by 10 million tons from 1980 levels.

Goal: Reduce smog and other pollutants

Urban smog or ground-level ozone pollution, produced by motor vehicles and other sources, will be substantially reduced. The object is to reduce volatile organic compounds, nitrogen oxides, and carbon monoxide, which can cause health problems. Diesel-powered buses in urban areas will be regulated to reduce their exhaust emissions by 95 percent by 1995.

In cities with more severe carbon monoxide and ozone levels, states may have to initiate or upgrade inspection and maintenance programs for motor vehicles and adopt new clean fuel programs. In areas where safe levels of particulate matter in the air are not being met, states may have to require use of emissions control measures, limit the use of wood stoves and fireplaces, or both.

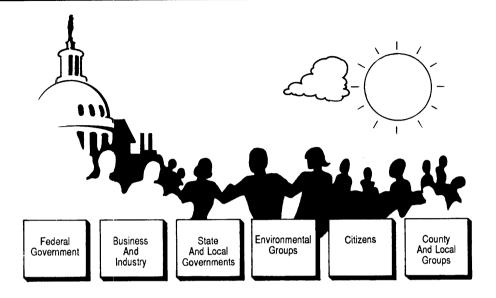
Goal: Reduce air toxics

Chemical plants, steel mills, and other businesses will need to reduce their emissions of an additional 189 air toxics—pollutants associated with cancer, birth defects, and other health risks—in addition to those already regulated.

Goal: Protect the ozone layer

Finally, chlorofluorocarbons (CFCs) and related chemicals that deplete the ozone layer may be phased out of production as early as the end of 1995. CFC recycling, especially for automobile air conditioners and residential, commercial, and industrial cooling and refrigeration systems, will be maximized to reduce current emissions.

Air pollution control: It's everybody's business



Government, industry, environmental groups, and citizens are working together to clean up our air. Here are some examples of what they are achieving:

Denver comes out from under a cloud

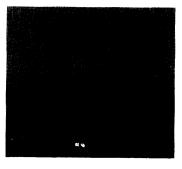
Denver, Colorado: Denver was once so renowned for its pure mountain air that tuberculosis victims traveled there for treatment. However, in 1985, Denver was under a "brown cloud" much of the time. Pollutants from motor vehicles, industry, and wood stoves clouded the skies and obscured the view of the Rocky Mountains that made the Mile High City a major tourist attraction. The city violated federal carbon monoxide exposure limits 33 days during the winter of 1985.

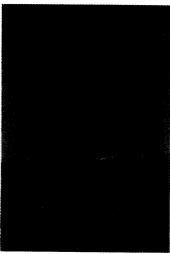
The public, as well as businesses and community leaders, demanded that something be done to bring clean, healthful air back to Denver. Responding to these concerns, the governor established the Denver Metro Air Quality Council. With technical support from EPA and the Colorado Health Department, the Council mobilized public and governmental

action, worked with industries, civic groups, and the news media to help remove the area's brown cloud and clean its air. How did they do it?

- New legislation required use of oxygenated fuels during the winter months to reduce cold weather carbon monoxide emissions from gasoline engines. Automobile owners' individual participation helped make this successful.
- The Denver schools switched from diesel fuels to compressed natural gas in new school buses.
- The state avoided legislation that would have delayed implementation of strict emission standards for wood stoves.
- Wood burning in the area was limited.
- The local electric utility replaced particulate-emitting coal fires in powerhouse boilers with a mix of "clean" natural gas and coal. The public bus company converted to low-sulfur fuel during the high-pollution season, tested methanol-fueled buses, and implemented an emissions inspection and maintenance program for its vehicles.
- The public, including employees and shoppers, found ways to drive fewer miles.

What did it all add up to? Carbon monoxide violations dropped from thirty-three in 1985 to only three in 1990. Average daily ozone (smog) levels for the ten highest days dropped considerably. In June of 1990, the United States Conference of Mayors called Denver "the most liveable city in the United States."





Air pollution control: It's everybody's business

Klamath Falls, Oregon: A woodsmoke success story Among the highest particulate matter (PM-10) concentrations recorded anywhere in the nation were those which occurred in a southern Oregon community of 37,500 called Klamath Falls. In January of 1988, measurements of PM-10 were recorded which were five times the federal health standard. The major problem was smoke from residential woodstoves and fireplaces in conjunction with wintertime inversions that trapped the air, causing woodsmoke concentrations to build to very unhealthy levels. Despite some initial resistance, Klamath County initiated strong public awareness and voluntary woodburning curtailment programs.

