



People you trust, delivering results.

2005 Safety Health and Environment Report





Our Business

Nalco Company is the leading global provider of integrated water treatment and process improvement services, chemicals and equipment programs for a variety of industrial and institutional customers. Our products and services are used in water treatment applications to prevent corrosion, contamination and the buildup of harmful deposits, or in production processes to enhance process efficiency and improve our customers' end products.

Through our sales, research and marketing team of more than 7,000 technically trained professionals, we serve more than 70,000 customer locations. We focus on providing our customers with technologically advanced, engineered solutions and services. These solutions and services enable our customers to improve their business by increasing production yields, lowering manufacturing costs, extending asset life and maintaining environmental standards. We offer the broadest product portfolio in our industry.

Letter From Our Chairman

In 2005, we made a great deal of progress in our ongoing safety, health, environmental and security efforts.

Nine additional manufacturing plants, located in the Americas, Europe and Asia, achieved certification or re-certification to ISO 14001, the globally recognized management system to protect the environment and achieve continual improvement in environmental performance. To date, 18 of our worldwide manufacturing plants have been certified to ISO 14001.

We are also conducting security vulnerability assessments at all of plants around the world. To date, all United States plants have completed their assessments and have taken action on suggested improvements. A total of 43 of our plants globally have completed their assessments, and the remaining five plant assessments will be completed by the end of 2006.

Last year we reaffirmed our commitment to Responsible Care®, our industry's program to address and improve safety, health and environmental concerns in several ways:

- Our corporate headquarters in the United States achieved certification to the American Chemistry Council's Responsible Care Management System®. The independent, third party audit confirmed that we have global management systems in place that drive con tinual improvement in safety, health, environment and security.
- For the third time since 1994, our Canadian operations were certified by the Canadian Chemical Producers Association in compliance with Responsible Care®. The verification report stated we "have a very good understanding of the Responsible Care® codes and have integrated these codes with the appropriate company management systems. The Responsible Care® ethic is well-understood at all levels and is part of day-to-day management of the global corporation."
- In November, I signed the Responsible Care® Global Charter, furthering our pledge to manage our chemical products using a risk-based and life-cycle approach supported by sound scientific information. This new charter is an agreement by International Council of Chemical Associations members to create a common global vision for Responsible Care® in more than 50 countries focused on sustainable development and continuous performance improvement.

Our Safety Champion Network of more than 380 Nalco employees globally is reinforcing safety messages with their co-workers in areas such as driver safety, product stewardship and general workplace safety at both Nalco facilities and our customers' locations. We have developed and are using Nalco Compliance Assessment Process (NCAP) audits to evaluate risks and identify improvements at our own plants and our operations at customer sites.

Increasingly, our customers are demanding that we further demonstrate our strong commitment to safety and environmental protection. Our neighbors, all levels of government and the general public expect the same. And we continue to demand it of ourselves as well. I invite you to review this report, which documents our efforts to deliver on those safety, health and environmental commitments.

Sincerely

Dr. William H. Joyce Chairman and Chief Executive Officer





Safety, Health, Environmental and Sustainability Principles

Nalco Company manages its global operations with concern for the health and safety of individuals, the environment and with a commitment to global sustainable development. We operate by the following principles:

- Conduct business in a safe, secure and environmentally sound manner, consistent with Responsible Care[®], the chemical industry's commitment to ensuring a chemical product's safe evolution from concept through customer use, to disposal, recycle or reuse.
- Develop environmentally sustainable and safe solutions through our products, processes and technology that bring value and confidence to our customers, employees, communities and our business.
- Comply with applicable laws and regulations and apply responsible standards where laws and regulations do not exist.
- Operate our facilities in a resource-efficient manner that protects the environment and the health and safety of our employees, contractors and the communities in which we operate.
- Strive for continuous improvement in the area of safety, health and the protection of the environment with the goal of zero injuries, illnesses, incidents, waste generation and emissions.
- Train all employees to work safely, preventing injuries to themselves and others, avoiding damage to property and protecting the public interest.
- Ensure procedures are in place to implement these principles and communicate openly about environment, health and safety issues.
- Support of these principles by all levels of management and all employees.

