

Advantage: Great Lakes



Great Lakes Chemical Corporation
2004 Summary Annual Report

2004 Financial Highlights

(in millions, except per share data)

Year Ended December 31

2004

2003

Results of Continuing Operations (GAAP):

Net sales	\$ 1,603.7	\$ 1,425.9
Gross profit	326.3	260.1
Operating income (loss)	52.8	(62.2)
Income (loss) from continuing operations before income taxes and cumulative effect of accounting change	3.5	(98.8)
Income taxes (credit)	(16.4)	(58.7)
Income (loss) from continuing operations before cumulative effect of accounting change	19.9	(40.1)
Diluted earnings (loss) per share from continuing operations before cumulative effect of accounting change	0.39	(0.80)

Results of Continuing Operations, Excluding Restructuring Charges, Repositioning, Other Items (Adjusted):

Net sales	\$ 1,603.7	\$ 1,425.9
Gross profit ⁽¹⁾	342.2	288.7
Operating income ⁽²⁾	92.4	49.5
Income from continuing operations before income taxes and cumulative effect of accounting change	54.3	11.8
Income taxes	16.8	3.1
Income from continuing operations before cumulative effect of accounting change ⁽³⁾	37.5	8.7
Diluted earnings per share from continuing operations before cumulative effect of accounting change	0.74	0.17

Financial Position:

Working capital excluding cash and cash equivalents	\$ 336.0	\$ 176.5
Current ratio	2.6	1.9
Debt, net of cash and cash equivalents	\$ 217.1	\$ 264.0
Debt	439.3	434.7
Percent of total capitalization	33.4%	36.9%
Stockholders' equity	\$ 875.5	\$ 743.5

The Results of Operations, Excluding Restructuring Charges, Repositioning and Other Items reflect the Results of Operations as detailed below:

(1) Excluded from gross profit in 2004 are \$12.0 million of restructuring charges, \$3.0 of fire-related business interruption costs and \$0.9 million of other costs. Excluded from gross profit in 2003 are \$24.2 million of restructuring charges, \$4.0 million of contract settlement costs, and \$0.4 million of repositioning and other items.

(2) In addition to the items in (1) above, operating income in 2004 excluded \$15.7 million of additional depreciation expense due to a change in useful life of the Company's enterprise software, \$6.8 million of CEO contractual termination benefits, asset impairments of \$3.0 million, \$1.3 million of restructuring costs, \$1.4 million of other costs, and an adjustment of a long-term incentive compensation plan of \$(4.5) million. In addition to the items in (1) above, operating income in 2003 excluded \$69.1 million of asset impairments, \$10 million of additional depreciation expense due to a change in useful life of the Company's enterprise software, and \$4.0 million of repositioning and other items.

(3) In addition to the items in (1) and (2) above, income (loss) from continuing operations before cumulative effect of accounting change in 2004 excluded \$15 million of asset write-offs and other costs related to facility fires, the sale of a non-operating site of \$(3.2) million, and a litigation settlement of \$(0.6) million. In addition to the items in (1) and (2) above, income (loss) from continuing operations before cumulative effect of accounting change in 2003 excluded a \$(1.1) million of reversal for litigation and other settlements as well as a \$(27.5) million income tax reserve release. Income (loss) from continuing operations before cumulative effect of accounting change in 2004 and 2003, excluding restructuring charges, repositioning and other items, reflects an assumed effective income tax rate of 31%. The use of this rate compared to the actual effective income tax rates in 2004 and 2003 changes income tax expense by \$33.2 million and \$61.8 million, respectively.



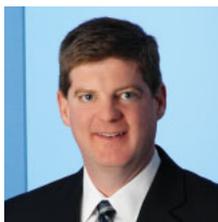
Advantage: Great Lakes

Great Lakes Chemical (NYSE: GLK) is a leading producer of specialty chemicals used in applications around the world – clearer water for recreation and industry, cleaner surfaces around the home, fire protection for people, buildings and critical assets, and additives that improve the longevity and performance of countless products.

Serving multiple markets in every corner of the globe delivers tremendous flexibility in product and geographic diversity. Currently, we hold No. 1 or No. 2 positions in key markets that account for 85 percent of company revenue.

Our increasingly focused product portfolio and competitive industrial and consumer business models give us a formidable advantage in the marketplace ... Advantage: [Great Lakes](#).

Letter to Shareholders



John J. Gallagher, III
Chief Executive Officer

To our shareholders, customers and employees:

At this time last year, we believed it was our time. Our businesses serving industrial customers – Polymer Additives, Bromine Performance Products, Fluorine Products and Industrial Water Additives – exited the economic downturn of 2003 with lower costs and enhanced flexibility to deliver an acceptable return to our shareholders. Our recreational pool chemicals business, bolstered by two small consumer product acquisitions in specialty household cleaners, was poised to accelerate its growth and earnings performance coming out of a sluggish 2003. Going into 2004, we felt Great Lakes Chemical could deliver ... and in many ways, we did.

For this year's report, we selected the theme "Advantage: Great Lakes." Our company is solidly positioned to win – with a strong portfolio of advantaged businesses, with increasingly competitive industrial and consumer business models, and with an outstanding team of dedicated employees and managers.

2004 Financial Performance At year-end 2004, we realigned our financial reporting segments to reflect the company's primary industrial and consumer businesses. This new reporting structure has been reduced to two segments – Industrial Performance Products and Consumer Products. The matrix found on pages 10-11 illustrates our new organization, principal markets and key products.

