

# Living Our Values

Innovation, Accountability and Performance

Koppers Safety, Health & Environment  
Progress Report 2004

## SH&E Excellence: A Core Value

At Koppers, safety, health and environmental (SH&E) excellence are core values. These values are integral to our business and guide our daily actions. Each business decision that is made reflects our SH&E values, because we know that our performance in these critical areas is connected to our credibility in the community and indirectly to building value for our shareholders.

Our commitment starts with senior leadership, but it is our employees who believe in and live these values daily. Employee actions create an atmosphere of caring vigilance, personal accountability and stewardship for safety and environmental performance.

Our success in living our values was recognized recently by *Occupational Hazards* magazine, which declared Koppers one of America's Safest Companies. We shared this honor with just 15 companies, including CSX Transportation, DaimlerChrysler, DuPont and Johnson & Johnson. Our commitment was also recognized by the National Safety Council, which bestowed 24 safety awards on Koppers facilities in the U.S. These facilities earned this honor, in part, by practicing SH&E stewardship.

A steward is a protector, a defender and a leader who directs with a greater goal in mind. Our environmental goal is to minimize the impact of our operations and products in all areas and to help maintain our natural resources for the enjoyment of future generations. A culture of stewardship is a key factor in protecting the environment, employees, customers and neighbors.

Wood preservation, a core business at Koppers, is a business founded upon conserving our timber resources. Wood preservation also enhances the safety of wood as a construction material by preventing decay-related failures for decades.

Another measure of our stewardship is the ISO 14001 certification that eight Koppers plants have received for their Environmental Management Systems. Certification recognizes our dedication to continuously improving our environmental protection practices. We expect to achieve certification for all plants by the end of 2004.

Throughout this report, you will read about actions Koppers has taken that demonstrate our commitment to our core values. We hope you find this report a valuable tool in understanding our achievements and future challenges, and we thank you for your interest in Koppers.



**Walter W. Turner**  
President and CEO



**Randall D. Collins**  
Vice President, Safety, Health and Environmental Affairs

Walt Turner (left),  
with Randy Collins.



### On the Cover:

Kevin Probst, SH&E Coordinator at the Koppers Carbon Materials and Chemicals plant in Clairton, Pa., encourages all employees to focus on ongoing environmental compliance and safety improvements.

**Living our Values: Innovation, Accountability and Performance**

Without action, values become meaningless. At Koppers, we measure our safety, health and environmental values by what we do at every location worldwide.

We recognize that continually improving our SH&E performance is an essential measure in living our values, for today and the future. We are accelerating our efforts to achieve SH&E excellence by offering new training, demanding additional levels of accountability and regularly recognizing innovation.

We are striving to build these values into the very structure of our company. Each employee, at every plant, accepts responsibility for his or her own health and safety, and for environmental compliance. But employees also look out for each other, encouraging and reminding fellow workers to be careful and thorough. Together, they devise new ways to work more safely, to recycle and conserve. This is the Koppers way of working, of living our values.