Safety, Health, and Environmental Performance

Our Safety, Health, Environmental and Sustainability Principles include our goal to "Strive for continuous improvement in the area of safety, health and protection of the environment with the goal of zero injuries, illnesses, incidents, waste generation and emissions." The following pages report our progress toward that goal.

Safety

Employee Safety

The Total Recordable Injury Rate (TRIR) is the U.S. Occupational Safety and Health Administration standard for worker safety. It measures the number of employees with work-related illnesses and injuries per 100 full-time workers per year. We have adopted this safety measurement globally, and it is also a key performance measurement of the American Chemistry Council (ACC), our major U.S. trade association. The ACC reports that employees of its member companies are more than four times safer than the U.S. manufacturing sector as a whole.

Our corporate target is to improve our TRIR to less than 0.7, the standard for the top 25 percent of ACC member companies. In 2005, we recorded a TRIR of 0.9, an 18 percent reduction from the previous year and the third straight year of double-digit safety improvement.

> Global Total Recordable Injury Rate (per 100 full-time workers per year)



Driver Safety

With thousands of our sales engineers globally constantly traveling between customer sites, we have identified driving accidents as the single greatest danger faced by our employees.

In the past, we reported on the number of preventable driving accidents by our employees, but beginning with this report, we are shifting to the Global Total Vehicle Accident Rate as one of our key performance indicators. While we still focus on driving defensively and to prevent accidents, we believe that measuring all vehicle accidents, preventable or not, helps us better focus on trends that impact our employees.

We accomplished our corporate goal to reduce the Preventable Vehicle Accident rate to 1.0, or no more than one accident per one million miles driven. Our goal for Total Vehicle Accidents is a 10 percent reduction in 2006.

Global Total and Preventable Accident Rates (per million miles driven) Total Accidents Preventable Accidents



Recognizing Safety

Our PORTA-FEED[®] transporter units are part of our hands-off chemical transfer service, which provides a safer work environment for both our employees and our customers' employees. These reusable containers are used to transfer chemicals to larger PORTA-FEED base tanks at customer sites. The transporter units were usually moved on a standard two-wheel handcart, but since they can weigh up to 900 pounds each, they presented a challenge to our delivery specialists. Pushing the units up ramps or outdoors in inclement weather was a potential safety and injury concern.

One of our delivery specialists, Pat Meyers, challenged himself to find a safer method for moving the transporters. Using his free time on weekends, he developed a self-propelled cart that allowed the delivery specialist to easily and safely walk the unit, rather than push it.

Ensuring safety in the workplace is a key goal every day for Nalco. Pat exemplified that goal and won a Nalco Chairman's Achievement Award, our highest internal recognition, for this safety improvement.

Environment

Fines and Penalties

We have added a new measurement to our report this year, tracking both the number and amount paid (in U.S. dollars) for safety, health and environmental fines and penalties. This figure also includes penalties related to product registration violations or transportation incidents.

Historically Nalco has had a very low incidence of these fines and penalties. The figures for 2004 include one civil penalty of \$80,000 related to one regulatory matter. Nalco failed to re-register with one state agency its biocide business in the time required, which is every 2 years. A process is in place to prevent reoccurrence.

Global Regulatory Fines and Penalties

Waste Index

The Global Waste Index compares the total amount of products we manufacture to the amount of waste generated by our production processes. It measures both our manufacturing efficiency and our ability to reduce waste. While waste generation increased slightly in 2005, that increase was less, on a percentage basis, than our increase in manufacturing production.

Since 2002, our global production has increased 11 percent, while waste generated has dropped by more than 17 percent. We are constantly looking for waste reduction opportunities. For example, the reuse of wash water from the rinsing of our production vessels eliminated more than 666,000 pounds of waste at two of our U.S. manufacturing plants in 2005. We are expanding the program to other locations. Toxics Release Inventory Emissions One of the best-known environmental measurements in the world is the U.S. Environmental Protection Agency's Toxics Release Inventory (TRI). The TRI reports chemical releases and other waste management activities for nearly 650 chemicals and chemical categories at facilities across the United States. The inventory was established in 1986 and expanded in 1990. The most recent information available covers emissions through calendar year 2004.

Our reported on-site emissions to air increased sharply in 2004, mainly due to a change in the method used to calculate air emissions at plants in Texas and Wyoming. We are validating those theoretical emissions calculations through a re-verification of the actual emissions from our manufacturing processes that will also identify opportunities for improvement. Our onsite water emissions decreased by half.



