



SUMCO Phoenix Corporation

**Environmental, Health and Safety
2006 Report**

SUMCO

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LETTER FROM THE CEO

This report focuses on SUMCO Phoenix Corporation's Environmental, Health and Safety activities. In it you will find our environmental policies, environmental performance, recent environmental challenges and goals. Our commitment to the environment can be summed up in two words: *Environmental Stewardship*. We understand that our operations have the opportunity to impact the environment in many different ways. We are committed to understanding those impacts and providing the necessary resources and attention to minimize and prevent adverse consequences from our activities.

SUMCO Phoenix Corporation strives to continually provide a safe and healthy environment for our employees, contractors and surrounding community. We demand safe work behavior, practices, design and systems.

The standard measurement for industrial safety performance is the OSHA Recordable Rate. In 2005, we renewed our focus to this very important business metric. We established goals for our plants to improve this metric and implemented a Safety Management System to provide a framework for improvement.

In 2006, we are beginning to see the positive results of the Activity-Based Safety Management Systems we initiated throughout our manufacturing operations in 2005. By year-end 2006, our OSHA Recordable Incident Rate had dropped to 3.29, a 20% change from the December 2005 baseline.

SUMCO Phoenix Corporation takes its commitment to the environment seriously and, consequently, makes it a core value for how we do business. We are committed to having our facilities perform in a manner consistent with the principles of responsible environmental stewardship. We have set high goals to ensure this core value is achieved, and are committed to do the following:

- ◆ Conserve resources by continuously reviewing opportunities to reduce the use of energy, water and raw materials
- ◆ Prevent pollution
- ◆ Reduce waste
- ◆ Go beyond compliance with environmental legislation and regulation
- ◆ Educate our employees and inform the community about responsible environmental practices

In 2005, SUMCO Phoenix Corporation established five-year goals for three very important environmental metrics that are in line with our commitment to environmental stewardship. These are challenging targets for reductions in hazardous waste generation, water consumption and electricity consumption. *I am happy to report that in 2006, we made significant progress towards meeting these 2010 reduction goals.*



Shigetoshi Shibuya
Chief Executive Officer and President
SUMCO Phoenix Corporation

COMPANY PROFILE

SUMCO Phoenix Corporation manufactures electronic-grade silicon wafers for the semiconductor industry. We are the second largest such manufacturer in the world. SUMCO Phoenix employs more than 1,200 people at three manufacturing facilities in the United States.

Our wafers are used by companies all over the world to make integrated circuits and semiconductor devices that power a myriad of electronic products, from computers to cell phones, digital watches to automobile engine systems.

With proprietary technologies pioneered in Japan and here in the U.S., SUMCO is able to meet and exceed customers' expectations, even as their need for sub-micron-level surface flatness and hyper-clean surfaces increases. SUMCO's mission is to be the world's No. 1 silicon wafer supplier by exceeding the expectations of our customers and stockholders, recognizing the value of our employees, and being good neighbors in our communities. To ensure that we produce the highest quality wafers possible with minimum environmental impact, we have invested time and energy to implement ISO 9001 and 14001 management systems at all of our facilities.

Guiding Principles

- ◆ We strive for excellence in every aspect of our business - products and services, client relationships, employee teamwork and corporate performance.
- ◆ We focus on continuous improvement. We are always looking for better ways to do things, and we rely on our employees to help identify improvements.
- ◆ We are committed to maintaining a healthy, safe and clean environment for our employees, and we have programs in place to assure this.
- ◆ We believe in good corporate citizenship. Globally, that means treating our customers with respect and operating with honesty and integrity. Locally, it also means protecting and enhancing the environment and communities in which we operate. We do this through responsible environmental management programs, volunteerism, and corporate and employee contributions to organizations that enrich our communities.

SUMCO Phoenix Corporation is committed to conducting business in a manner consistent with our Guiding Principles. We will operate our facilities in an environmentally responsible manner with continuous improvement in our processes, EHS Management Systems and pollution prevention efforts.

To achieve this, we will:

- ◆ Meet or exceed all applicable environmental, health and safety regulatory requirements, as well as best-practice standards to which we subscribe.
- ◆ Establish sound EHS objectives and targets for continual improvement in our efforts to maintain a safe work place and to practice environmental stewardship.
- ◆ Evaluate performance by monitoring results through effective management reviews and routine reports to all management levels.
- ◆ Report progress and key issues to senior management at the plant and corporate levels.

