

JANUARY 24, 1996

The New York Times

Bristol-Myers Reports Loss In 4th Quarter

Cites Implant Fund And Plant Closings

By MILT FREUDENHEIM

The Bristol-Myers Squibb Company reported yesterday a net loss of \$208 million for the last three months of 1995. The loss includes a new after-tax write-off of \$590 million for claims by women who say they were injured by breast implants and a \$310 million charge for plant closings and reorganizing.

Bristol-Myers Squibb said pretax profit on operations, before the charges, was \$910 million, up 9 percent from the fourth quarter of 1994.

Bristol-Myers Squibb said it has now made \$3.2 billion available for the breast implant claims, including \$1 billion covered by insurance. The company said the after-tax cost for these claims, which were written off over the last three years, was \$1.39 billion.

Securities analysts said the cash-rich pharmaceutical and health care

products manufacturer was well able to deal with the claims. Bristol-Myers Squibb, based in New York, has withdrawn from the breast implant business. Its shares rose \$2 yesterday, to \$86.125, on the New York Stock Exchange.

Drug industry sales were generally strong in the fourth quarter, although some analysts worried that profits may erode because of growing competition from lower-priced generic drugs as patent protection runs out for important products.

The Warner-Lambert Company, which has already felt the sting from generic competitors, said yesterday that profits fell 11 percent, to \$123 million, in the quarter. Sales, including the company's many lower-profit nonpharmaceutical businesses, rose 8 percent, to \$1.86 billion.

Merck & Company said sales rose 18 percent, to \$4.56 billion, while net income increased by 11 percent, to \$858 million.

Pfizer Inc., which has a strong lineup of recently introduced drugs not threatened by generic competitors, reported 24 percent increases last week in both sales and net income.

Bristol-Myers Squibb sales rose 11 percent, to \$3.61 billion.

"Pfizer was spectacular, Merck was in line with expectations, Bristol-Myers Squibb did better than expected, before the charges, and Warner-Lambert did slightly better than expected," said Scott Shevick, an analyst with Bear, Stearns & Company.

Bristol-Myers Squibb reported strong growth for Taxol, an anti-cancer drug and Glucophage, a new

diabetes treatment. It said Capoten, which will lose patent protection next month, held its own at 1994 sales levels.

"They launched their own generic version of Capoten in December," said Hemant K. Shah, an independent drug analyst in Warren, N.J. "The question is how Bristol-Myers Squibb will do in 1996."

Merck, based in Whitehouse Station, N.J., reported strong growth in its Medco managed care unit, which provides drug benefits for 47 million people, up from 41 million at the end of 1994. Medco sales rose 49 percent, to \$1.58 billion, in the fourth quarter, not counting Medco sales of Merck products, which Merck does not disclose. Thirteen percent of Medco sales are from Merck drugs, up from 10 percent two years ago.

Mr. Shah said Medco's ability to get Merck drugs on the preferred lists of big managed care buyers might account for the continued strength of some Merck drugs that face heavy competition. He listed Pepcid, an ulcer treatment, which had a sales gain of 9 percent in the quarter, and the cardiovascular drugs Vasotec and Vaseretic, up 2 percent.

Mr. Shevick said Merck's future earnings could be tied to the success of Fosamax, its new osteoporosis treatment. "Fosamax looks like it's doing well," he said.

Warner-Lambert, based in Morris Plains, N.J., said its lower earnings reflected the devalued Mexican peso and higher operating costs.

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FINANCIAL TIMES

Drug company to cut jobs

Rhône-Poulenc Rorer, the French controlled US pharmaceuticals company, is to cut 140 out of 470 sales and marketing jobs in the UK following its acquisition last October of Fisons, a UK rival. The jobs will be lost from Eastbourne, RPR's UK

headquarters, and Coleorton in the English Midlands, a Fisons site. Some sales staff not based at those sites will also lose their jobs.

The job losses do not cover any reorganisation of manufacturing, drug and medical device development and corporate functions of RPR and Fisons in the UK. *Daniel Green, London*

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MONSANTO CO.