Sustainability

Reducing greenhouse gas emissions and increasing energy efficiency are important sustainable development targets. The American Chemistry Council has selected these two areas as key performance indicators for Nalco and all of its member companies that have committed themselves to Responsible Care®.

Greenhouse Gases

We and all other ACC members have committed to reduce the intensity of our greenhouse gas emissions (the ratio of greenhouse gases to economic output) by 18 percent by 2012.

Our downward trend in greenhouse emissions compared to production since 2002 was interrupted in 2005, as emissions rose at a faster rate than production due to a customer-driven shift to products that require more energy-intensive manufacturing. To combat that increase, we have established a program to identify and implement greenhouse gas reduction projects at our manufacturing sites.

Energy Efficiency

We measure our energy efficiency by comparing our manufacturing production to the amount of energy (measured in British Thermal Units) we consume in making our products (the energy used is a combination of electricity, natural gas, distillate oil and liquid propane gas).

Since 2002, our production has increased by 11 percent. While our energy use remained below 2002 levels, the downward trend of recent years was reversed in 2005. As with greenhouse gas emissions, that increase was due to a shift in product mix. We are investing in newer production technology and identifying other opportunities to reduce energy usage in our manufacturing operations.



Global Greenhouse Gas Emissions Product Produced (millions of pounds) Greenhouse Gases (thousands of pounds)



Global Energy Efficiency

Energy Consumed (billions of BTUs) Product Produced (millions of pounds)



Nalco: Protecting And Preserving Water



Water has always been a necessity for life. That need for water goes beyond simple human consumption to include uses for agriculture, industry, and a variety of domestic uses such as cleaning, cooking and basic sanitation. In a world where more than two-thirds of the planet's surface is covered by water, it might appear we have more than we could ever need. And when a tsunami washes ashore or hurricanes batter the seacoasts, it clearly seems we have too much water.

The reality is that the bulk of our world's water isn't usable. Most of it is in the oceans or frozen in the polar icecaps and glaciers. And an ever-growing human population, combined with increasing development to support that population, is straining our remaining global fresh water supplies.

Saharan Africa and the Middle East, for example, have faced historical fresh water scarcity. However, the United Nations Environment Programme expects that population growth and development, along with their attendant increased water use, will stress fresh water supplies in the industrialized nations of Western Europe and the United States, as well as in fast growth areas such as India and parts of China in the decades ahead.

Even without projected water stress and scarcity, water quality is a constant challenge. In developing countries, poor sanitation pollutes many fresh water sources such as lakes, wells and rivers. Even in developed countries, raw water contains natural organic and inorganic impurities that must be removed. And the need for quality is not limited to water used for human needs. Industry demands water that can meet even more exacting requirements. For more than 75 years, we have been helping customers meet their challenges of how to best use water in a variety of ways, in a variety of industries.

There is an old Nalco saying, "Water you would easily drink would be unfit for use in an industrial boiler." That's because scaling and corrosion from everyday water can cause clogged boiler tubes and tube failures that lead to lowered efficiency, higher fuel bills, equipment shutdowns and even catastrophic failures.

The water used in cooling towers and other cooling systems, from hotels or office buildings to large manufacturing plants, present similar challenges. Scale and corrosion can reduce cooling efficiency and damage equipment. Fouling from airborne debris, suspended solids and microbial contamination also decrease efficiency and increase equipment deterioration.

Water scarcity and increasing costs for water are forcing many industrial users to seek ways to reuse water in their processes. After its use in boilers, cooling towers or other industrial processes, wastewater must be treated to remove harmful pollutants before it can be discharged.

Water can also be a critical part of an industrial process itself, and many of those processes can be water-intensive.

It many ways, it can be said that a paper mill has a river flowing through it because water is such an integral part of the process that uses thousands of gallons of water to make each ton of paper product. Produced oil contains water that is costly to transport and damaging to equipment. Separation technologies are needed to break oil and water emulsions, allowing water removal. Water clarifiers are used to purify that water and make it safe to release into the environment. Electric power generation, mining and primary metals are other examples of processes that are heavily dependent on water.







Nalco provides the products, programs, equipment and services to help these and other industries better manage their use of water, improve efficiency and reduce environmental impacts.