For the year ended December 31, 2004, Great Lakes' net sales from continuing operations increased 12 percent over the prior year to \$1,603.7 million. Adjusted operating income nearly doubled to \$92.4 million. Net debt decreased almost \$50 million, benefiting from the \$105 million in proceeds from the sale of WIL Research Laboratories, our toxicological services business, offset by our investment in working capital.

Accounts receivable increased due entirely to volume, as our days sales outstanding decreased slightly from 2003 levels. Inventory levels, also volume-driven, increased as well, reflecting steps taken in advance of the pool season to improve our customer service levels in 2005. Our balance sheet remains strong, giving us options to improve returns to shareowners through strategic acquisitions, debt repurchase, share repurchase or increased dividends.

While our 2004 results are significantly improved from the prior year, and encouraging in many respects, I have mixed feelings in reporting on Great Lakes' segment performance.

Operational Overview As anticipated, the Industrial Performance Products segment experienced a tremendous turnaround with 2004 sales up 16 percent and adjusted operating income almost tripling to \$73.7 million from the year before. Conversely, the performance of our Consumer Products business segment was a disappointment. While

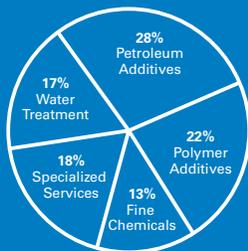
Advantage: Focused portfolio

All of us at Great Lakes — directors, management and employees — share a responsibility to improve our return to shareholders. Nearly 10 years ago, we began a fundamental strategy to focus our portfolio on businesses that we believe hold a distinct competitive advantage.

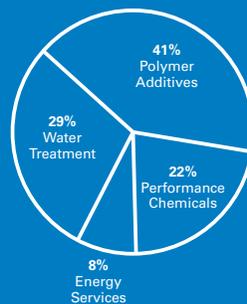
In 1995, the company consisted of 13 businesses composing five segments — but roughly half lacked sufficient scale to be competitive in the long term, and greater than 50 percent of company earnings were tied to a sunset business, Octel Corp. In the years since, we aggressively streamlined our portfolio, exiting certain underperforming businesses and investing in more advantaged businesses — defined as businesses that serve a market or markets with strong fundamental growth rates and provide the opportunity for acceptable returns on investments through various economic cycles. Today, our portfolio focuses solely on core businesses in two key segments: Industrial Performance Products and Consumer Products.



1995 portfolio: \$2.4B revenue



2000 portfolio: \$1.7B revenue



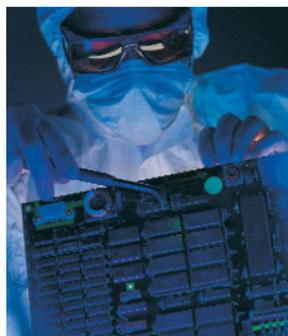
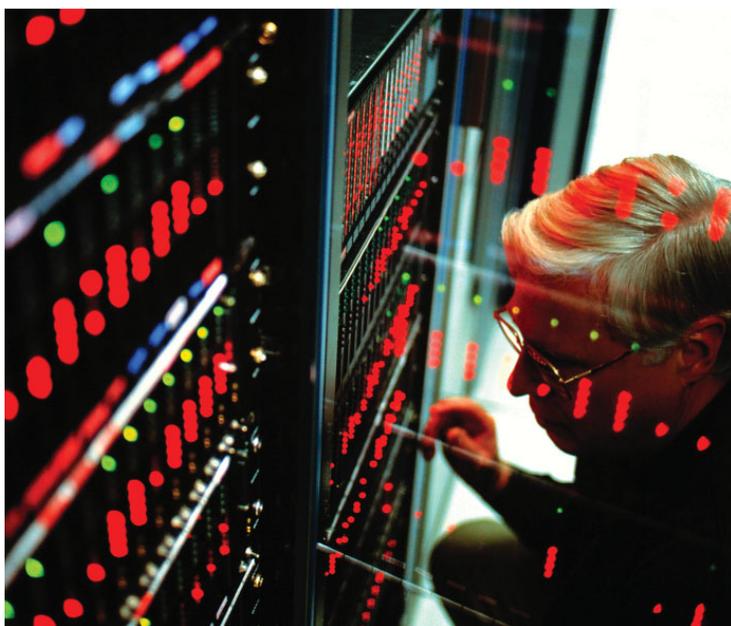
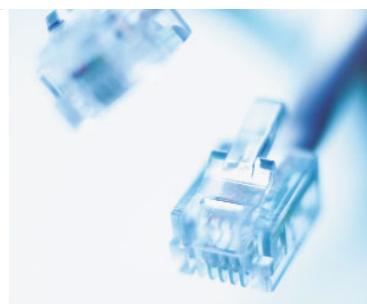
2005 portfolio: \$1.6B revenue



Advantage: Industrial Products Business Model

Our Industrial Performance Products unit serves the diverse needs of customers in a wide range of markets around the globe. To temper the volatile and cyclical environment in which we operate, we continue to forge a strategic business model with improved competitiveness through various business cycles – one that delivers profitable growth by focusing on new products and innovative solutions, and that generates higher revenues with fewer but more productive sites.