Net Up 48% in 4th Period; Sales Held at \$2.1 Billion

Monsanto Co. reported fourth-quarter net income rose 48% to \$80 million, or 65 cents a share, from \$54 million, or 51 cents a share, a year earlier. Sales in both quarters were \$2.1 billion. Nonrecurring items for the St. Louis-based chemical company included an after-tax gain of \$116 million, or \$1 a share, from the sale of its

world-wide styrenics business and an after-tax charge of \$125 million, or \$1.08 a share, from the cost of work-force reductions and the closing of various small facilities. The year-earlier results included an after-tax restructuring charge of \$22 million. Excluding nonrecurring items, fourth-quarter net rose 17% to \$89 million, or 73 cents a share, from \$76 million, or 70 cents a share, a year earlier. Analysts had expected earnings of 70 cents a share, according to Zacks Investment Research.

THE WALL STREET JOURNAL.

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The fact that 3M shakes the trees of its labs and customers more vigorously than before reinforces its essential reliance on them to set the agenda. It is of course a strength to get ever more intimate with customers, and a strength to let creative flowers bloom.

THOSE VIRTUES, however, beget a startling vice: 3M has no strategy. Asked about strategy, DeSimone says: "We're going to do two principal things: be very innovative, and satisfy our customers in all aspects. We don't have one core; we have lots of cores—sticky stuff, optical and safety stuff, medical stuff, etc." How do executives decide what is or isn't a 3M business? Says vice chairman Mitsch: "That's a good question. None of us is foresightful enough to de-

cide that, because our people might find some way to make whatever they're doing work." Says Baukol, whose international sector accounts for more than half of 3M's sales: "3M fundamentally is a collection of a lot of stuff."

That aimlessness forces 3M to pay a lot of attention to the numbers. As DeSimone puts it, "3M needs its financial characteristics to be exceptionally good because the company is hard to understand." That's an odd thing to hear about a company so famous that its nickname is itself a global brand. It is also a concise description of 3M's biggest weakness. Says DeSimone: "We tend to believe we can do anything; we know it's not true, but we like to have it as a piece of our philosophy." A well-articulated strategy could have provided a vector for the innovative energy that steams

out of every corner of 3M, and helped 3M work its way to a quicker and less drastic resolution of the long-simmering problems in its imaging and electronic storage businesses.

Yet the paradox that governs human things says that a weakness is also a strength. The fact that 3M must fall back on "exceptionally good" financial characteristics is not, after all, a bad thing for a business. "To make money is part of the culture here," the chairman says, and he vows that the new 3M will be "a company that will be the envy of the world." Its recent troubles notwithstanding, 3M remains a treasure—and a treasure-trove of intelligently applied management ideas. DeSimone says: "It would take me many years to screw it up."

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THE WALL STREET JOURNAL

Three Drug Firms Post Mixed Results, But Revenues and Volumes Are Strong

By GAUTAM NAIK

Staff Reporter of THE WALL STREET JOURNAL

Three major drug companies posted mixed fourth-quarter results, amid strong revenues and volume growth.

Bristol-Myers Squibb Co. reported a loss that reflected a large charge related to breast-implant litigation and restructuring. Warner-Lambert Co.'s earnings fell 11% partly because of a higher tax rate. Merck & Co.'s profit rose 11% amid strong volume growth. Each company reported increased revenue.

Results for Bristol-Myers and Merck were in line with analysts' expectations, while Warner-Lambert's profit was at the low end of estimates, according to Zacks Investment Research Inc. In New York Stock Exchange composite trading, Bristol-Myers closed at \$86.125, up \$2. Warner-Lambert increased 25 cents to \$92.125, and Merck gained 62.5 cents to \$66.875.

An Industry Turning Point

Analysts said 1995 marked a turning point for an industry that as recently as two years ago, was bracing for sweeping changes in health-care legislation that were expected to hurt drug makers' profits.

"The continuing surprise over the last 12 months is that the industry is fundamentally very strong," said Alex Zisson, an analyst at Hambrecht & Quist Inc. "Two or three years ago, Wall Street was afraid the sky was falling, but it was just an acorn or two."

Investors had worried that health-care overhaul would give managed-care organizations more power to lower pharmaceutical prices and influence doctors' decisions about prescribing drugs. During 1993 and 1994, such fears drove pharmaceutical

companies to restructure operations and sell low-performing businesses, which contributed to the overall pessimism and hampered drug stocks.