## Environment: Innovation Through Action

### Setting New Standards for Environmental Compliance

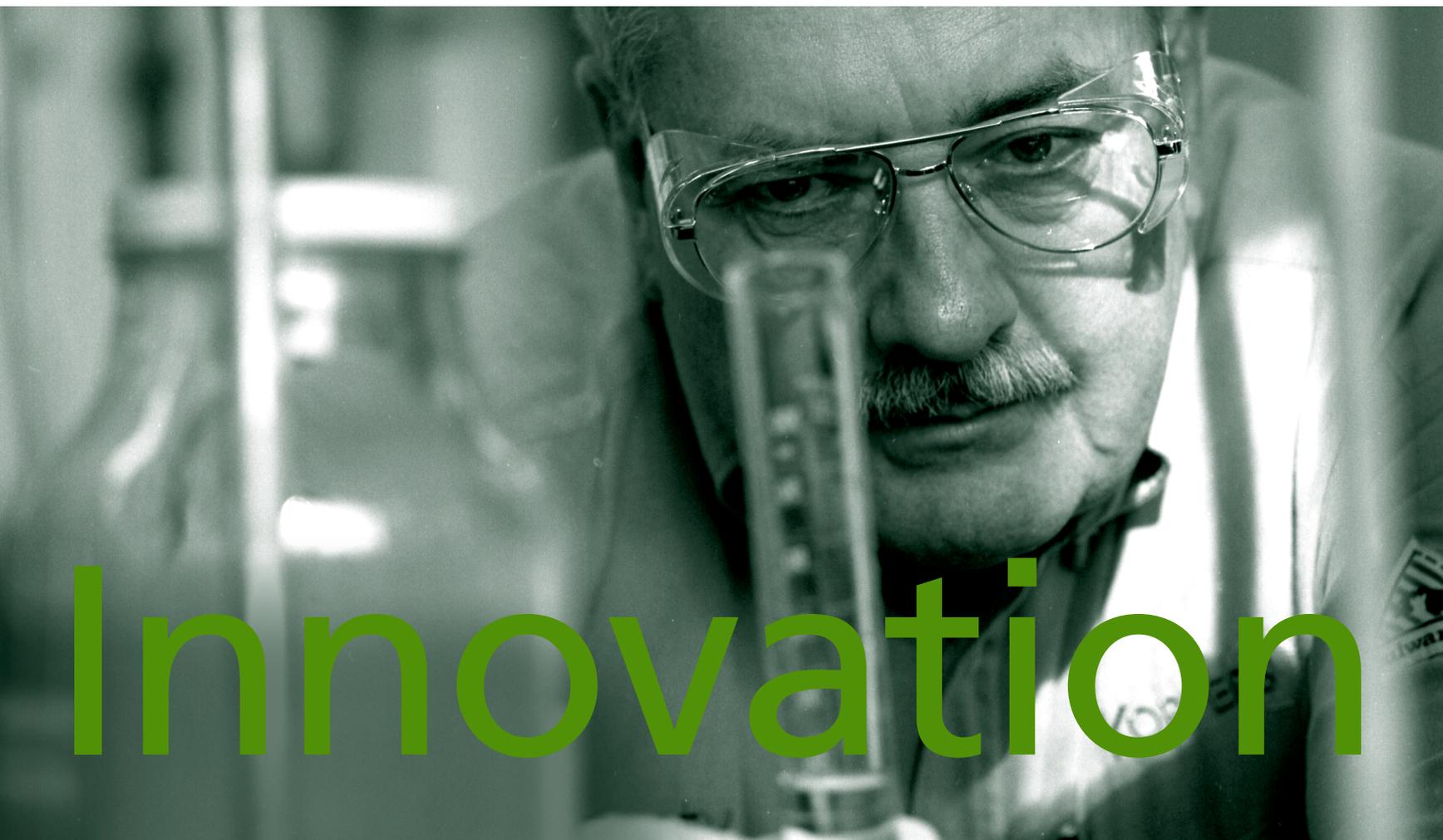
During the manufacturing process at Koppers, raw materials, products and byproducts must be properly handled and treated. To comply with regulations and permits, all Koppers manufacturing sites maintain a host of environmental controls.

Employees at Koppers wood treatment plants use heavy-duty wood preservatives that are approved by the EPA to pressure treat wood products for industrial and commercial use. These employees are registered as certified pesticide applicators by appropriate state agencies.

As a good environmental steward, Koppers follows all applicable regulations to minimize the generation of wastes and to treat and discharge, recycle or correctly dispose of any waste that is created. In treating wood products, for example, the company's manufacturing and treatment equipment is self-contained, to ensure that neither liquid preservative nor wastewater come in contact with the ground.

Comprehensive response plans are in place at every plant for immediate response to any accident or release. Drills are routinely conducted to evaluate the effectiveness of these plans.

At the Harmarville Technical Center, Rusty Pfeiffer, a chemical analyst with Koppers, researches the nature of coal tar pitch and other chemicals. These scientists work to develop new products and better serve existing markets.



# Innovation

**The Year in Review**

To keep SH&E excellence in the forefront every day, Koppers employees follow procedures designed to minimize the impact of operations on the environment. They document compliance with federal, state and local regulations, reporting on more than 10,000 compliance points annually just to meet Clean Water Act requirements. In 2003, company representatives attended seminars to stay current with changes in environmental regulations, and employees implemented new and improved environmental procedures.