These programs proved to be insufficient. A 1989-90 health study of school children showing significant declines in lung function during PM-10 episodes alerted the community to the seriousness of the problem. To further improve air quality, in 1991-92 over 325 woodstoves were replaced with alternative heat sources purchased with federal and local funds. In 1991, the community also adopted restrictions on the use of residential wood burning devices when inversions threatened to cause high PM-10 concentrations. As of the summer of 1992, these renewed efforts appeared to have paid off—preliminary data for the 1991-92 wood heating season suggested that the federal health standard was never exceeded. While favorable weather conditions may have contributed in part to that winter's air quality, Klamath Falls has made significant progress in improving air quality and ultimately assuring long-term protection of public health.

Getting the lead out

By the 1970s, high levels of lead in our nation's air became a major health concern. Beginning in 1974, EPA launched a major new program to introduce emission control equipment on new cars and phase-out lead in the nation's gasoline. As a result, lead emissions have dropped by 97 percent from 1970 levels. By 1992, about 95 percent of all gasoline sold in the United States was lead-free. Over the next few years, the remainder will be phased out entirely.

Green Lights: Shedding new light on emission reductions



Green Lights is an EPA program aimed at cleaning the air and saving energy by reducing emissions from power plants. About one quarter of the electricity sold in the United States is used for lighting. EPA is encouraging organizations and individuals to voluntarily switch to energy-efficient lighting. In 1992, over 600 companies, state governments and others had enrolled in the Green Lights program and were using 50 percent less electricity while saving money on their electricity bills.

The current square footage in the program equals all of the commercial real estate of Los Angeles, Chicago, Dallas, Detroit, and New York combined. When all the profitable lighting changes are in place, the reductions will likely add up to thousands of tons of nitrogen oxides and sulfur dioxide and 202 million metric tons of carbon dioxide every year. This is the equivalent of removing 44 million cars from the road, a third of the vehicles in use, simply by making profitable investments in modern lighting. Over the next five years, actions of Green Lights participants are expected to prevent over 8.4 million metric tons of air emissions and be a mainstay of the United States' strategy to stabilize greenhouse gas emissions.

Three weeks in 1984: An Olympic-sized story

Prior to the 1984 Summer Olympic Games in Los Angeles, there was considerable concern that the region's heavily polluted summer air would adversely affect Olympic competitors. The regional air quality agency, city and county officials, transit companies, and area employers developed a plan for staggered working hours that resulted in fewer cars and buses on the road. The driving and riding public cooperated. The result was a twelve percent drop in ground-level ozone (smog) levels during that period!

A new
Clean Air Act:
Scrubbing our skies

The 1990 Clean Air Act Amendments set new goals for improving our nation's air quality and offered new approaches to achieve these goals (see pages 6 and 7). By 1992, EPA had already proposed, issued, or begun implementing new rules designed to achieve about 85 percent of the 56 billion pounds of annual air pollution reductions to be phased in by 2005.

What YOU can do to help reduce air pollution

We have described some examples of how government, industry, and private citizens are working successfully to reduce or prevent air pollution. Everyone in the country has an important part to play in achieving clean air. Here are a few suggested ways that you can make a difference in your own community.

How you drive and care for your car is important



Since automobiles are a major source of air pollution in most areas, your driving habits and your car maintenance can either add to the problem or help to solve it.

Driving tips

- Plan ahead. Organize your trips. Driving fewer miles will help reduce air pollution. Combine several errands into one trip. Avoid driving during peak traffic periods when stop-and-go traffic is at its worst. This will not only save you gas but will also reduce the wear and tear on your car. Try walking or bicycling for short errands and leisure activities.
- Ride share. Carpools and public transportation reduce the number of cars on the road and miles driven. If you own or manage a business, create incentives that encourage employees to carpool. As an employee, form a carpool with others at work or in your neighborhood. Consider taking public transportation as an alternative to driving.