But with the breakdown of proposed, sweeping health-care reform, drug companies in 1995 began to reap the benefits of their earlier actions. Prices, which had stayed at—or even below—inflation levels during 1992-94, began to creep up in 1995 by as much as 3% over the inflation rate for some companies, Mr. Zisson said. At the same time, managed-care organizations may be more inclined to consider drugs "a cost-effective therapy" compared to other treatments, said D. Larry Smith, an analyst at First Albany Corp.

What's Coming Up

For 1996, Merck's revenue is expected to receive a boost from the sale of two new drugs, one for osteoporosis and one that lowers cholesterol levels. A blockbuster Bristol-Myers blood-pressure drug will lose its U.S. patent protection this year, but potential revenue losses could be offset by increased sales of other drugs. Warner-Lambert is expected to launch an over-the-counter version of the popular ulcer drug, Zantac, this year.

Bristol-Myers recorded a charge of \$590 million in the quarter for breast-implant litigation, similar to charges totaling \$798 million in the 1993 and 1994 fourth quarters. The New York-based drug maker also recorded a charge of \$198 million, or 39 cents a share, for consolidating plants and other facilities, and related costs to cut jobs. Revenue rose 11% to \$3.61 billion.

Warner-Lambert's net was lowered by an increase in the tax rate to 26% from 24% in the year-earlier quarter; by a devaluation of the peso, which reduced net by seven cents a share; and by higher manufacturing costs. Quarterly revenue increased 8.1% to \$1.86 billion for the Morris Plains, N.J., company.

Merck's profit gain reflected a 18% revenue rise to \$4.56 billion. Newer products and growth of the Merck-Medco Managed Care business contributed to the stronger quarterly and annual revenue, the Whitehouse Station, N.J., company said.

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professor Van de Ven, who was the only outsider on a high-level 3M task force assembled a decade ago to study ways to improve the management of innovation: "You see constant self-reorganization and self-redesign, without the need for a whole lot of coordination across the company."

For instance, the very week Post-it Notes was launched, and before he went off to work on electronic components packaging, Leon Royer, ostensibly running labs for commercial office supplies, was given a crash assignment to come up with a new fly-fishing line for the leisure-time products department because a competitor's new product was killing 3M's offering. Royer called in a fluorocarbon expert from a third part of the company, who suggested playing around with a molecule that had been invented for still another piece of 3M. Royer himself spent many a Sunday afternoon testing the line by fly-casting in high school gymnasiums—the only structures around that were big enough, empty enough, and warm enough on those Minnesota winter days. The new line was ready by the time trout season opened, and went gangbusters—the result of an in-house effort that not only ignored the formal organization but also built no permanent structure of its own.

EXECUTIVES don't preside over a climate; they try to keep it healthful. That doesn't mean keeping it genteel—nature's red in tooth and claw, after all. New employees are pushed to learn about this simultaneously nourishing and ruthless environment via a class in risk taking. They come with their supervisors and are taught, among other things, to be willing to defy their supervisors. They hear stories about victories won despite the opposition of the boss—perhaps how DeSimone five times tried and failed to kill the project that became the wildly successful Thinsulate. Storytelling is an important way 3M conserves its environment. Miss Manners wrote that married couples should be seated apart at dinner parties because "they tell the same stories, and they tell them differently." 3Mers tell them the same.

Student risk takers are given real money and asked to wager it. In one exercise, a small wad of cash is placed at the end of a long plank laid on the floor, and an employee is asked to walk along it to get the loot. Then, for a bigger pot, he is asked if, for real, he'd walk the same plank if it were seven stories high and stretched between buildings in the company's headquarters complex, with the asphalt parking lot below. "The downside risk—" someone might begin; and the leader retorts: "What risk? You've already proved you can do it."

No one expects a one-day course to turn Neville Chamberlain into Audie Murphy.

Rather, it's designed to help newcomers inhale the atmosphere of 3M at its heady best. The company boasts that its high employee retention rate (turnover is less than 3% a year), generous benefits, and

supportive culture provide a safe environment for risk-taking entrepreneurship. Clearly so: 3M has achieved its goal of getting 30% of sales from products less than four years old so consistently that it is considering raising the bar. Amid so much invention, there's always someone around to give advice or moral support to an employee striking out on her own innovation journey.