Aggressively reshaping our manufacturing operations, we have decreased the number of global facilities from 28 in 2001 to 15 today – eliminating excess, costly capacity to achieve reduced production costs and improved operating efficiencies. Our continued focus on operational excellence and consistent quality has resulted in significant productivity savings over the last two years. And increasingly, we are gaining greater operational flexibility and stronger market positions in selected areas through strategic partnerships and joint ventures with leading global suppliers.



sales increased almost 7 percent in 2004, adjusted operating income declined almost 17 percent from the prior year.

Industry fundamentals throughout most of the Industrial Performance Products segment turned positive during the year, with supply/demand balances reflecting continued tightness across many product areas in the polymer additives market. The benefits of a significantly lower cost structure as a result of restructuring and facility closures, and broad-based price increases in excess of raw material and energy cost increases, combined with volume gains across the segment, contributed to the strong recovery.

Our Consumer Products business faced several challenges in 2004 – some self-inflicted and some market-driven. Competitive pricing actions at the start of the 2004 pool season, a warehouse fire within our Conyers, Georgia, packaging facility, a slower start to our household growth strategy and added costs due to poor integration of acquired manufacturing operations all contributed to performance that was well below our expectations.

Strategies for Continued Growth By mid-year 2004, we completed an aggressive restructuring of our manufacturing operations to eliminate excess, high-cost capacity for reduced costs and improved efficiencies. This \$140 million effort involved closing four production facilities and reducing our total workforce by approximately 9 percent. The number of global manufacturing facilities has decreased from 28 in 2001 to 15 today.

While laying the foundation for future productivity gains, this plant consolidation effort resulted in approximately \$30 million in annualized savings in 2004.

Focusing intently on operational excellence and continuous improvement throughout the organization, Great Lakes employs a variety of best practices, processes and tools. These efforts are designed to take costs out of manufacturing by increasing efficiency and yields, lowering costs and delivering consistent quality.

Among the tools and techniques we apply are Six Sigma to improve manufacturing operations and business processes; Sales Operations and Inventory Planning (SOIP) to manage supply and demand for improved productivity and customer service; and SPRINT, our product development process, to help us quickly identify and bring to market new products.

After achieving productivity savings of \$20 million in 2003, we targeted even greater improvements in 2004. By year-end, we had tallied \$24 million in savings. Revenue per employee – up 59 percent since 1998 – reflects our continued progress in improving productivity.

Great Lakes is a recognized leader in the production of specialty chemical solutions, with innovative products that protect against and extinguish fire, enhance the stability and performance of polymers, treat and purify water, and keep household surfaces shining.

Today, 85 percent of company revenue is derived from markets where we hold a leading position. Last year, new product revenue in Industrial Performance Products climbed to 12 percent of sales, while new product revenue in Consumer Products grew to 27 percent of sales. While generating increased sales, new products also help stabilize our margins and accelerate growth – for instance, new polymer stabilizer products produced margins two times the category average.

Management Team As our transformation continues, we are undergoing a period of transition in the senior leadership team. In November 2004, the Board of Directors elected Nigel D.T. Andrews to the position of non-executive chairman and named me acting chief executive officer, following the resignation of Mark P. Bulriss for personal reasons.

I would like to personally thank Mark Bulriss for the efforts and sacrifices he made over the years to make Great Lakes a better company.

In connection with my appointment as acting chief executive officer, I named Jeffrey Potrzebowski as acting chief financial officer. Jeff is well-known to our shareowners and the investment community, previously serving as vice president of investor relations and financial planning and analysis.

We continue to build strong leadership at the business level, as well. Angelo Brisimitzakis, as executive vice president and general manager of our Flame Retardant and Performance Products business, together with Maurizio Butti, executive vice president

and general manager of our Polymer Stabilizers business, manage the Industrial Performance Products segment. And, I am pleased to report that Kevin M. Dunn joined the company subsequent to year-end as president and CEO of our BioLab Inc. subsidiary and corporate executive vice president of consumer products, leading the Consumer Products segment.

2005 and Beyond Entering 2005, we are confident that our portfolio is firmly focused on businesses that have a competitive advantage – businesses where we hold, or can attain, a top leadership spot. Going forward, we must build on the momentum in our Industrial Performance Products segment and effectively address the challenges in our Consumer Products business. In the current economic environment, we predict double-digit revenue growth and target a 9 percent return on investment for Great Lakes in 2005.

Clearly, Industrial Performance Products is benefiting from a cyclical upturn in the end markets we serve, particularly electrical, electronics and polyolefins. With this understanding, we constantly challenge ourselves to better prepare for the next cyclical downturn. We believe that our reduced cost structure and flexibility in our supplier partnerships will have us well-positioned when the economy softens. Moreover, the financial performance of our Industrial Performance Products business is approaching reinvestment levels. We are obligated to you, our shareowners, to explore investment options to strengthen this franchise. Much of our effort over the past few years has been in restructuring and improving performance; therefore, we have not been in a position to explore growth opportunities until now.

Advantage: Consumer Products Business Model

Historically, Great Lakes' recreational pool and spa treatment business has achieved the consistent growth and investor return characteristics of an advantaged business – even during difficult economic downturns. Seasonal rather than cyclical, this business successfully combined product innovation with distribution and packaging competencies to deliver double-digit growth in sales and earnings throughout the 1990s.

While continuing to meet the needs of residential and commercial pool owners through our dealer and distributor network, we have gained increasing channel access to mass merchants with our proven capabilities to provide the service they require – on-time shipment, specified delivery dates and specialized packages.