In 2003, Koppers treated 238.4 million gallons of process and storm water to prevent any contaminants from impacting the environment.

Ten out of 20 U.S. plants had no exceedences of Clean Water Act permit limits in 2003: Alorton, Ill., Gainesville, Fla., Green Spring, W. Va., Guthrie, Ky., Logansport, La., Monessen, Pa., Montgomery, Ala., Portland, Ore., Stickney, Ill., and Superior, Wis.

Koppers spent \$5.41 million in the U.S. for capital expenditures for environmental concerns and improvements in 2003: \$3.54 million in the Carbon Materials and Chemicals division and \$1.87 million for Utility Poles and Piling and Railroad Products and Services divisions.

**ISO 14001 Certifications On Track**

During 2004, Koppers will be working to gain ISO 14001 certification for all its locations worldwide. In 2003, Koppers plants in Clairton, Pa., Green Spring, W.Va., Stickney, Ill., Woodward, Ala., Follansbee, W. Va., Galesburg, Ill., Superior, Wis. and Continental Carbon in Kurnell, NSW, Australia, received ISO 14001 certification.

The ISO 14001 standard provides a framework for companies to find potential environmental problems and fix them. Established by the International Organization for Standardization, it is the world's most recognized Environmental Management System framework, used by more than 37,000 organizations in 112 countries. ISO certification validates that Koppers is committed to taking systematic and sustainable steps forward in its environmental practices.

**Compliance Performance at U.S. Locations**

	2001	2002	2003
<b>Number of spills</b>	15	19	15
<b>Quantity of spills (gallons)</b>	6,406	1,623	44,553
<b>Reduction in Operational Waste*</b>			
Carbon Materials and Chemicals		34.5%	69.5%
Railroad Products and Services		31.8%	48.8%
Utility Poles and Piling		25.9%	31.3%

\* The Hazardous Waste to Production Ratio measures how much waste is generated at varying levels of operation. The chart compares the current levels with a base year, (2000 or 2001 depending on the plant).

In 2003, Koppers reduced the hazardous waste ratio by 69.5 percent for the Carbon Materials and Chemicals division, 48.8 percent for the Railroad Products and Services division, and 31.3 percent for the Utility Poles and Piling division.

“In 2003, I visited Koppers plants in Clairton, Pa., Green Spring, W. Va., and Monessen, Pa. I sat in on Executive Environmental Council meetings, attended the SH&E Global Management meeting in February, and met with most of the senior management team. I think the Environmental Management System that Koppers has in place is good, comprehensive and strong. My sense is that Koppers employees are capable, and that they want to do things right and safely for themselves and their co-workers.”

Paul King, EPA ombudsman for Koppers and Director, Environmental Health and Safety, Duquesne University, Pittsburgh.

### Innovations in Environmental Protection

In its efforts to increase overall compliance and efficiencies, Koppers made a number of improvements to protect air and water quality in 2003.

At the Railroad Products and Services plant in North Little Rock, Ark., a new railcar unloading station was constructed within concrete containment, eliminating the chance of creosote or liquid preservative contacting the ground. A vapor collection system captures emissions, further minimizing air emissions.

At Utility Poles and Piling plants in Grenada, Miss., and Florence, S.C., residual material left after wood treatment required expensive disposal. Now these solids are passed through a new filter press. The cake of solid waste that remains weighs much less, reducing the cost of transport and the amount of material disposed.

### Innovations in Conservation

At Koppers, environmental stewardship is about more than compliance. Koppers also works to improve environmental performance by focusing on conservation of our natural resources. When Koppers treats wood and timber with government-approved chemical preservatives, the wood lasts longer because it is less susceptible to insect infestation and decay, making it stronger and safer. A Koppers joint venture, KSA in Portsmouth, Ohio, makes railroad ties of concrete using environmentally conscious practices.