LONG-TERM EHS GOALS — 2010 GOALS*

In 2005, SUMCO Phoenix Corporation's CEO and President challenged our manufacturing sites to meet aggressive targets for EHS improvement.

These goals, to be met by 2010 by all three U.S. manufacturing sites, are:

- ◆ To achieve continuous improvement in the recordable injury/illness rate with an interim target of less than the industry average by the end of 2007
- ◆ To reduce hazardous waste by 50% from 2005 levels
- ◆ To reduce water use by 25% from 2005 levels
- ◆ To reduce energy use by 25% from 2005 levels
- ◆ To achieve zero EHS-related fines and continuous improvement in the number of citations

(- environmental metrics are on a production-rate basis)*



POLICIES

SUMCO Phoenix Corporation's Safety and Environmental Policies are printed below. We give them wide communication throughout our organization to serve as guiding principles for how we expect all our personnel to conduct business on our behalf.

Corporate Safety Policy

The management of **SUMCO Phoenix Corporation** is committed to minimizing risks to human health and the environment. We believe that nothing is so urgent that we cannot take time to do our work safely. In short, safety will not be compromised for any activity, task or mission. In the interest of a proactive approach to achieving world-class safety performance, each operational unit will establish systems and practices to meet the following Corporate Safety commitments:

- ◆ A Safety Management System based on careful identification of specific activities to be performed by each organizational level and an accountability to perform those activities with special emphasis on employee participation, recognition and safety
- ◆ Educating and training to institutionalize our Environmental, Health and Safety (EHS) values throughout the organization
- ◆ Setting and monitoring EHS objectives to minimize safety risks
- ◆ Raising EHS awareness of all employees and stressing personal accountability
- ◆ Complying with or exceeding all applicable EHS regulatory requirements
- ◆ Continual improvement of the Safety Management System

Environmental Policy

SUMCO Phoenix Corporation is committed to Environmental Excellence and to having its activities performed in a manner consistent with the principles of responsible environmental stewardship. Toward that end, SUMCO Phoenix Corporation will develop and maintain an Environmental Management System that accomplishes:

- ◆ Prevention of pollution, taking into account facility significant environmental aspects, technological options, business needs, and legal and other internal requirements
- ◆ Compliance with relevant environmental legislation and regulations, and with other requirements to which the facility subscribes
- ◆ Continual improvement by setting and reviewing environmental objectives and targets on a regular basis and by providing appropriate resources for effective function
- ◆ A review of opportunities for improvements in resource conservation in the form of energy water and raw materials reductions on an ongoing basis