But at the same time, she's on her own. Says Royer: "They wrote 'The Little Red Hen' about 3M. No one says, 'We'll help you.' If you have an idea, you form your little ad hoc group—it may be two people. You don't have top management supporting you. You take your idea to where you bake the bread and let the aroma filter out, and see how they respond. If they don't bother to come and eat your bread, you throw it out and feed it to the birds. But if they like it, you'll know it."

Of course, little hens need resources along the way, and it's in the nature of innovation to take longer and cost more than expected. That leaves senior managers, in Van de Ven's words, "facing 45 project leaders all saying, 'Trust me, trust me, trust me.'" If the stakes get high enough—either because a project's potential is enormous or because it's costing a ton—the petitioner might find himself on the 14th floor, where the top executives have their lairs, every six weeks. One time he might get avuncular counsel and the benefit of the doubt; the next time he'll be fending off jabs and innuendo—really rough stuff, according to some who have been through the wringer. The long careers of senior executives help reduce politics in the environment: Every judge has been, and can expect again to be, a supplicant. Says Royer: "You don't go up there to b.s. the company, because you're part of a community."

NO CORPORATE community is democratic, but 3M has a long history of resisting autocracy. Half a century ago, founder William L. McKnight, the only superstar CEO in company history, penned a memo that hangs as a plaque in many offices. In part, it reads, "Those men to whom we delegate authority and responsibility, if they are good men, are going to have ideas of their own and are going to want to do their jobs in their own way ... These are characteristics we want in men and should be encouraged ... Mistakes will be made, but ... [these] are not so serious in

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the long run as the mistakes management makes if it is dictatorial."

In today's 3M, that translates into letting the company follow where its scientists and

customers lead. Says DeSimone: "Innovation tells us where to go; we don't tell innovation where to go." It's not that simple, of course: 3M has an elaborate system (predictably larded with deliberate duplication) for evaluating which R&D projects should become "pacing programs" that might result in breakthrough innovations that change the basis of competition.

A recent example: Apex, a fruit of the remarkably fecund microreplication technology. Apex is an abrasive material that can replace sandpaper (3M's very first manufactured product) for many uses. A single piece of Apex can do a job—from the first coarse smoothing to a final buff and polish—that might require half a dozen grades of sandpaper. That capability has allowed one customer, a golf club maker, to eliminate one of the three shifts it used to need to smooth and polish its clubs. Apex was a low-

priority item—someone was noodling around with it on his 15% time—when the quest for pacing products in abrasives turned it up. Money rained down, the schedule was pushed up from 1998 to 1995, and now Mitsch says Apex might be a half-billion-a-year business by the turn of the century.

The company has become more aggressive about milking customers for ideas too. Thirty-year veteran Marc Adam, head of marketing, says, "There's progressively more in common between R&D and marketing—more than at any time since I've been with the company." 3M has always tried to get deep inside its customers—hoary company lore instructs salesmen to head for the smokestacks, where end users are, rather than the offices, where the purchasing department sits. Now Adam is pushing full body contact on the 3M side of the relationship too, creating major-customer teams that include representatives from everything from R&D to sales. The idea is to foment a rich conversation that allows 3M to see not only what other stuff it can peddle but also its customers' unarticulated needs, so that 3M can invent products that meet them. Says Coyne: "The technical community can participate in that, where it couldn't participate in just selling

more of what we already have." A recent instance: a fabric that allows water vapor to pass through but blocks liquids, developed after doctors told 3M that they wanted surgical gowns that protected them from patients' blood but didn't leave them soaked in their own sweat.

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Yet patience cost 3M dearly in the magnetic-storage business (diskettes, videotape, and audiotape), where, according to DeSimone, problems were evident for more than ten years before 3M decided to get out. The businesses were riding down a steep cost curve that rapidly turned high-tech, high-value-added items into commodities. Profits, never great, kept shrinking. 3M couldn't cut costs enough to get ahead of the curve or innovate its way off the slope altogether. Still, 3M held on because the businesses supported technologies it needed elsewhere—for instance, the chemistry-based color capabilities of videotape are also used in film and X-rays. What tipped the scales was 3M's realization that its knowledge of digital color technology had advanced enough that the company could afford to stop investing in the chemistry-based skills.