To further build on these competencies and leverage our infrastructure into higher growth and more profitable markets, in 2003 we expanded our growth opportunities with the acquisition of two small household cleaning products companies. And we are currently extending our reach in pool and spa care to include related products such as equipment and accessories.



Advantage: People Who Make a Difference

The men and women of Great Lakes come in all shapes and sizes. They speak many languages, and the places they call home are worlds apart. Despite these differences, they share much in common – an unwavering commitment to bringing our customers the best solutions, the best products and the best service in the world. Our people – at every level of the organization, on five continents around the globe – are the key to our success and our competitive advantage in the marketplace.

People who develop new formulations, and who ensure the safety of our workplaces. Those who produce and package our products, and who deliver exceptional service to our customers. People who market our products, and who generate sales. Those who manage our accounts, balance our books, purchase our supplies and keep our offices humming. People who oversee construction, and who maintain our plants and equipment. And all those who find ways to do it better.



The Consumer Products business is a good fundamental business, with the ability to achieve growth and investor return even during difficult economic times. Over 90 percent of the revenue and related profitability from this segment comes from our recreational pool water franchise. This business, clearly No. 1 in the world, is the envy of the space in which it competes. Consequently, the recovery in this segment will be driven by improvement in the recreational pool chemicals business performance. Plus, we are exploring investment opportunities to strengthen our pool chemicals franchise by redefining the pool care market and broadening our view on customer needs in this area. Opportunities for investment in household cleaning consumer products, while still significant, must wait until we are confident that we have addressed the internal execution issues experienced in 2004.

I am excited about the future of Great Lakes – and its formidable advantages in the marketplace. We are on the cusp of proving that we can deliver consistent returns to our shareowners. Our employees have worked tirelessly to transform this company and deliver on our commitments. I am confident this hard work will be rewarded with positive results in our performance.

Sincerely,



John J. Gallagher, III
Chief Executive Officer
February 28, 2005

At press time, Great Lakes and Crompton Corporation announced the signing of a definitive merger agreement, which, if consummated, would form the third-largest specialty chemicals company in the United States. An excellent strategic fit between two companies with complementary business portfolios, the new company would have leading positions in multiple high-value businesses including plastics additives, petroleum additives, flame retardants and pool chemicals. The combination is estimated to result in cost savings of \$90 million to \$100 million, largely achieved in 2006. The transaction, which is subject to regulatory approval and approval by shareholders of both companies, is expected to close mid-year 2005.

Corporate Overview

Great Lakes Chemical Corporation (NYSE: GLK) is a global company dedicated to making the world safer and healthier, cleaner and greener, and more productive. We develop and deliver specialty chemical solutions that treat and purify water, disinfect and clean household surfaces, protect against and extinguish fire, extend the useful life of plastics and enhance the performance of consumer products from computers, electronics and automobiles to packaging, building materials and furniture. We operate an integrated network of research, production, sales and distribution facilities to serve customers around the world.

Great Lakes at a Glance

Manufacturing facilities: 15

Sales/administrative facilities: 25

Employees: 3,700

Global reach: Offices in 22 countries and over 8,500 products marketed in more than 90 countries worldwide

Market position: 85% of revenue derived from markets where we hold the No. 1 or No. 2 market position

Business Units

Consumer Products

Premier manufacturer of water treatment biocides and related products to help make water better for recreational and commercial pool and spa applications, and specialty solutions that sanitize, disinfect and bring a clean, fresh shine in and around the home.

Pool and Spa Water treatment sanitizers, algicides, biocides, oxidizers, pH and mineral balancers; and specialty chemicals.

Household Cleaning Specialty and multipurpose cleaners and degreasers that disinfect and clean indoor and outdoor surfaces such as kitchen, bath, laundry, patio, garage and automotive.

Industrial Performance Products

One of the world's most comprehensive portfolios of polymer additive solutions formulated to meet specific needs of the plastics industry; a major producer of fluorine-based materials that provide fire protection and performance-enhancing characteristics to a wide variety of compounds; and industrial water treatment.

Flame Retardants Bromine-, phosphorus-, antimony- and zinc-based flame retardants, synergists and smoke suppressants; antimony-based catalysts used in the manufacture of polyester; and physical-form compounds and blends that reduce or eliminate the flammability of a wide variety of combustible materials.

Polymer Stabilizers UV stabilizers, antioxidants and patented non-dusting polymer additive blends that enhance critical polymer performance characteristics such as heat and light resistance resulting in maintenance of physical properties and color consistency; nucleating agents and clarifiers to enhance mechanical properties and transparency of polymers; and a line of optical monomers for the production of eyewear.

Brominated Performance Products Fumigants that improve crop yields, protect grain and other stored food sources from infestation and eliminate pests from imported crops; chemical intermediates that serve as building blocks for other compounds; and clear brine fluids used for oil and gas exploration.

Performance Additives and Fluids High-performance lubricant additives that increase the stability of oils and provide wear reduction; fire-resistant fluids and lubricants for use in industrial applications; and surface-active phosphate ester additives.

Fire Protection Waterless fire suppression for mission-critical and high-value assets, which prevents extensive fire damage and eliminates collateral damage and downtime.