- Use an energy-conserving grade of motor oil. Look for the EC grade on the container and be sure to use multigrade. An EC multigrade can improve your mileage by as much as 1.5 percent. An EC II-rated oil can provide a 2.7 percent mileage boost over single grades.
- Use clean fuels. Reformulated or "clean" gasolines are becoming more widely available. Use them when possible.
- Drive at a medium speed. In normal traffic conditions, most cars operate most efficiently between 35 and 45 miles per hour; lower or higher speeds are less efficient. If you drive 55 miles per hour rather than 65 miles per hour on the highway, you can increase your gas mileage by as much as 15 percent, depending on your car.
- Drive at a steady speed. It is more fuel efficient to drive at an even speed than it is to keep speeding up and slowing down. This is true in heavy traffic as well as on the open road.
- Stop and start evenly. Gently accelerating reduces gas consumption. Coasting to a stop lets the car's momentum, not its fuel, get you where you want to go.
- Don't idle the engine unnecessarily. Contrary to popular belief, turning off and starting an engine uses less gasoline than letting the engine idle for 30 seconds. Stop the engine if it is idling at a drive-up window or in traffic jams. Limit engine warm-ups in winter.

- Travel light. The more weight your car carries, the less fuel-efficient it becomes. Take unnecessary items out of the trunk.
- Follow your owner's manual. The owner's manual that comes with your car will recommend which grade of gasoline to use, how to shift gears, and other ways you can keep your engine running at maximum environmental and economic efficiency.



Maintain your car

- Don't remove or tamper with pollution controls. The pollution control equipment on cars helps limit the pollutant emissions at the tailpipe. Removing or tampering with these controls puts more pollution into the air.
- Don't overfill or "top off" your car's gas tank. Even if you don't spill gasoline, fumes can escape. They react with nitrogen oxides and sunlight and create smog.
- Avoid releasing gas vapors. Gas vapors can harm your health as well as the environment. Many service stations are installing vapor controls on their pumps to help reduce air pollution. While many of the new nozzles have what look like elephant trunks, others look more conventional.

- Get regular engine tune-ups and car maintenance checks. Tune-ups improve your gas mileage and car performance. The spark plugs are especially important, because a worn spark plug will cause poor starting, rough idling, and poor gas mileage.
- Make sure your tires are properly inflated and your wheels aligned. Doing this can prevent excessive drag and improve fuel economy up to one mile per gallon.
- Keep car filters and catalytic converters clean. Dirty air filters increase fuel consumption; and your car's pollution control devices need to be in good working order to be effective. Follow the car manufacturer's guidelines.
- Use your car air conditioner wisely. Air conditioning is a drag on your car's engine, reducing gas mileage by as much as 20 percent. On not-so-hot days or while in stop-and-go traffic, roll down your window instead. Have leaks in your car air conditioner fixed by a certified technician using required CFC recycling equipment.
- Consider buying fuel efficient cars. When buying a car—new or used— check its posted fuel efficiency and seek the most fuel-efficient, "clean" car in the size category that meets your needs.

Reducing pollution and conserving resources at home and at work



• Conserve electricity. Electricity generation can be a major source of air pollution. New home and office oriented technology can help. At home or work you can save electricity by using energy-efficient lighting wherever possible. Replacing a common incandescent light bulb with an energy-efficient compact fluorescent bulb saves 45 watts and 157 kilowatt hours. Make sure that lights and appliances are turned off when not in use. In addition, you should raise the temperature level on your air conditioner a few degrees in summer, and turn down your heat a few degrees in winter. Purchasing energy-efficient appliances will also aid in conserving energy use. Conserving electricity reduces air pollution caused by power plants.

- Participate in your local utility's energy conservation programs. Ask your local utility about its customer energy conservation program. If they have one, join up. If they don't, encourage them to start one.
- Buy fuel-efficient motorized equipment. If you are buying a power mower or other motorized garden tools, construction or farm equipment, or outboard motors, seek out those that are designed to minimize emissions and reduce spillage when being refueled.
- Avoid spilling gas. Take special care to avoid spills and the release of fumes into the air when refueling gasoline-powered lawn, garden, farm and construction equipment, and boats.
- Properly dispose of household paints, solvents, and pesticides. Do not pour these chemicals down the drain, into the ground, or put them into the garbage. Call your local environmental agency for information on proper disposal of these products.
- Seal containers tightly. Make sure that containers of household cleaners, workshop chemicals and solvents, and garden chemicals are tightly sealed to prevent volatile chemicals from evaporating into the air. Don't leave containers standing open when not in use.