This sacrifice of financial goals to nonfinancial thinking hints at what may be the central secret of 3M: Beneath its orderly, AAA-rated, Midwestern exterior, the place is dotty. One of 3M's crazy-like-a-fox traits is famous—the "15% rule" that tells researchers to spend that much of their time working on something other than their primary project. That's a mild eccentricity next to some of the stuff that goes on.

Organizational design, for instance. 3M's org chart looks as if it might have been drawn by Mr. Honeywell, the stuffy businessman-boss on the 1950s sitcom *My Little Margie*:

Beneath the CEO are boxes for two big operating sectors (three before the restructuring) and international, each led by an executive vice president who also oversees some corporate services; finance, and manufacturing also report directly to the top. Within each sector are groups, lined up as neatly as brigades in a corps, and beneath them stand divisions in serried rank.

That handsome pyramid has little or nothing to do with how the place runs. "The only reason the sectors exist is the convenience of analysts. The scientists don't care; even the marketing people don't care," says spokesperson Mary Auvin. (The divisions, groups, and sectors are also a proving ground for executive talent.) Says Andrew Van de Ven, a professor at the University of Minnesota's business school who has studied innovation and organization at 3M: "You can find seemingly absurd combinations within the structure," such as the fact that the division that makes tape for disposable diapers for years was lodged in the same group as the division that makes reflective materials for traffic signs.

So what does 3M's real organization chart look like? This, according to Ron Baukol, head of international operations:

THIS, he explains, is "a centipede table," upside down. The leaves of the table are some 33 technology platforms. In 3M's lexicon, a technology platform is "a technology from which we can generate multiple products for multiple markets," such as adhesives, chemical ceramics, fluorochemicals, microreplication, or precision coating. Growing up from the table leaves are legs, each a business, some quite small, derived from the technology. Says Baukol: "We must have 500 to 1,000 different businesses." The whole thing, he goes on, is shrink-wrapped with three tapes: financial goals and disciplines, human resources principles, and the company's values.

Those businesses—the table legs—are fitted into a 3M division, group, and sector usually based on marketing consanguinity—auto parts in one group, pharmaceuticals in another. But not always. To make sure its scientists and business people know one another's

skills and needs, 3M wants each technology platform represented in the business portfolio of each group. Diaper tape was with road signs to give traffic products a stake in adhesives.

Then there's the matter of redundancy, which 3M wallows in. The company's 8,300 researchers are scattered among so many different labs and types of labs that no one is entirely certain how many there are. There's central R&D; there are labs attached to each of the sectors; more linked to groups or businesses; and 11 centers dedicated to particular technology platforms. In general, the main lab and technology centers do research, the others development, but the generalization is full of holes. A scientist who can't get money for a project from a business unit his lab is linked with is encouraged to see if someone else will pony up or, if no one will, to apply for a "Genesis Grant," money that is not allocated by management but by a panel of fellow scientists. On occasion a stubborn and frustrated researcher has pushed

into DeSimone's office looking for scratch, and received it.

Deliberate duplication abounds at 3M. For example, at the other end of the innovation pipeline, ideas are evaluated for commercial potential not only by people with hierarchical responsibility for them but also by a "technical audit" panel of scientists, manufacturing folk, and marketers, none of whom work for the sponsoring business. The audit has a dual purpose: to second-guess the hierarchy and, if an idea can't be used by its sponsor, to expose it to other businesses that might want it. Says Morgan Tamsky, head of the adhesives technologies center: "One of the imponderables of 3M is the multiplicity of interaction—it's not explainable, and it's not orderly."

It is, however, efficient—redundant without waste. Labor productivity bears witness to the achievement. In 1984, when 3M had 88,949 employees, sales per employee totaled \$88,814. In 1994, with almost the same head count (85,166), per employee

sales had jumped 99% to \$177,019. In real terms the gain was even higher, 101%, since 3M's average prices fell 2% in the decade. By comparison, for U.S. manufacturers as a whole, real output per person rose only 39% during the same period.

Forgive, gentle reader, a brief excursion into abstraction as we probe how 3M stays lean while seeming not to watch its weight. DeSimone says, "You never see the productivity issue off the screen," but 3M rarely pursues it in the usual ways—streamlining, chopping, eliminating duplication. Those words have a mechanical feel—fine-tuning the machine, removing superfluous parts.