In 2003, Koppers Arch, headquartered in Australia, launched Tanalised Ecowood with Tanalith E, a new wood preservative with low toxicity and modern organic biocides. Tanalith E protects wood from the natural and certain destruction by insects and fungi, increasing the service life of the wood product. It preserves the safety and attractiveness of wood.

To prevent the "first flush" of rain from picking up contaminants on site surfaces, Continental Carbon, Kurnell, NSW, Australia, built a new water retention system to catch and treat water. In a concrete-lined collection pond, contaminants settle out at the deep end while excess clean water is pumped off the top to be used in the production of carbon black pellets. Water and excess gases are heated to generate steam, which is sold to local refineries. By using this "first flush" of storm water as a source of "free" water, Continental Carbon is saving up to 175 kiloliters of water (46,230 gallons) a week.

Koppers Australasian Operations are partnering with the biology department of the University of Newcastle in Australia to study phytoremediation, the science of growing plants to absorb specific chemicals from the soil. Koppers is supplying soil samples containing permitted levels of chemicals for use in the university greenhouses.

### Environmental Awards

At Koppers, recognition for environmental excellence and improvement is not only acknowledgement of a job well done, but also a motivator for continued progress and a means of sharing best practices across the company.

In 2003, Koppers presented Environmental Compliance Awards to its plants in Alorton, Ill., Montgomery, Ala., and Portland, Ore., for exceeding corporate goals for compliance, reportable spills and other measures in 2002.

Environmental Stewardship Awards are given by Koppers to recognize employees who creatively and effectively addressed an environmental issue in the workplace or community. Each winning plant receives \$5,000 to be donated to a community group. These plants shared top honors in January 2003 for projects installed during 2002:

- In Stickney, Ill., a new recovery system returns phthalic anhydride in the overhead stream vapor to the thermal oxidizer to be used as fuel, reducing waste by 900,000 pounds a year and saving Koppers \$450,000 a year. Its cost was \$158,000.
- In Muncy, Pa., a new conveyor system for the cogeneration plant allows smaller pieces of treated wood to be used as fuel. The \$700,000 system reduced waste by 3,000 tons a year, decreased truck traffic, and saved Koppers \$255,000 a year in landfill costs, as well as allowing more fuel to be turned into energy.

In addition to these internal awards, the Carbon Materials and Chemicals plant in Nyborg, Denmark received a Diploma Award from the Environmental Association of Industries on Funen (EAIF) for its Environmental Report. The New South Wales Australia EPA also commended the Wood Products plant in Grafton, NSW, Australia, for installing a system that minimizes creosote odors.

## Safety: Ensuring Accountability

### Safety as a Core Value

Along with the company's everyday efforts to conserve natural resources and protect the environment, Koppers works to ensure the safety of its most valuable resource — its employees. Across the company and around the world, Koppers managers and employees focus on meeting and exceeding important safety goals. As a result of these efforts, Koppers safety performance remains strong.

- The combination of injuries with days away from work and job restrictions for 2003 was unchanged from 2002 — 55 cases.
- In 2003, the DART (Days Away Restricted/Transferred) case rate was 2.6 cases per 200,000 hours, equal to the 2002 case rate.

- Koppers global operations achieved a TR (Total Recordable) rate of 5.2 cases per 200,000 hours in 2003, compared to a 2002 TR of 5.1 cases per 200,000 hours worked.
- Twenty Koppers locations completed the year without a Days Away case. Sixteen of these 20 locations also did not experience any restricted/transferred cases.
- Twelve operating locations completed 2003 without a single work-related injury.
- Case management of the DART cases continues to improve. The number of Lost Workdays Per Days Away cases decreased by 39 percent.
- Workers' Compensation claims decreased by 43 percent from 1997. The total net cost incurred in 2003 for U.S. employees was \$363,059, down from \$2.6 million in 1997.

Global Safety Performance

	2001	2002	2003
DART Rate	2.7	2.6	2.6
TR Rate	5.1	5.1	5.2
<b>U.S. Workers' Compensation</b>			
Claims	111	104	131
Net Costs	\$709,581	\$1,461,279	\$363,059

Koppers capital improvements include new equipment like this coal tar thermal oxidizer, which leads to SH&E excellence and assures EPA compliance. Thermal oxidizers process waste gas to reduce air pollution and odors, as Koppers employee Pete Roman demonstrates.