Fluorine Specialties Specialty products essential to the performance of silicone-based materials used under demanding conditions where aggressive solvents or high temperatures may be present; other specialty products used as propellants in medical inhalers, electronic etchants, agricultural and pharmaceutical intermediates and as refrigerants.

Industrial Water Additives Specialty additives used in industrial water treatment and desalination processes that include antiscalants, corrosion inhibitors, dispersants, antifoams and non-oxidizing and superior bromine-based oxidizing microbiological control products.



Principal Markets

Pool and Spa Pool and spa dealers and distributors, mass market retailers, wholesale distributors, specialty store owners, commercial pool and water park operators, residential and commercial builders, and retail customers.

Household Cleaning Grocery stores, mass merchandisers, dollar stores, hardware stores, farm and fleet operators, discount clubs and automotive.

Flame Retardants Building and construction materials, electrical components, wire and cable, information technology and consumer equipment, printed wiring boards, furniture and furnishings, and automotive.

Polymer Stabilizers Fibers, cables, household appliances, agrofilms, communications equipment, computer and business machines, automotive parts, pipes, packaging, films and tapes, textiles, building and construction, cosmetics and optical lenses.

Brominated Performance Products Agricultural chemicals; pest control in soil preparation, commodity storage and post-harvest food processing; electronics; plastics; rubber compounds; detergents; pharmaceuticals; and oil well drilling, completion and workovers.

Performance Additives and Fluids Synthetic and mineral oil-based lubricants and fluids used in aviation, mining, electricity generation and gas pumping; and waxes, solvents and industrial cleaners.

Fire Protection Information technology, telecommunications, transportation, medical equipment and laboratories, hazardous and flammable liquid storage facilities, document vaults and archives, and art galleries and museums.

Fluorine Specialties Refrigerants, electronic chemicals, pharmaceuticals and automotive components.

Industrial Water Additives Industrial cooling water treatment, industrial and municipal wastewater treatment, municipal desalination, pulp and paper processing, food processing and preservative intermediates.

Key Products

Pool and Spa Water treatment sanitizers AquaBrome®, Aqua Chem®, Aqua Clear®, BAYROL®, BioGuard®, Guardex®, Hydrotech®, Miami, Omni®, Pool Time®, ProGuard®, Spa Essentials®, Spa Guard®, Spa Time®, and Sun®; algicides, biocides, oxidizers, pH balancers, mineral balancers and specialty chemicals.

Household Cleaning The Works® brand of cleaners for glass, surface, tub, shower and toilet bowl, as well as drain openers and rust and calcium removers; Greased Lightning®, Greased Lightning Blast® and Greased Lightning High Performance® brands of multipurpose cleaners for tough cleaning tasks and everyday cleanup for bath, kitchen, flooring, laundry, patio and automotive.

Flame Retardants Bromine-, phosphorus- and antimony-based flame retardants and synergists marketed under the trade names Firemaster®, Fireshield®, Kronitex®, LSFR®, Oncor®, Ongard®, Pyrobloc®, Reofos®, Reogard®, Smokebloc®, Thermoguard®, Timonox®, Trutint® and UltraFine®; antimony-based catalysts marketed as UltraFine® and PetCat®; and flame retardant physical-form compounds and blends sold under the trade name Fyrebloc®.

Polymer Stabilizers Antioxidants, UV absorbers and light stabilizers marketed under the trade names Alkanox®, Anox®, Lowilite® and Lowinox®; non-dusting blends sold under the trade name Anox® NDB®; nucleating agents sold under the Clearlite® name; and Rav7® and Nouriset® optical monomers.

Brominated Performance Products Methyl bromide including products marketed under the trade names Agribrom®, Brom-O-Gas®, Chlor-O-Pic®, Meth-O-Gas® and Terr-O-Gas®; bromine, bromine derivatives and bromine-based specialty chemicals; and brominated heavy brine fluids.

Performance Additives and Fluids Durad® lubricant additives, Reolube® fire-resistant fluids and lubricants, and Reomol® and KP-140® specialty additives.

Fire Protection FM-200® waterless fire protection.

Fluorine Specialties Organo-fluorine compounds and fluorinated intermediates.

Industrial Water Additives Antiscalants, biocides, corrosion inhibitors, dispersants and antifoams sold under the trade names Belclene®, Belcor®, Belgard®, Belite®, Bellacide®, Bellasol®, Belsperse®, BromiCide®, Flocon® and LiquiBrom™.

Key Metrics

Sales
(in millions)



Sales
(in millions)



Outlook

Consumer Products

- Operations improvement plans being developed to deliver increased productivity.
- Focus on improving business performance, especially profitability in pool care and household products.
- Improved packaging, expanded distribution, and refocused advertising and marketing programs.
- Introduction of Burnout Extreme (patent pending) – a fast-dissolving and high-performance shock treatment for pools, with a safer storage and handling profile, to give consumers sparkling clean water.

- Greased Lightning and the Works brands will continue expansion to mass retailers throughout the Northeast, Southeast and West Coast.
- Household brands will be refocusing advertising and marketing programs to grow core products and brand strengths.

Industrial Performance Products

- Accelerate profitable new product growth in Flame Retardants, Fluorine Specialties and Industrial Water Additives driven by customer needs.
- Drive value creation/pricing, ensuring selling prices are at least ahead of material inflation and margins move toward adequate reinvestment levels.
- Leverage upside potential for flame retardants and fire suppressants from new fire safety standards and regulations.
- Continue expansion of specialty and UV product portfolio.
- Extend innovation to customers by providing additives solutions and enhanced services.
- Implement operational excellence activities, leveraging Six Sigma and lean manufacturing tools, in order to maximize productivity and EHS improvements.