The talk in 3M's offices is more holistic and organic. Says Coyne: "We're managing in chaos, and that's the right way to do it." Baukol: "We go in helping to shape but not shaping." Appeldorn: "What matters is the climate." Mitsch: "All you really have to do in management is provide an environment; it's almost alive, always ebbing and

flowing." Tamsky: "I manage an environment." Royer: "An environment to free up your imagination—that's the whole idea."

Consider, says the University of Minnesota's Andrew Van de Ven, the difference between these mechanical and ecological metaphors. In an environment like the ocean, "every drop of water contains all the elements of the entire ocean. The ocean is full of redundant drops—but the redundancies are supportive, not wasteful." 3M's environment supports hundreds upon hundreds of businesses. Each contains the essential elements of the whole, yet none is independent of it. That is—in this metaphorical version, at least—each business can draw sustenance from the whole and also flourish because a big, varied ecosystem gives it room to grow, compete, and evolve.

Certainly redundancy carries costs; but it also creates opportunities and savings. First, there's knowledge sharing: 3Mers save time and money by adapting one another's ideas rather than reinventing them. Also, because 3M managers swim in the same sea, they seem able to move from one business to another—or to toggle between labs and businesses—smoothly, with no loss of speed and with minimal bureaucratic drag. Marvels

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hot summer days, he would walk the shoreline near his grandfather's house in Verplanck, a village 30 miles north of Manhattan.

"When I wasn't out at the farm in Peekskill," Mr. Pataki said, "I was down on the river. And you couldn't go in the water." Pollution from factories and open sewer lines had rendered the river untouchable.

"I'll never forget standing there throwing bricks into the river — because it was an old brickyard," he said. "But as hot as it was, you couldn't go in."

After a pause, he added, "That should end."

Mr. Pataki cited as the hallmark of his environmental accomplishments the billion-dollar pact his office brokered last year to protect New York City's upstate watersheds. The agreement ended a generations-old dispute between New York City and the towns around its reservoirs, with the city agreeing to sponsor economic development programs while gaining new powers to curb pollution. The deal, he said, benefited from his ties both to rural upstate communities and to conservationists.

Mr. Pataki's environmental activism grew in lockstep with his political career. As Mayor of Peekskill in 1982, he was credited with working to protect open space along the river.

As a state legislator, he worked to clean up a riverside landfill at Croton Point, link green space in communities up and down the Hudson and preserve habitats for wildlife.

But at the same time, Mr. Pataki was growing increasingly frustrated with the state's environmental bureaucracy and the enforcement strategy of the Department of Environmental Conservation.

When he was Mayor of Peekskill, he recalled, he learned of a broken pump in a sewer system that was sending raw sewage into the Hudson. "So we go back and fix the pump, and tell D.E.C.," Mr. Pataki recalled. "They came down and said, 'Aha, you have a violation. We're fining you.'"

"If we had done nothing, they would have never known," Mr. Pataki said. "But because we finally ended what had been a problem for years, we ended up getting fined. That was just typical of the attitude. It was process-oriented instead of results-oriented. We want results."

Regulating, Not Condemning

He said he is determined to move away from the old confrontational approach to one in which the department works with industry to identify pollution problems before they become severe. "We want to vigorous-

ly enforce environmental laws, but we don't think that's inconsistent with having a cooperative attitude with those who are regulated," Mr. Pataki said.

But Mr. Pataki's critics say he has allowed the pro-business, or anti-regulatory, camp in his administration far too much latitude. The \$1.5 million tax deductible settlement negotiated between the administration and General Electric over a pollution problem at an upstate silicone plant was far less than possible fines, which could have reached \$20 million, according to some environmental law experts.

That is one of several issues dogging Mr. Pataki's environmental chief, Mr. Zagata, who has traveled to Hartford on state time to buy decorative shrubs for his home and used department vehicles on other out-of-state personal trips. But the Governor said he supported Mr. Zagata, praising his aggressive approach to changing the way the department works. "He'll continue to take a lot of heat," Mr. Pataki said.