**Safety Awareness Program:  
“Want To” vs. “Have To”**

To encourage employees to practice safety, every day and everywhere, Koppers spreads a simple but powerful message: it's in the best interest of employees to “want to” work safely, to protect themselves and their co-workers. This philosophy challenges the common manufacturing attitude that employees “have to” follow safety rules.

Two years ago, 1,200 Koppers U.S. employees spent a combined 9,600 hours in behavioral safety training. Subsequently, in 2003, 170 Koppers U.S. supervisors completed a combined 5,440 hours of safety leadership training. As part of this training, each supervisor was certified by OSHA in Course 501 Hazard Awareness.

Koppers was named one of the Safest Companies in America in the September 2003 issue of *Occupational Hazards* magazine.



**Watching Out for Each Other**

To help employees perform their jobs more safely, effectively and in an environmentally sound manner, Koppers introduced an Observations and Contacts Program. This systematic method of reviewing and reinforcing SH&E training and skills was introduced to all U.S. plants in 2003. Australasian and European operations will implement similar programs in 2004.

“Contacts” are short, frequent reminders — like a brief meeting or job procedure review — meant to keep SH&E at top-of-mind for all employees. During an “observation” a supervisor might watch for on-the-job behavior, providing immediate reinforcement or intervention. In 2003, 15,419 observations were performed — 96.8 percent of which noted safe behavior — along with 65,368 contacts.

At the Carbon Materials and Chemicals plant in Clairton, Pa., where the program began in 2001, supervisors provided 8,600 observations and conducted 8,228 contacts involving 51 employees in 2003. “Today, the majority of our at-risk behaviors are housekeeping issues. We are seeing fewer at-risk observations for things like PPE (personal protective equipment) use and failing to follow procedures. Employees have internalized the safety procedures and are doing work safely because they want to do it safely,” said Kevin Probst, SH&E Coordinator, Clairton.

At the Railroad Products and Services plant in Alorton, Ill., 40 employees participated in 3,000 observations and contacts in 2003. “This program has been a huge success for the Alorton plant and for the company as a whole. We give each supervisor a group of employees to contact and observe, rotating responsibilities often. Getting hurt at work doesn't just harm the company, it adds stress to your home and family. When employees relate to safety in a personal way, they take it seriously,” said Steve Basham, General Foreman, Alorton.

“Making safety a value in the company requires more than simply goodwill. Top management needs to clearly communicate the importance of safety and hold managers and employees accountable for safety performance. At Koppers, for example, an executive-level council chaired by the CEO meets to review injury statistics, accident reports and the steps taken to prevent or minimize the likelihood of recurrence. New policies and action steps are developed. Communications from the council go out as a single voice from the chief executive.”

Stephen G. Minter, Editor, *Occupational Hazards* magazine

#### Improvements for Safer Workplaces

Koppers acts on its core value of safety by making structural and process improvements at many locations. In 2003, Koppers spent \$1.2 million in the U.S. for capital expenditures on safety improvements, including fall protection, fire protection, equipment guarding and upgrades to railroad tracks.

The Koppers Wood Products plant in Hume, ACT, Australia, added equipment to automatically size and distribute poles of various diameters, eliminating the potential hazards associated with manual operation.

At the Koppers Arch plant in Port Shepstone, South Africa, the staff designed a drum lifter to eliminate heavy manual lifting during product mixing. A new material handling system eliminates any potential inhalation exposure.

In North Little Rock, Ark., six original equipment treatment cylinders are being replaced with newer, larger cylinders, which use hydraulic doors and bridge ramps, reducing the potential for injury or exposure to the wood preservatives. This improvement also significantly reduces the potential for a chemical release.