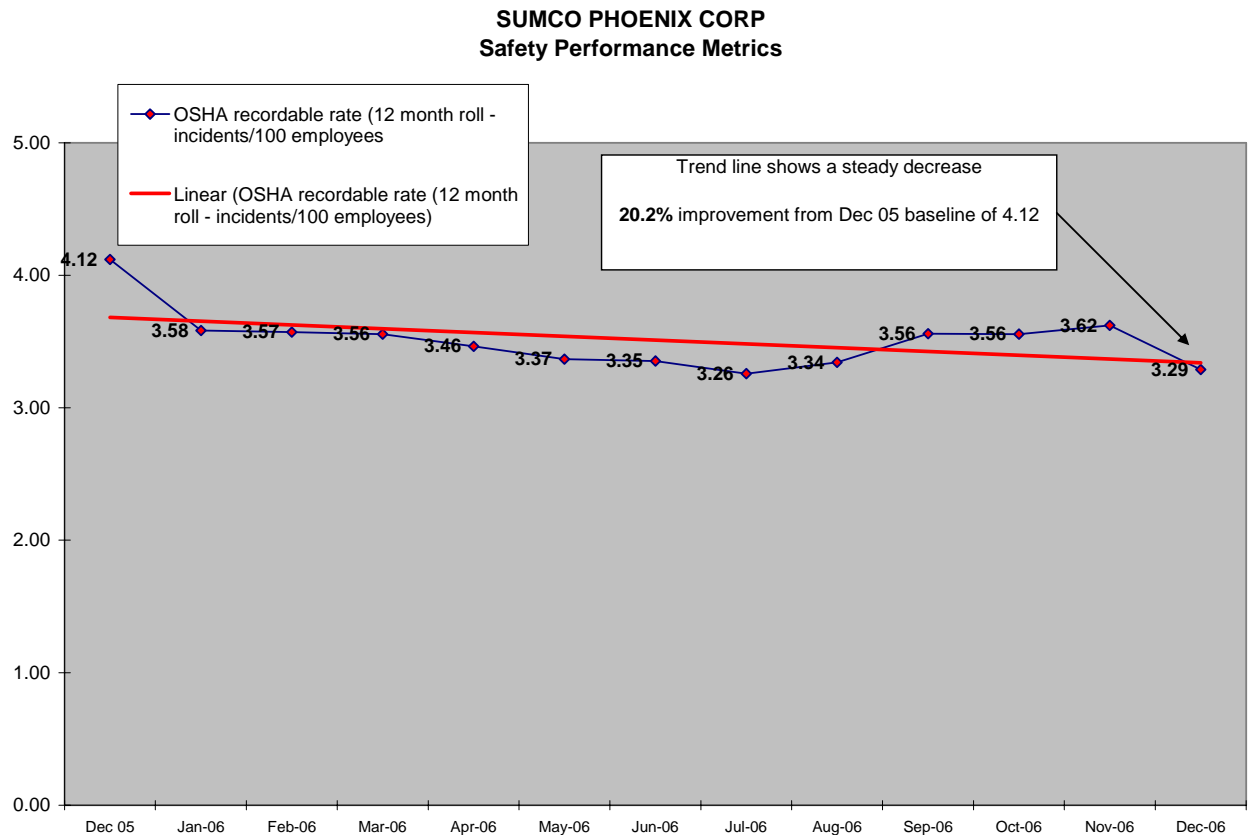
With accomplishment of the above principles within an Environmental Management System, SUMCO Phoenix Corporation establishes and directs a commitment to environmental stewardship.

ENVIRONMENTAL HEALTH AND SAFETY AT SUMCO PHOENIX CORPORATION

Safety

The common safety metric for industrial safety performance throughout U.S. companies is the OSHA Recordable Incident Rate, which is the number of annual OSHA Recordable incidents per 100 employees.

In 2006, we began to see the positive results of the Activity-Based Safety Management Systems we initiated throughout our manufacturing operations in 2005. By year-end 2006, our OSHA Recordable Incident Rate was 3.29, a 20% drop from the December 2005 baseline.



ENVIRONMENTAL

SUMCO Phoenix Corporation has manufacturing operations in Phoenix, Albuquerque and Cincinnati. The combined operations are registered at the corporate level to the globally recognized environmental management system standard ISO 14001 through an independent auditor, Lloyd's Register Quality Assurance.

Each manufacturing plant has an Environmental Management System Team consisting of the senior Plant Operations Manager, the site Environmental Management Representative, the Plant Facilities Manager and other members appropriate to the needs of the specific plant. In addition, the Corporate EMS Team provides overall structure and policies to give direction to the plant EMS activities.

One of the functions of the plant Environmental Management System Team is to drive environmental improvement objectives and targets. In 2006, the following environmental improvement activities were completed:

Environmental Objective	Description
Install a foam vapor fire suppression system in the TCS cylinder storage room	This project provided a redundant safety control for any release of trichlorosilane within the storage room and is one of the first applications of this type in the industry.
By end of 2005 reduce Kva rate by at least 8% compared to first half 2005	This project identified opportunities to use less electrical energy at one of our facilities.
Wire saw slurry reclamation	This project was the 2006 winner of the President's Sustainable Development Award. It accomplished reclamation and re-use of 85% of the raw materials used in the wire saw operation.
Use fewer test wafers - by the end of 2005, increase by 25% the ratio of reclaimed test wafers/prime test wafers compared to a baseline from the first half of 2005	This project met the target by more than double by increasing the ratio of reclaim test wafers/prime test wafers to over 50%.
Upgrade security hardware and procedures	This project involved implementing the recommendations for increased physical security of the Phoenix manufacturing site and is timely, considering the Department of Homeland Security's initiatives for Security Vulnerability Assessments.
Implement a shipping box recycling program by end of Q2 06	This project contributed to the recycling of 26,000 pounds of high-quality, polypropylene plastic in 2006.