Responding to criticism that the Pataki administration had weakened the department's ability to pursue polluters, Mr. Pataki said, "The number of lawyers went from 128 to 103. They don't need 103 lawyers in the D.E.C. to have a solid enforcement program." More cuts are planned, he said.

This year, he said, he intends to use the same negotiating methods used last year in the Catskills watersheds to find consensus in the Adirondacks and create a plan to clean up Long Island Sound.

Long on Ideas, Short On Money for Them

Among environmental advocacy groups, however, concern is rising that Mr. Pataki's pledges may not be matched by his budget. They say that hidden in Mr. Pataki's plan to pump \$100 million into the state's Environmental Protection Fund — created in 1994 to pay for land and environmental projects — are plans by his budget office to siphon off more than \$25 million for projects not related to the environment.

The \$25 million would go to fix state facilities, like prisons, that are some of New York's biggest polluters. Money to fix faulty prison septic systems or other state infrastructure should not come at the expense of environmental projects, said Eric J. Siy, a lobbyist for Environmental Advocates, a 30,000-member New York conservation group.

But Mr. Pataki said he was committed to seeing New York State end its reign as its own worst polluter

The New York Times

and begin "leading by example instead of leading in its level of pollution."

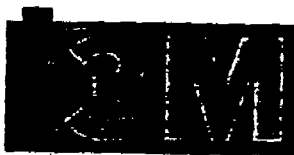
He also defended a plan by Bernadette Castro, his Commissioner of Parks, Recreation and Historic Preservation, that would for the first time allow commercial logging in a state park. For more than a decade, Mr. Pataki said, the state has sought a way to manage Allegany State Park, the swath of mature forest near Buffalo that at 67,000 acres is New York's largest state park. "This was a problem that was deferred over and over again," he said.

But groups pressing to keep the park wild say they cannot understand Mr. Pataki's stance. Logging would lead to destructive road construction and set a precedent implying that parks must somehow pay their way, Mr. Woodworth said.

Elsewhere, as well, mixed signals predominate, people representing a wide range of interests say. In his annual message to the Legislature this year, Mr. Pataki endorsed the recommendations of a 1994 commission on the Adirondacks, Mr. Woodworth said. But Mr. Pataki, in sharply cutting the budget and staff of the Adirondack Park Agency, is not providing the means to accomplish the goals, he said. "We said we need 10 more people, and he's subtracting 10 people," Mr. Woodworth said. "There's still a big gap between his words and his deeds."

Mr. Pataki insisted that the rewards of a clean environment were far more precious than any short term considerations. Living along the Hudson in Garrison, he said, he appreciated those rewards every day. "We had an eagle the other day fly over my house," he said. "When was a kid there weren't any. No around Iona Island at this time of the year there are a bunch of them. It just awe inspiring."

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Fights Back

The Cal Ripken of corporate consistency stumbled last year—but don't think 3M is in trouble. The company's travails are the result of the very things that make it successful.

■ by Thomas A. Stewart

WHETHER it is that puts a silver lining in every cloud is the same character who drops rain on every parade. Lately he has been busy up in Minnesota. In mid-November, the Minnesota Mining & Manufacturing Co., a paragon of corporate consistency, announced the biggest restructuring in its 93-year history. The move, as the *Wall Street Journal* put it, "included all the favorite morsels that analysts have come to crave: layoffs, spinoffs, and business discontinuations." In the fourth quarter of 1995, 3M took a \$600 million charge against earnings, equivalent to 27% of 1994 operating income. It is lopping off businesses with 1994 sales of \$2.95 billion, nearly a fifth of 3M's total; most will be spun off into an as yet unnamed new company, but \$650 million worth of computer diskette, videotape, and audiotape manufacturing is headed for the dump. The new 3M—call it 2.4M?—will have 5,000 fewer employees, some spun off, some attrited, and perhaps 1,000 laid off. When 1995's numbers are added up, for the first time in years 3M won't have met the financial goals—10% growth in earnings per share, 20% to 25% return on equity, 27% return on capital employed—it sets for itself.

This from a company that has scored in the top ten on FORTUNE's list of Most Admired Corporations ten times in the past 11 years, a record matched only by Rubbermaid, which also took a bad bounce in 1994. It's a company that between 1985 and 1995 gave its investors

a solid 15.5% annual return. A company where officers, their average tenure 31 years, talk about the last time they exited a major business—11 years ago, when 3M sold its copier line—as if it were yesterday.