#### Internal Safety Awards

The Directors' Award of Safety Excellence is given to Koppers plants where employees have worked one year or 100,000 hours with no injuries (defined as OSHA recordable cases or Workers' Compensation cases) or chargeable motor vehicle accidents. These locations achieved the "Excellence Award" in 2003:

- U.S. Operations  
Galesburg, Ill. and Western Region  
Procurement Operations
- European Operations  
Scunthorpe, U.K.
- Australasian Operations  
Koppers Arch, Australia

The Directors' Award of Safety Excellence includes a \$5,000 award to be donated to non-profit organizations selected by the employees at each location.

#### External Safety Recognition

In addition to *Occupational Hazards* magazine, other industry organizations recognized Koppers for its safety performance in 2003.

Eleven Koppers locations earned the National Safety Council (NSC) Perfect Record Award for 2003, completing 12 consecutive months without an accident involving Days Away from Work. These facilities are at the following locations: Denver, Colo., Florence, S.C., Follansbee, W. Va., Galesburg, Ill., Harmarville, Pa., Logansport, La., Montgomery, Ala., North Little Rock, Ark., Portland, Ore., Somerville, Texas and Woodward, Ala.

Thirteen Koppers locations earned the NSC's Green Cross for Safety Excellence Achievement Award for completing 2003 with Days Away from Work rates less than 50 percent of the Bureau of Labor Statistics rates for the applicable Standard Industry Code. These facilities are at the following locations: Florence, S.C., Follansbee, W. Va., Galesburg, Ill., Grenada, Miss., Guthrie, Ky., Harmarville, Pa., Logansport, La., Monessen, Pa., Montgomery, Ala., North Little Rock, Ark., Portland, Ore., Somerville, Texas and Woodward, Ala.

In 2003, railroad customers recognized Koppers for safely transporting hazardous materials during 2002, including Burlington Northern and Santa Fe Railway Company, Norfolk Southern Corporation, and Canadian National Railway Company (for the Stickney, Ill. plant).

“At Koppers, safety is not a priority, it’s a value, rooted in concrete. Employees understand that if they make a bad decision safety-wise, it will impact their spouse and family. They think, ‘I want to stay safe so I can get home to my family in one piece.’ During training, Koppers employees appreciated what the company was doing for them. Now they want to be accountable, to learn the rules and follow them 100 percent of the time.”

Flavius Brown, Vice President, FDRsafety



### **Security: Training for Emergencies**

Koppers regularly conducts pre-crisis management exercises (including tabletop exercises, functional drills and full scale mock scenarios) at all of its locations. This allows plant emergency coordinators to test contingency plans with fire departments, police, hazardous materials (HAZMAT) teams, U.S. Coast Guard and rescue teams. In addition, the training enables these first responders to determine how to mitigate worst-case scenarios at the facilities (e.g., fires, explosions, chemical releases and/or injuries.)

In 2003, all Koppers plant managers and plant trainers completed U.S. Department of Transportation (DOT) HAZMAT training and security awareness training. The trainers will now provide instructions to other plant employees handling hazardous materials.

As part of the Koppers Crisis Management Program, plant managers and SH&E supervisors attended media communications training, including mock interviews on camera by “reporters.”

Koppers established a security plan for each location that ships hazardous materials, as required by the DOT. The security plans address personnel security, unauthorized access and en route security procedures, to ensure the safety of our employees and the security and integrity of hazardous materials products while in our facilities.

## Community Relations and Employee Health

### Health: Measuring our Performance

Koppers takes steps every day to ensure that the health of its employees and its neighbors is not adversely affected by plant operations or working conditions.

The 500 Koppers employees in the U.S. who participated in the Koppers Health Awareness Program in 2002 received a family health handbook and personal contact from a medical consultant, if needed. Koppers also conducted first aid and Automated External Defibrillator (AED) training in several locations. AEDs were purchased for use in Stickney, Ill., Clairton, Pa., Monessen, Pa., Harmarville, Pa., and Pittsburgh, Pa.

In addition, as part of the Koppers comprehensive Industrial Hygiene Program:

- 200 U.S. production employees participated in air monitoring studies covering more than 100 occupations at ten plants.
- More than 100 noise dosimetry results were obtained for occupations that have high noise potential.
- 975 U.S. employees had audiometric testing to evaluate their hearing.
- 429 U.S. employees were medically evaluated for respiratory protection, including pulmonary function, face seal fit and blood pressure testing.