Recognition from Local Regulators

The SUMCO Albuquerque plant received a Gold Award from Albuquerque Water Utility Authority for complete and consistent compliance with its Industrial Wastewater Permit for the program year 2005 – 2006. The SUMCO Albuquerque location has received this award 10 times since the facility opened.

The SUMCO Phoenix plant also received a recognition award from the City of Phoenix Water Services Department Pollution Control Division for 100% compliance with its permit parameters for calendar year 2006. It was among the honorees at a local breakfast meeting sponsored by the City and attended by members of the Phoenix City Council, the Arizona Department of Environmental Quality and representatives.

ENVIRONMENTAL STEWARDSHIP/NATURAL RESOURCE USE

Recycling and Reuse

SUMCO Phoenix Corporation's environmental stewardship commitment is demonstrated by vigorous recycling/reuse programs at each of the plants.

Efficient use of the utilities and consumable materials that go into making silicon wafers is not only good business, it is a core principle of environmental stewardship. In 2006, SUMCO Phoenix Corporation facilities were able to recycle or re-use significant amounts of materials, thereby saving the environmental impact of their production from our suppliers.

In 2006, our recycling/reuse efforts kept **4,990.44** tons of materials in the cycle of productive use.

In 2006, SUMCO facilities supported the reclamation or internal reuse of materials listed below.

<u>Material recycled/reused</u>	<u>Tons</u>
Cardboard	100
Plastic	52.93
Paper	15
Metal drums	40.5
Fluorescent light bulbs	0.32
Silicon	133.01
Computer equipment	5.61
Polyethylene glycol	612
Silicon Carbide	1974
Trichlorosilane	222
N-MethylPyrolidone	1768
Shipping container re-use program	60
Used batteries	0.17
Oil	6.9
Total Tons recycled/reused 2006	4990.44

CONSERVATION OF RESOURCES

Cincinnati - Hydrogen Recovery



In our manufacturing process, hydrogen gas is a production-support material. The Cincinnati facility has been using a Hydrogen Recovery Unit for many years that collects the hydrogen gas as it leaves the wafer reactors. We are able to isolate as much as 90% of the used hydrogen, and clean and reuse it internally. In 2006, the Cincinnati facility reused more than 300,000,000 standard cubic feet of hydrogen.

This effort means that our suppliers did not have to produce that quantity of hydrogen, nor put it in trucks for delivery to our facility. More than 200 truck deliveries and their subsequent 300,000 miles of travel were saved in 2006, as well as the associated environmental impact of the production activities of our suppliers.

Albuquerque – Water Consumption



In a desert community such as Albuquerque, water use is an important issue. Any water that can be “consumed” more than once is water that does not have to be supplied from city resources. Water reuse at our Albuquerque facility includes two components:

A portion of the industrial wastewater that has been pH-adjusted at the plant is directed to a collection tank used by the city of Albuquerque to irrigate a local park. In 2006, the SUMCO Albuquerque facility provided 10.5 million gallons of irrigation water to the city. Since the program’s inception in mid-2001, 110 million gallons of irrigation water has been provided.

The plant also uses spent water from its internal production of high-quality, deionized water to irrigate the grounds of the Albuquerque plant. In 2006, the facility reused 2.8 million gallons of water in this manner.