3M's name is synonymous with innovation; the company's 1995 results will show that it did meet its goal of getting at least 30% of sales from products less than four years old. But paradoxically, 3M's creativity sits on a foundation of extraordinary continuity. "We like to say it's innovation and stability," the CEO, L.D. "Desi" DeSimone, said just weeks before dropping the shoes—he wears size 11—of spinoff and shutdown. After announcing the restructuring, DeSimone admitted, "This isn't the way we wanted to do it," but he won't use

the word "failure" to characterize the business problems that led him to jettison a fifth of the company.

He's right. The troubles that have afflicted 3M grow in the same soil that makes it flourish: patient capital (both financial and intellectual), an environment that encourages people to work around and even defy their superiors, and a determination to let the company follow where its scientists and customers lead.

That 3M's amply proven formula for success produces failure as a sometime byproduct raises a management question that borders on the profound. It is a fundamental truth that the strength of every human thing is also its weakness, and vice versa. The optimist sails over obstacles that would rip the keel from someone less buoyant—but his insouciance can lead him to take foolish risks.

Hamlet's glory—his all-things-considered mind—is also the wellspring of his fatal hesitancy. The debilitating fractiousness of the United States is the malign form of the exhilarating diversity that is its strength. If this is so, if every human strength carries within itself the seeds of its own weakness, can the bad seeds be kept from poisoning the rest?

Patience is one of those mixed blessings. In

a business world where it's received wisdom to see an enemy in time, 3M sees an ally. Listen to Roger Appeldorn, who has spent 40 of his 60 years at 3M, talk about the early days of a technology called microreplication. Microreplication is the art of covering surfaces with millions of precisely made minuscule structures—pyramids, cubes, spheres, ridges. Like a conspiracy in an Oliver Stone film, microreplication is

suddenly everywhere in 3M. Depending on the size and shape of the tiny structures and the material of which they are made and to which they are applied, products that use microreplication can refract light or transport it, strip adhesive from plastic film or serve as a fastener, reduce water drag on boat hulls or polish golf clubs. Last year 3M sold close to a billion dollars' worth of microreplication products, and that number could increase ten times in five years. No one planned that, recalls Appeldorn, who invented 3M's first microreplication product—lenses for overhead projectors—and now heads the lab chiefly responsible for the technology: "We

didn't sit down and say, 'Microreplication is the next thing to do; let's go do it.' It doesn't work this way. It evolved. It reached a critical mass. And it suddenly proliferated."

The technology was two decades old in 1981, and Appeldorn was sticking microreplicated lenses in lighting systems at the University of Minnesota. Says his then boss Ron Mitsch, now vice chairman and the executive VP in charge of 3M's largest business sector: "Roger was a manager running a small business, being judged on a day-to-day P&L." His manufacturing equipment was getting old, but sales didn't justify a pitch for capital spending. Looking for help, Appeldorn found that microreplication had crept into half a dozen products in other business units that together might fund the investment. Muttering "Eureka," or words to that effect, Appeldorn and Mitsch realized that they might have stumbled upon the edge of a vast and largely unknown field of science, artificially managing the structure of surfaces. They set out, in Mitsch's words, "to enhance the capability in a methodical way." In 1982, 3M bought a company with relevant manufacturing technology; the next year Appeldorn was put in charge of a new "technology center" devoted to microreplication; now DeSimone says, "We can't make enough of this stuff."

3M is full of stories whose moral is "ripeness is all." Says R&D chief William Coyne: "One of our goals is to increase our speed to market. But we're not trying to increase our speed before we decide to take something to market, because that could have a real negative implication for innovation." 3M can be equally patient with existing businesses. Leon Royer, who headed the commercial tape division labs when Post-it Notes came out in 1980, moved from that triumph to the task of rescuing what looked like a failing business making electronic components packaging. Says Royer, now 3M's head of organizational learning: "We were losing millions, and I was compounding

that through investment. At my lowest moment—damn, I'm in debt beyond my derelict—we're doing everything right, why isn't anything going right?—I got a note from Mitsch, who'd just seen the P&L. The note said only 'Push on.' Today the business is thriving.

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