Management's Statement of Responsibility for Financial Statements

The management of Great Lakes Chemical Corporation is responsible for the preparation and presentation of the accompanying consolidated financial statements and all other information in this summary annual report. The financial statements are prepared in accordance with accounting principles generally accepted in the United States and include amounts that are based on management's informed judgments and estimates.

The company maintains accounting systems and internal accounting controls that management believes provide reasonable assurance that the company's financial reporting is reliable, that assets are safeguarded and that transactions are executed in accordance with proper authorization. This internal control structure is supported by the selection and training of qualified personnel and an organizational structure that permits the delegation of authority and responsibility. The systems are monitored worldwide by an internal audit function that reports its findings to the Audit Committee.

The company's consolidated balance sheets at December 31, 2004 and 2003, and the related consolidated statements of operations and cash flows for each of the three years in the period ended December 31, 2004, have been audited by Ernst & Young LLP, independent auditors, in accordance with auditing standards generally accepted in the United States. These standards provide for the review of internal accounting control systems to plan the audit and determine auditing procedures and tests of transactions to the extent they deem appropriate.

The Audit Committee of the Board of Directors, which consists solely of independent directors, is responsible for overseeing the functioning of the accounting systems and related internal controls and the preparation of the company's consolidated financial statements. The Audit Committee periodically meets with management and the independent auditors to review and evaluate their accounting, auditing and financial reporting activities and responsibilities. The independent auditors and internal auditors have full and free access to the Audit Committee without management's presence to discuss internal accounting controls, results of their audits and financial reporting matters.



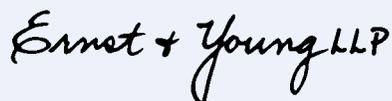
John J. Gallagher, III
Chief Executive Officer



Jeffrey Potrzebowski
Chief Financial Officer

Report of Independent Auditors on Condensed Financial Statements

We have audited, in accordance with generally accepted auditing standards in the United States, the consolidated balance sheets of Great Lakes Chemical Corporation at December 31, 2004 and 2003, and the related consolidated statements of operations, cash flows, and stockholders' equity for each of the three years in the period ended December 31, 2004 (not presented separately herein) and in our report dated February 25, 2005, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying condensed consolidated financial statements is fairly stated in all material respects in relation to the consolidated financial statements from which it has been derived.



Indianapolis, Indiana
February 25, 2005

Consolidated Statements of Operations

(millions, except per share data)

Year Ended December 31	2004	2003
Net Sales	\$ 1,603.7	\$ 1,425.9
Operating Expenses		
Cost of products sold	1,277.4	1,165.8
Selling, general and administrative expenses	270.5	253.2
Asset impairments	3.0	69.1
	1,550.9	1,488.1
Operating Income (Loss)	52.8	(62.2)
Interest Income (Expense) – net	(25.2)	(25.8)
Other Income (Expense) – net	(24.1)	(10.8)
Income (Loss) from Continuing Operations before Income Taxes and Cumulative Effect of Accounting Change	3.5	(98.8)
Income Taxes (Credit)	(16.4)	(58.7)
Income (Loss) from Continuing Operations before Cumulative Effect of Accounting Change	\$ 19.9	\$ (40.1)
Discontinued Operations		
Income (Loss) from Discontinued Operations before Income Taxes	\$ 74.8	\$ (2.9)
Income Taxes	31.8	5.1
Income (Loss) from Discontinued Operations	\$ 43.0	\$ (8.0)
Income (Loss) before Cumulative Effect of Accounting Change	62.9	(48.1)
Cumulative Effect of Accounting Change, Net of Income Taxes	–	(3.3)
Net Income (Loss)	\$ 62.9	\$ (51.4)
Earnings (Loss) per Share		
Basic and Diluted		
Income (Loss) before Cumulative Effect of Accounting Change		
Continuing Operations	\$ 0.39	\$ (0.80)
Discontinued Operations	0.84	(0.15)
	\$ 1.23	\$ (0.95)
Cumulative Effect of Accounting Change	–	(0.07)
Net Income (Loss)	\$ 1.23	\$ (1.02)
Cash Dividends Declared per Share	\$ 0.385	\$ 0.365

See Notes to Consolidated Financial Statements.

Consolidated Balance Sheets

(millions, except per share data)