- Reduce waste. When you make purchases, consider using products that are durable, reusable, or use less packaging. Repair broken items rather than buying new ones. Recycle and compost potential wastes before they become part of the waste stream. Such actions help reduce the pollutants that might reach the air during the manufacturing process or during the collection and processing of wastes for incineration or landfill disposal. If there is no local recycling program in your community, start one with the help of your neighbors and the local trash collection company.
- Use wood stoves and fireplaces wisely and sparingly. If you have a wood stove, learn how to burn cleanly and more efficiently. Remember to burn dry, well-seasoned wood, and build efficient fires that burn hot and clean. Check your stack, clean your chimney, and inspect your catalyst annually. A well maintained and operated stove produces less pollution and is better for the environment. Adhere to local or state regulations about when and where wood stove use is permitted.
- Properly dispose of refrigeration and air conditioning equipment. The Clean Air Act prohibits the release into the atmosphere of refrigerants from automobiles and home appliances during the disposal of this equipment. Contact your local government or trash pickup service to find out what procedures are being implemented in your area to ensure the safe disposal of cars and home appliances. In some areas, municipalities arrange for periodic pickups of home appliances that contain refrigerant. In others, it is required that homeowners have the refrigerant removed by a qualified service technician before the appliance can be picked up.
- Recycle refrigerant. As of July 1, 1992, individuals are prohibited from knowingly venting refrigerant into the atmosphere while maintaining, servicing, repairing, or disposing of air conditioning or refrigeration equipment. Make sure that the technician who services, repairs, or maintains your refrigerator or air conditioner has recovery equipment to capture any refrigerant that may be released. This refrigerant can later be recycled. Also, when possible, don't just refill leaky air conditioning or refrigeration systems-repair them.

Get involved in local efforts to reduce air pollution

- Let people know you care. One of the driving forces behind reducing air pollution is citizen concern and involvement (as in Denver, for example). As an individual or as a representative of a concerned group, speak up at hearings and let your local public officials know how you feel about air pollution problems in your community. Your state and local environmental agencies can tell you when hearings are held and what agency is responsible for clean air.
- Learn about local efforts and issues. Talk to your state environmental agency to find out what it is doing in your area.
- Work with a local group. Join a community group that is working to improve air quality.
- Report problems. If you think you see an air pollution problem, advise your local or state agency, or the EPA regional office near you.



You can make a difference

When environmental scientists talk about air pollution, they talk in terms of millions of tons of pollutants. It is not easy to relate such figures to the smoke that comes out of your chimney or the exhaust coming out of your car. However, even small sources of pollution, when added to hundreds or thousands of other small sources, do harm the environment and are dangerous to your health.

If we all do our share to reduce air pollution, the benefits will be tremendous:

- If 190,000 car owners started to get regular tune-ups, they will keep some 90 million pounds of carbon dioxide out of the atmosphere.
- If each commuter car carries one more passenger, 600,000 gallons of gasoline will be saved and 12 million pounds of carbon dioxide will be kept out of the air.
- If consumers set their air conditioners six degrees higher, it will save 190,000 barrels of oil a day—and eliminate all those pollutants that come from burning the oil to produce the electricity involved.



Sources of information about air pollution in your community

Y ou don't have to rely solely on your own perception of what is happening to the air around you. There are official sources of information—your state and county health department and environmental agencies and the U.S. Environmental Protection Agency. Your state and local agencies will have information about local problems and the State Implementation Plan that has been developed to deal with them. The EPA has available an annual National Air Quality and Emissions Trends Report that includes specific information about air quality standards for specific pollutants and air pollution levels in hundreds of metropolitan areas. Your state or local environmental agency or health department usually has information about specific areas, and local weather reports on television, radio, and in the newspapers frequently include a daily air quality statement. The news media also report air quality concerns expressed by community groups or public agencies.

For more information about how you can help keep our air clean, contact the appropriate EPA regional office or your state agency responsible for air quality. These numbers are listed below. You may also contact the Department of Energy or your local power company for publications on energy conservation.

State Air Quality Agencies

Department of Environmental Management Air Division Montgomery, AL (205)271-7861

Department of Environmental Conservation Air Quality Management Section Juneau, AK (907)465-5100

Department of **Environmental Quality** Office of Air Quality Phoenix, AZ (602)257-2308

Department of Pollution Control and Ecology Air Division Little Rock, AR (501)562-7444

Air Resources Board Sacramento, CA (916)445-4383

Department of Health Air Pollution Control Division Denver, CO (303)331-8500

Department of Environmental Protection Bureau of Air Management Hartford, CT (203)566-2506

Department of Natural Resources and Environmental Control Division of Air and Waste Management Air Resources Section Dover, DE (302)739-4791