Phoenix – Resource Conservation and Recycling



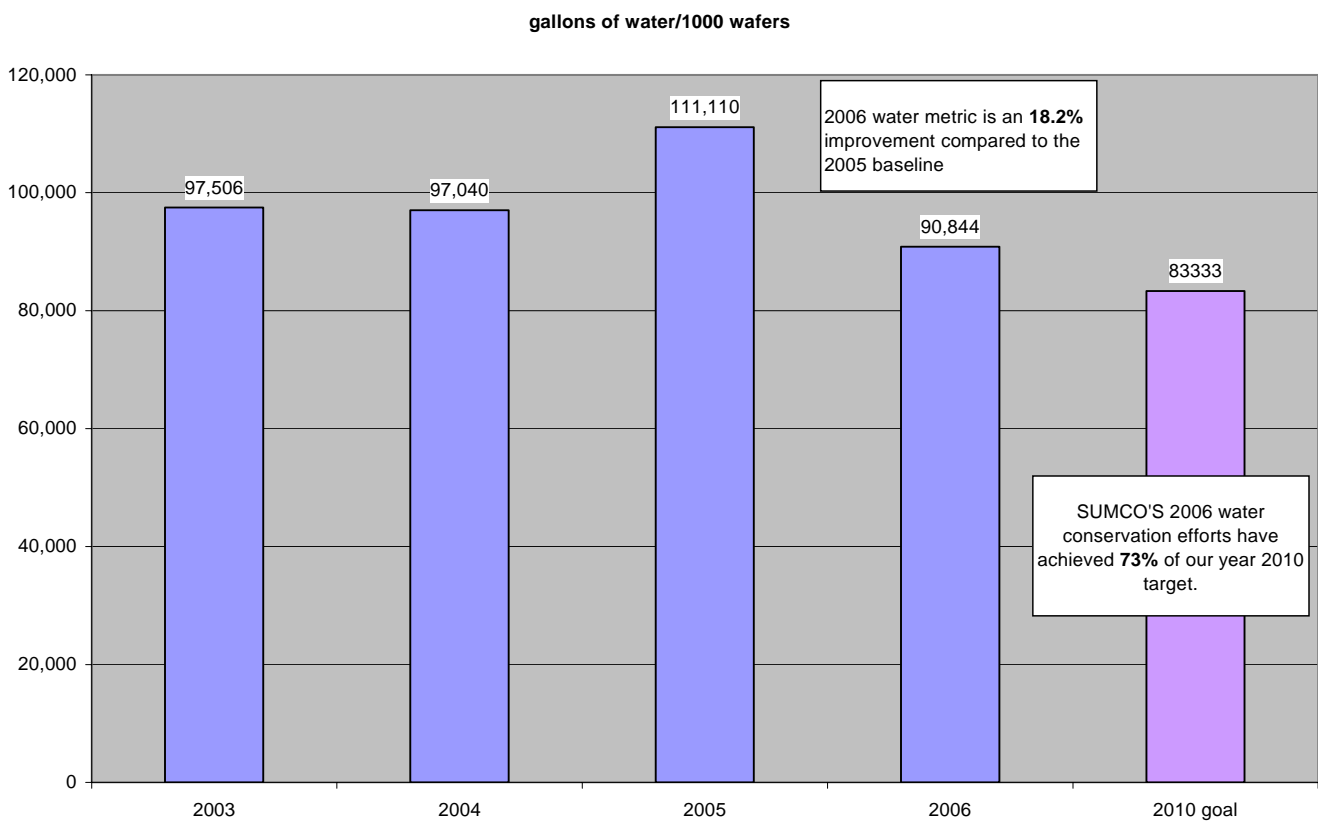
Like Albuquerque, Phoenix is also a desert community and shares the same philosophy regarding water conservation. Processes are continually being reviewed, fine-tuned and evaluated for water type, use and flow rate. This continual process improvement has yielded millions of gallons per month in water savings and reuse.

Raw material reuse and recycling is also a major focus at the Phoenix facility, where some chemicals are used in up to four processes before they are sent off-site to be recycled. This type of reuse and recycling of process materials saves hundreds of thousands of pounds of waste material that would have gone to area landfills or to the local sewer system.

WATER CONSERVATION

Even though SUMCO Phoenix Corporation's manufacturing facilities use significantly less than a typical semiconductor fab, we continue to advocate programs to reduce water usage.

At the end of 2006, SUMCO was 73% toward the 2010 water conservation goal.