December 31	2004	2003
Assets		
Current Assets		
Cash and cash equivalents	\$ 222.2	\$ 170.7
Accounts and notes receivable, less allowances of \$2.2 and \$3.9, respectively	320.7	261.5
Inventories	324.2	260.2
Prepaid expenses	26.0	26.2
Deferred income taxes	17.3	4.1
Current assets – discontinued operations	8.6	37.7
Total Current Assets	919.0	760.4
Plant and Equipment, Net	549.3	550.5
Goodwill	212.3	205.7
Intangible Assets	72.8	63.4
Investments in and Advances to Unconsolidated Affiliates	22.6	22.5
Other Assets	24.0	24.7
Deferred Income Taxes	—	46.4
Non-Current Assets – Discontinued Operations	1.5	19.6
Total Assets	\$ 1,801.5	\$ 1,693.2
Liabilities and Stockholders' Equity		
Current Liabilities		
Accounts payable	\$ 204.4	\$ 169.8
Accrued expenses	115.3	122.4
Income taxes payable	17.0	71.4
Dividends payable	5.1	4.8
Notes payable and current portion of long-term debt	10.4	7.1
Current liabilities – discontinued operations	12.1	27.4
Total Current Liabilities	364.3	402.9
Long-Term Debt, less Current Portion	428.9	427.6
Deferred Income Taxes	24.4	—
Other Non-Current Liabilities	70.7	106.4
Non-Current Liabilities – Discontinued Operations	5.7	6.0
Minority Interest	32.0	6.8
Stockholders' Equity		
Common Stock, \$1 par value, 200.0 million authorized shares; 73.6 and 73.0 million issued shares in 2004 and 2003, respectively	73.6	73.0
Additional paid-in capital	130.7	124.7
Retained earnings	1,656.3	1,612.9
Treasury stock, at cost; 22.1 and 22.4 million shares in 2004 and 2003, respectively	(1,022.1)	(1,035.9)
Accumulated other comprehensive income (loss)	37.0	(31.2)
Total Stockholders' Equity	875.5	743.5
Total Liabilities and Stockholders' Equity	\$ 1,801.5	\$ 1,693.2

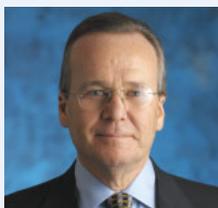
See Notes to Consolidated Financial Statements.

Consolidated Statements of Cash Flows

(millions)		
Year Ended December 31	2004	2003
Operating Activities		
Net income (loss)	\$ 62.9	\$ (51.4)
Adjustments to reconcile net income (loss) to net cash provided		
by operating activities – continuing operations:		
(Income) loss from discontinued operations	(43.0)	8.0
Cumulative effect of accounting change	—	3.3
Depreciation and depletion	90.0	87.5
Amortization of intangible assets	6.7	5.8
Deferred income taxes	17.8	(41.3)
Losses of unconsolidated affiliates	0.9	3.5
Loss on disposition of assets	2.8	2.3
Income tax reserve release	(17.5)	(27.5)
Asset impairments	3.0	69.1
Other	(7.2)	(1.2)
Changes in operating assets and liabilities, net of effects from business combinations:		
Accounts receivable	(44.0)	24.5
Inventories	(46.7)	9.4
Other current assets	(3.1)	(0.5)
Accounts payable and accrued expenses	21.0	(3.6)
Income taxes and other current liabilities	(14.4)	(7.9)
Other non-current liabilities	(8.3)	(3.2)
Net Cash Provided by Operating Activities – Continuing Operations	20.9	76.8
Income (loss) from discontinued operations	43.0	(8.0)
Adjustments to reconcile income (loss) from discontinued operations to		
net cash provided by (used for) operating activities – discontinued operations:		
Depreciation and depletion	1.1	1.4
Asset impairments	—	15.8
Gain on disposition of assets – WIL Research Laboratories	(84.1)	—
Loss on disposition of assets – Fine Chemicals	14.9	—
Deferred income taxes	30.6	(2.3)
Changes in operating assets and liabilities	(3.0)	10.3
Net Cash Provided by (Used for) Operating Activities – Discontinued Operations	2.5	17.2
Net Cash Provided by Operating Activities	23.4	94.0
Investing Activities		
Plant and equipment additions	(84.0)	(62.0)
Business combinations, net of cash acquired	—	(105.7)
Proceeds from sale of assets	7.6	3.9
Other	(1.5)	(0.5)
Net Cash Used for Investing Activities – Continuing Operations	(77.9)	(164.3)
Plant and equipment additions – discontinued operations	(1.5)	(3.1)
Proceeds from sale of WIL Research Laboratories	105.0	—
Other net investing activities – discontinued operations	(2.1)	0.4
Net Cash Provided by (Used for) Investing Activities – Discontinued Operations	101.4	(2.7)
Net Cash Provided by (Used for) Investing Activities	23.5	(167.0)
Financing Activities		
Net repayments of commercial paper and other long-term obligations	(0.2)	(4.2)
Net (repayments) borrowings on short-term credit lines	1.4	—
Proceeds from stock options exercised	11.1	—
Cash dividends paid	(19.3)	(18.1)
Other	0.8	(1.8)
Net Cash Used for Financing Activities	(6.2)	(24.1)
Effect of Exchange Rate Changes on Cash and Cash Equivalents – Continuing Operations	10.0	9.2
Increase (Decrease) in Cash and Cash Equivalents	50.7	(87.9)
Cash and Cash Equivalents at Beginning of Year	171.5	259.4
Cash and Cash Equivalents at End of Year	222.2	171.5
Less: Cash and Cash Equivalents – Discontinued Operations	—	0.8
Cash and Cash Equivalents – Continuing Operations	222.2	170.7

See Notes to Consolidated Financial Statements.