Our boiler water treatment programs include pretreatment, feedwater, boiler and condensate systems to protect equipment, reduce maintenance and downtime and yield energy savings. Every day, our programs in thousands of plants help customers safely and more efficiently generate billions of pounds of steam to run industry.

Our cooling water treatment programs control scale, corrosion and microbiological fouling in systems large and small. We constantly strive to innovate to improve those programs. Our 3D TRASAR[®] program expands on our traced molecule monitoring and control technology to maximize cooling system

performance while reducing environmental impacts. Our new corrosion inhibitor, PSO (phosphino succinic oligomer), replaces heavy metals like zinc and also reduces the discharge of phosphate into the environment.

Our wastewater products and programs reduce potentially harmful pollutants in wastewater so that the wastewater can be reused in an industrial process or released back into the environment. Membrane technology is being adopted in an ever-increasing rate for purifying both industrial and potable water. Our products improve the performance of all types of membrane systems including desalination of seawater, purification of well and surface water and advanced water recycling and wastewater treatment. Our performance-enhancing polymer chemistries, for instance, allow increased throughput in membrane-based wastewater systems. This allows for more cost-effective, smaller wastewater treatment systems for both industry and municipal uses.

Since 1928, Nalco has been developing and implementing innovative ways to improve water quality, increase its recycling and reuse, and reduce environmental impacts on this critical resource. We will continue on that path as water becomes ever more important.



Our Suzhou Plant in China received a Top Ten Environmentally Friendly Enterprises Award from the Suzhou National Development Zone government, based on our ability to provide high-tech solutions to improve efficiency and reduce energy consumption and waste.

2005 Safety Milestones

Calamba Plant in Philippines has been accident-free since 1990. Carson Plant in the U.S. has been accident-free since October 2000. Citeureup Plant in Indonesia has been accident-free since April 2001. Evansville Plant in the U.S. achieved 23 years without a recordable injury. Fawley Plant in the U.K. was accident-free in 2005. Freeport Plant in the U.S. achieved 15 years without a lost-time injury. Garyville Plant in the U.S. exceeded 1.7 million hours worked without a lost-time accident. Green Tree Plant in the U.S. achieved 25 years without a lost-time accident. Hopewell Plant in the U.S. did not have a recordable injury in 2005. Hu Kou Plant in Taiwan has been accident-free since 1978. lackson Plant in the U.S. has been accident-free since 2002. Konnagar Plant in India has been accident-free since March of 1990. Mecas Plant in Malaysia has been accident-free since 1996. Nisku Plant in Canada has not had a reportable incident since it opened in 1993. Osan Plant in Korea has been accident-free since 2002. Port Allen Plant in the U.S. has been accident-free since 1999. Rayong Plant in Thailand has been accident-free since 1999. Singapore Plant has been accident-free since 1992. Sugar Land Pilot Plant in the U.S. surpassed one million hours worked without a lost-time accident. Suzano Plant in Brazil has not had a lost-time accident since November 2001.

Texarkana Plant in the U.S. achieved four years without a recordable injury. Weavergate Plant in the U.K. was accident-free in 2005. Yangsan Plant in Korea has been accident-free since 2001.

2005 Awards

Biebesheim Plant in Germany achieved certification to ISO 14001 and was awarded the Okoprofit environment award from the region of Starkenburg.

Burlington and **Nisku Plants in Canada** were re-verified for Responsible Care® compliance.

Calamba Plant in Philippines achieved re-certification to ISO 14001. **Citeureup Plant in Indonesia** received the Indonesian government's Golden Flag award for occupation, safety and health excellence and achieved certification to ISO 14001.

Clearing Plant in the U.S. won an Illinois Governor's Pollution Prevention Award for the third straight year.

Fawley Plant in the U.K. received a Gold Award from the Royal Society for the Prevention of Accidents for the fifth consecutive year.

Garyville Plant in the U.S. received an excellence in Environmental Achievement Award from the Fluid Sealing Association and *Chemical Engineering* magazine.

Gul Lane Plant in Singapore achieved re-certification to ISO 14001.

Hu Kou Plant in Taiwan achieved re-certification to ISO 14001.

Jackson Plant in the U.S. achieved certification to RC 14001.