WASTE MINIMIZATION

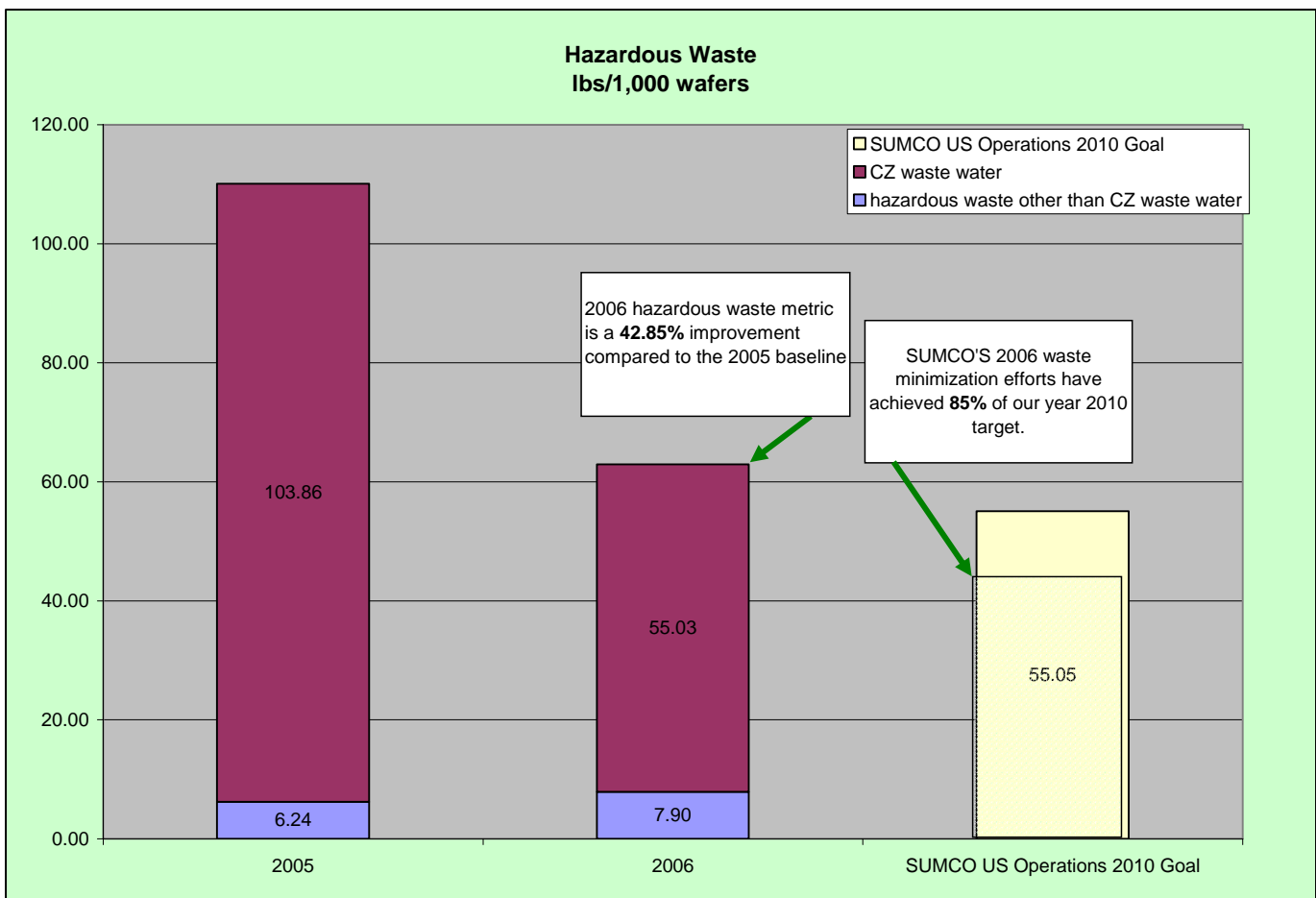
The U.S. Environmental Protection Agency defines hazardous waste and regulates businesses according to the amount of hazardous waste they generate.

The smallest EPA category of hazardous waste generator is "Conditionally Exempt Small Quantity Generator." Our Albuquerque facility is in this category.

The next smallest category is "Small Quantity Generator." Our Phoenix facility is in this category.

For purposes of this report, we show graphs for the waste water from the CZ ingot-growing process, plus all other hazardous wastes generated.

At the end of 2006, SUMCO was 85% toward the 2010 waste-minimization goal.



ENERGY CONSERVATION

SUMCO realizes that the electrical energy we consume creates the release of greenhouse gasses from the utility companies, as they burn fossil fuels to generate the electricity.

At year end 2006, SUMCO is 25% toward the 2010 energy conservation goal.