Board of Directors



Nigel D. T. Andrews^{2,5}
Chairman of the Board, Great Lakes Chemical Corporation, Former Managing Director, Internet Capital Group (Venture Partner), Director since 2000



Thomas M. Fulton^{2,5}
Former President and Chief Executive Officer, Landauer, Inc., Director since 1995



John C. Lechleiter^{1,2,5}
Executive Vice President, Pharmaceutical Products and Corporate Development, Eli Lilly and Company, Director since 1999



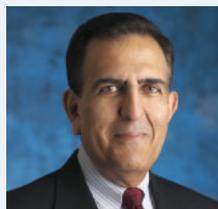
Martin M. Hale^{1,4}
Former Nonexecutive Chairman of the Board, Great Lakes Chemical Corporation, Former Executive Vice President, Hellman Jordan Management Co., Inc., Director since 1978



Mack G. Nichols^{3,5}
Former President and Chief Operating Officer, Mallinckrodt, Inc., Director since 1998



James W. Crownover^{2,3}
Presiding Independent Director, Great Lakes Chemical Corporation, Former Director, McKinsey & Company, Director since 2000



Louis E. Lataif^{1,5}
Dean of the School of Management, Boston University, Director since 1995



Jay D. Proops^{1,4}
Cofounder/Former Vice Chairman, The Vigoro Corporation, Director since 1996

¹ Audit Committee

² Compensation and Incentive Committee

³ Corporate Responsibility Committee

⁴ Finance Committee

⁵ Governance and Nominating Committee

Corporate Officers

John J. Gallagher, III
Chief Executive Officer

Larry J. Bloom
Executive Vice President and Chief Strategy Officer, Consumer Products

Angelo C. Brisimitzakis
Executive Vice President, Flame Retardants and Performance Products

Maurizio E. Butti
Executive Vice President, Polymer Stabilizers

Kevin M. Dunn
Executive Vice President, Consumer Products

Richard T. Higgons
Executive Vice President, Business Development

John B. Blatz
Senior Vice President, Environmental, Health and Safety

Richard J. Kinsley
Senior Vice President, Human Resources and Communications

Jeffrey M. Lipshaw
Senior Vice President and General Counsel

Jeffrey Potrzebowski
Senior Vice President and CFO

Zoe F. Schumaker
Senior Vice President and Chief Information Officer

Miguel A. Desdin
Vice President and Treasurer

William L. Sherwood
Vice President and Corporate Controller

Karen Witte Duros
Vice President and Secretary

Shareholder Information

Corporate Headquarters

Great Lakes Chemical Corporation
9025 North River Road, Suite 400
Indianapolis, IN 46240 USA
Voice: +1 317-715-3000
Fax: +1 317-715-3060
www.greatlakes.com

Stock Exchange Listing

Great Lakes common stock is listed on the New York Stock Exchange and Pacific Stock Exchange under the trading symbol GLK.

Transfer Agent / Registrar

For information or assistance regarding stock transfer, change of name in which shares are registered, individual stock records, dividend checks or stock certificates:
Voice: +1 800-829-8432 or +1 704-590-0394
Fax: +1 704-590-7618

online:
www.wachovia.com

or write:
Wachovia Bank, N.A.
Equity Services Group
1525 West W.T. Harris Blvd., 3C3
Charlotte, NC 28288-1153 USA

For items sent by courier or overnight delivery, use the following address:
Wachovia Bank, N.A.
Equity Services Group
1525 West W.T. Harris Blvd., 3C3
Charlotte, NC 28262 USA

Forward-Looking Statements and non-GAAP Financial Management

Any statements contained in this report relating to matters that are not historical facts are forward-looking statements. Some of these statements include words such as expects, anticipates, should, intends, believes and other similar expressions. Although they reflect our current expectations, these statements are not guarantees of future performance, but involve a number of risks, uncertainties and assumptions. We urge you to review Great Lakes Chemical Corporation's Annual Report on Form 10-K and quarterly report on Form 10-Q, for a discussion of some of the factors that could cause actual results to differ materially.

This report contains non-GAAP financial measures within the meaning of Regulation G promulgated by the Securities and Exchange Commission, including adjusted operating income (loss) and adjusted income (loss) from continuing operations. Included in this report is a reconciliation of the differences between these non-GAAP financial measures with the most directly comparable financial measures calculated in accordance with GAAP.

Equal Opportunity Employer – M/F/D/V

It is the policy of Great Lakes Chemical Corporation and its subsidiaries to provide equal opportunity without regard to race, religion, color, national origin, sex, age, disability or veteran status. This policy applies to all areas of employment including

Form 10-K, Other Reports

A copy of the Great Lakes Form 10-K annual report, filed with the Securities and Exchange Commission, and other public financial information for the year ended December 31, 2004, are available:

online:
www.greatlakes.com

or write:
Great Lakes Chemical Corporation
Investor Relations
9025 North River Road, Suite 400
Indianapolis, IN 46240 USA
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Paul Britton
Vice President, Financial Analysis
and Investor Relations
Wendy Chance
Manager, Corporate Communications

Independent Auditors

Ernst & Young LLP
111 Monument Circle
Indianapolis, IN 46204 USA

Online Information

Board committee charters, governance guidelines, the Great Lakes Code of Business Conduct, and audio rebroadcast of quarterly earnings conference calls and investor conferences at which the company participates, are available from the Great Lakes website at www.greatlakes.com.

recruitment, placement, training, transfer, promotion, lay-off, termination, pay and other forms of compensation and benefits. Great Lakes Chemical Corporation and its subsidiaries will comply with its legal obligation to provide reasonable accommodation to qualified individuals with disabilities.



Great Lakes is a member of the American Chemistry Council and a signatory of the Council's Responsible Care® program. Great Lakes is committed to a continuous effort to improve performance in safety, health and environmental quality.

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