Department of Consumer and Regulatory Affairs Environmental Control Division Air Quality Control and Monitoring Branch Washington, DC (202)404-1120

Department of Environmental Regulation Air Resources Management Environment Tallahassee, FL (904)488-1344

Department of Natural Resources Environmental Protection Division Atlanta, GA (404)656-6900

State Department of Health Laboratories Division Air Surveillance and Analysis Branch Honólulu, HI (808)586-4019

Division of Environmental Quality Air Quality Bureau Boise, ID (208)334-5898

Environmental Protection Agency Division of Air Pollution Control Springfield, IL (217)782-7326

Department of Environmental Management Environment Office of Air Management Indianapolis, IN (317)232-8384

Department of Natural Resources Air Quality Section Des Moines, IA (515)281-8852

Department of Health and Bureau of Air and Waste Management Topeka, KS (913)296-1593

Department for Environmental Protection Division for Air Quality Frankfort, KY (502)564-3382

Department of Environmental Quality Office of Air Quality and Radiation Protection Air Quality Division Baton Rouge, LA (504)765-0110

Department of Environmental Protection Bureau of Air Quality Control Augusta, ME (207)289-2437

Department of the Air Management Administration Baltimore, MD (301)631-3255

Department of **Environmental Protection** Division of Air Quality Control Boston, MA (617)292-5630

Department of Natural Resources Air Quality Division Lansing, MI (517)373-7023

Pollution Control Agency Air Quality Division St. Paul, MN (612)296-7331

Department of **Environmental Quality** Office of Pollution Control Air Division Jackson, MS (601)961-5171

Department of Natural Resources Division of **Environmental Quality** Air Pollution Control

Program Jefferson City, MO (314)751-4817

Department of Health and **Environmental Sciences** Air Quality Bureau Helena, MT (406)444-3454

Department of Environmental Control Air Quality Control Lincoln, NE (402)471-2189

Division of Environmental Protection Bureau of Air Quality Carson City, NV (702)687-5065

Air Resources Division Concord, NH (603)271-1370

Department of **Environmental Protection** and Energy Division of Environmental Quality Air Program Trenton, NJ (609) 292-6710

New Mexico Environment Department **Environmental Protection** Division Air Quality Division Santa Fe, NM (505)827-0070

New York State Department of Environmental Conservation Division of Air Resources Albany, NY (518)457-7230

Department of Environment, Health, and Natural Resources Air Quality Section Raleigh, NC (919)733-3340

North Dakota State Department of Health Division of Environmental Engineering Bismarck, ND (701)221-5188

Ohio Environmental Protection Agency Division of Air Pollution Control Columbus, OH (614)644-2270

Oklahoma State Department Tennessee Department of of Health, Air Quality Ser. Oklahoma City, OK (405)271-5220

Oregon Department of **Environmental Quality** Air Quality Control Div. Portland OR (503)229-5287

Pennsylvania Department of Environmental Resources Bureau of Air Quality Control Harrisburg, PA (717)787-9702

Environmental Management Division of Air and Hazardous Materials Providence, RI (401)277-2808 South Carolina Department of Health and

Department of

Control Columbia, SC (803)734-4750 Department of Environment and Natural Resources Division of Point Source Control Program

Pierre, SD

(605)773-3351

Environmental Control

Bureau of Air Quality

Environment and Conservation Division of Air Pollution Control

Nashville, TN

(615)741-3931

Texas Air Control Board Austin, TX (512)908-1000

Department of **Environmental Quality** Division of Air Quality Salt Lake City, UT (801)536-400Ó

Agency of Natural Resources Air Pollution Control Division Waterbury, VT (802)244-8731

Richmond, VA (804)786-2378 Washington State Department of Ecology Air Program

Air Pollution Control

Department of

Olympia, WA

(206)459-6632

Air Pollution Control Commission Charleston, WV (304)348-2275

Wisconsin Department of Natural Resources Bureau of Air Management Madison, WI (608) 266-7718

Wyoming Air Quality Division Cheyenne, WY (307)777-7391. Department of Planning

and Natural Resources Division of Environmental Protection Christiansted, St. Croix U.S. Virgin Islands (809)773-0565

Puerto Rico Environmental

Santurce, Puerto Rico (809)767-8071 **Environmental Quality** Commission Pago Pago, American

Air and Water Division

Quality Board

Samoa

011(684)633-4116 Guam Environmental Protection Agency Harmon Guam 011(671)646-8863

EPA Regional Offices

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1SBN 0-16-038145-2