Konnagar Plant in India achieved certification to ISO 14001.

Our **Naperville headquarters in the U.S.** achieved Responsible Care Management Systems® certification.

Osan and Yangsan plants in Korea achieved certification to ISO 14001.

Sugar Land Plant in the U.S. received the Caring for Texas Award and the Distinguished Service Award from the Texas Chemical Council.

Suzhou Plant in China received the Environmental Friendly Enterprises Award from the Suzhou Municipal Administration.

An Outstretched Hand When Help Is Needed

To say that 2005 was a difficult year for many might be an understatement. The year began with recovery from the tsunami that devastated Southeast Asia and later included a series of hurricanes that battered the gulf coast of the United States. But the year also provided the opportunity for the people of Nalco to demonstrate their generosity with more than \$1 million contributed to various causes through employees, the Company and the Nalco Foundation.

While thankfully no Nalco employees were directly affected by the tsunami, they were more than willing to help aid the victims of the devastation. A matching grant program globally raised \$116,000 in employee donations that was matched by the Nalco Foundation for a total of \$232,000. While employees donated to the support group of their choice, the Foundation funds went to the American Red Cross' International Disaster Relief Fund.

Unfortunately, Nalco employees along the U.S. Gulf Coast were not as lucky. Hundreds were affected by successive hurricanes in August and September, disrupting lives, damaging and destroying homes. Again our employees saw a need and responded.

Employee donations to general hurricane relief totaled more than \$42,000. The Nalco Foundation matched those contributions (plus others by students at two schools near our headquarters) donating \$44,000 to the American Red Cross. We also established a Company-sponsored relief fund to directly help affected employees. Employee contributions of more than \$80,000 were matched by the Company 2 for I for an additional \$160,000.

Nalco employees were generous in other ways as well. Chicago-area employees raised more than \$54,000 to benefit research to cure diabetes while others donated blood, clothing, school supplies and their time through our Science is Fun program, which has encouraged tens of thousands of children to consider careers in science.

The Nalco Foundation continued its support for Water For People, an international organization dedicated to bringing clean water and sanitation to impoverished areas. A \$50,000 grant provides filters for public water taps in West Bengal, India (an area with naturally occurring arsenic in the ground water) and new wells on Sagar Island in India to provide a safer water supply. An additional \$9,000 was raised through employee purchases of special wristbands and our India operations donated office space for use by Water For People staff.

The annual U.S. campaign to support the United Way still saw a strong level of support despite the many fundraising efforts earlier in the year. U.S. employees contributed more than \$130,000, nearly as much as in 2004. The Nalco Foundation donated an additional \$125,000 for more than a quarter of a million dollars combined. United Way supports a number of programs in local communities helping children and adults in crisis.



On Sagar Island in India locals rely on contaminated ponds like this one for water, leading to a variety of diseases and health problems. The Nalco Foundation is funding new wells to provide a safer water supply. (Photo © Nancy J. Haws 2005)

Safety, Health and Environmental Web links:

American Chemistry Council's Responsible Care[®] www.responsiblecare-us.com

Canadian Centre of Occupational Health & Safety (CCOHS) www.ccohs.ca

Canadian Chemical Producers Association Responsible Care[®] www.ccpa.ca/responsiblecare

Environment Congress for Asia and the Pacific www.ecoasia.org

Environmental Management Secretariat for Latin America and the Caribbean www.ems-sema.org

European Chemical Industry Council www.cefic.org

European Environment Agency eea.eu.int

Global Chemical Industry's Responsible Care[®] www.responsiblecare.org

National Institute for Occupational Safety and Health (NIOSH) www.cdc.gov/niosh

United States Centers for Disease Control and Prevention www.cdc.gov

United States Environmental Protection Agency www.epa.gov

United States Occupational Safety and Health Administration www.osha.gov

NALCO COMPANY OPERATIONS

North America: 1601 West Diehl Road • Naperville, Illinois 60563-1198 • USA Europe: Ir.G.Tjalmaweg I • 2342 BV Oegstgeest • The Netherlands Asia Pacific: 2 International Business Park • #02-20 The Strategy Tower 2 • Singapore 609930 Latin America: Av. das Nações Unidas 17.891 • 6°Andar 04795-100 • São Paulo • SP • Brazil

www.nalco.com

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