Doing it right means doing it safely. When tackling a tough task, Koppers workers like Mark Macosta wear personal protective equipment and follow strict safety procedures.



# Performance

## Community: The Value of Participation

“Being a member of the Roanoke, Va. CAP has taught me a lot about how stringent the rules are for environmental compliance for Koppers... how careful they have to be to avoid spills and protect our groundwater. My most memorable CAP meeting was when we did a tabletop exercise and simulated a rescue operation for a hypothetical creosote tank car crash. Frequent interaction with the CAP members has raised the Koppers plant’s profile and made it accessible to the community. I think people here feel comfortable calling the plant with a question or concern.”

Melinda J. Cox, Manager of Existing Business Programs, Roanoke County Department of Economic Development and member of the Roanoke Community Advisory Panel.

With the addition of Community Advisory Panels (CAPs) in Galesburg, Ill. and Muncy, Pa. in 2003, Koppers now has 13 CAPs in place. CAP members represent a cross-section of the community, including representatives of business and city government, retirees, educators, clergy, health officials, environmental advocates, emergency responders and students. CAPs meet on a regular schedule with Koppers management to learn more about plant operations and the safety and environmental regulations that affect our business. CAPs also share local concerns, helping Koppers to ensure open dialogue and build trust and credibility in our communities.

### Social Responsibility through Local Actions

Koppers supports many organizations, projects and programs in our communities around the world. Koppers employees are often given paid time off to volunteer for causes they value.

In 2003, Koppers sponsored several events that drew significant participation from employee volunteers.

In Pittsburgh, Koppers supported River Sweep, a six-state project to clean up 1,962 miles of river shoreline, the United Way Campaign and Day of Caring, The American Heart Association Heart Walk, 2003 Race for the Cure, Salvation Army Kettle Drive, Friends of Scouting campaign and Hot Pink Pittsburgh, a fundraiser for cervical cancer and breast cancer screenings for uninsured women.

Other examples of community involvement by Koppers include:

- The donation of hundreds of railroad ties to line roads and gardens in Green Spring, W. Va.
- An 18,000-pound bridge built by employees of the Railroad Products and Services plant in Guthrie, Ky, that is part of the community's new walking trail.
- Funds contributed to restore the church tower and bell ringing platform to St. Peter-ad Vincula Church Bottesford, a 14th-century church in Scunthorpe, U.K. As a result, bells are again ringing at mass, services and weddings.

At Koppers, we recognize that we must continue to be innovative, to hold ourselves accountable, and to perform at our best to demonstrate our commitment to safety, health and environmental excellence. This is an ongoing effort, a continuous search for ways to work more safely and with greater concern for the environment. Though we are proud of our progress in 2003, we know that we must raise the bar to live these values in the years ahead. For our employees, our customers, our neighbors and our world, we must continually strive for excellence in performance, innovation and accountability.

## Company Description

Koppers, with corporate headquarters and a research center in Pittsburgh, Pa., is a global integrated producer of carbon compounds and treated wood products for use by the utility, construction, railroad, aluminum, chemical and steel industries. Including its joint ventures, Koppers operates 39 facilities in the United States, United Kingdom, Denmark, Australia, the Pacific Rim and South Africa. The company's stock is shared by a large number of employee investors and by majority equity owner Saratoga Partners of New York, N.Y.

In December 2003, Koppers celebrated its 15th anniversary, with annual revenues up 70 percent since December 1988. Sales for 2003 increased to \$794.8 million, compared to sales of \$730.3 million in 2002.

Koppers was established in December 1988 as a management buyout of carbon materials and wood treating assets from Koppers Company, Inc.

Koppers makes:

- Carbon materials and chemicals, including carbon pitch, carbon black, creosote, phthalic anhydride, refined tars, specialty chemicals, and commercial grade roofing products.
- Railroad products, utility poles and piling, including pressure treated wood products and services for the railroad industry, utility poles for the communications and electrical power industries, and treated wood materials for commercial construction.
- Wood preservatives for treating lumber, utility poles and railroad ties, through its joint venture, Koppers Arch.





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