CROMPTON CORP
Form 10-K
March 16, 2005
U.S. SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

[x] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2004
OR

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to
Commission File No. 0-30270

Crompton Corporation

(Exact name of registrant as specified in its charter)

Delaware	**52-2183153**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
199 Benson Road **Middlebury, Connecticut**	**06749**
(Address of principal executive offices)	(Zip Code)

Registrant s telephone number, including area code: (203) 573 2000

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, $0.01 par value	**New York Stock Exchange**

Securities registered pursuant to Section 12(g) of the Act: NONE

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes [x] No [ ]

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [ ]

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Act).
Yes [x] No [ ]

The aggregate market value of the voting stock held by non-affiliates of the registrant, computed as of February 25, 2005 was $1,577,707,508.

The number of voting shares of Common Stock of the registrant outstanding as of February 25, 2005 was 117,185,760.

DOCUMENTS INCORPORATED BY REFERENCE

Proxy Statement for Annual Meeting of Stockholders on April 26, 2005	Part III

PART I.

ITEM 1. BUSINESS

When we use the terms the Corporation, Company, Crompton, Registrant, we, us and our, unless otherwise indicated or the context othe requires, we are referring to Crompton Corporation and its consolidated subsidiaries. Certain disclosures included in this Annual Report on Form 10-K constitute forward-looking statements that are subject to risk and uncertainty. See Item 7. Management s Discussion and Analysis of Financial Condition and Results of Operations - Forward-Looking Statements.

(a) General Development of Business

Crompton Corporation, formerly known as CK Witco Corporation, was incorporated in Delaware in 1999 in connection with the merger of Crompton & Knowles Corporation and Witco Corporation on September 1, 1999 (the Merger).

Crompton & Knowles Corporation (Crompton & Knowles) was incorporated in Massachusetts in 1900. Crompton & Knowles engaged in the manufacture and sale of specialty chemicals beginning in 1954 and, beginning in 1961, in the manufacture and sale of polymer processing equipment. Crompton & Knowles substantially expanded both its specialty chemical and its polymer processing equipment businesses through a number of acquisitions in both the United States and Europe, including the acquisition in 1996 of Uniroyal Chemical Company, Inc., now known as Crompton Manufacturing Inc. (Uniroyal), a multinational manufacturer of performance chemicals, including additives for rubber, plastics and lubricants, crop protection chemicals, and polymers, which include Royalene® EPDM rubber and Adiprene®/Vibrathane® urethane prepolymers.

Witco Corporation (Witco) was incorporated in Delaware in 1958 as Witco Chemical Company, Inc., at which time it succeeded by merger to the business of Witco Chemical Company, an Illinois corporation formed in 1920. Witco was a global manufacturer and marketer of specialty chemical products for use in a wide variety of industrial and consumer applications.

Today, we are a global diversified producer of specialty chemicals (including agricultural chemicals), polymer products, and polymer processing equipment. Our products are used in a wide variety of end-use markets, principally including transportation, construction, packaging, agriculture, lubricants, plastics for durable and non-durable goods, and personal care products. Most of our chemical products are sold to industrial manufacturing customers for use as additives, ingredients, or intermediates that add value to their end products. We are a market leader in many of our key product lines, including polyvinyl chloride (PVC) additives, aluminum alkyl catalysts, high-performance castable urethanes, and single-screw extrusion equipment. We manufacture and sell more than 3,500 products and formulations. Of our $2.5 billion 2004 net sales, 53% were to customers in the United States and Canada, 28% to Europe and Africa, 12% to Asia/Pacific, and 7% to Latin America.

During 2004, the Company completed a voluntary severance program and an activity-based restructuring initiative intended to structure the Company s operations in a more efficient and cost effective manner. As a result of this initiative, the Company expects to achieve annual pre-tax cost savings of at least $50 million. For the year ended December 31, 2004, the Company realized approximately $6.3 million of these savings. The full extent of the savings are expected to be realized in 2005. All cost savings, both estimated and actual, are reported net of any increased expenses or the impact of reduced revenues. During 2004, the Company recorded pre-tax charges of $54 million for facility closures, severance and related costs related to the voluntary severance program and activity-based initiative.

On March 22, 2004, the Company entered into an agreement with Bayer CropScience LP in the U.S. and Bayer CropScience Inc. in Canada to sell its 50 percent interest in the Gustafson seed treatment joint venture for $128.9 million, of which $122 million was received in the first quarter of 2004, a deferred payment of $4.9 million was received in the third quarter of 2004, and $2 million was contingent upon a licensing consent and the execution of a related supply agreement. The transaction closed on March 31, 2004 and resulted in a pre-tax gain of $90.9 million in the first quarter of 2004. The licensing consent and related supply agreement were finalized in December 2004 and resulted in an additional pre-tax gain of $2 million in the fourth quarter of 2004. The

Company expects to receive the $2 million of proceeds from this additional gain in the first quarter of 2005.

On July 31, 2003, the Company sold certain assets and assigned certain liabilities of its OrganoSilicones business unit to the Specialty Materials division of General Electric (GE) and acquired GE s Specialty Chemicals business. The transaction resulted in a gain of $111.7 million (net of income taxes of $175.3 million). The Company received net cash proceeds in 2003 of $633.4 million. In 2004, the Company and GE settled various purchase price adjustments, which resulted in a $14 million payment to GE. As a result of this settlement, the adjustment of certain reserves and the resolution of certain tax matters related to the transaction, the Company recorded a $2.1 million (after-tax) gain on sale of discontinued operations in 2004. Additionally, during 2004 the Company received $40.3 million of earn-out proceeds, $35 million as required in the sale agreement and $5.3 million based on the combined performance of GE s existing Silicones business and the OrganoSilicones business. The Company will continue to receive a minimum of $8.75 million of quarterly earn-out payments through September of 2006. Depending on the combined performance of GE s existing Silicones business and the OrganoSilicones business, the Company may receive additional performance-based proceeds or could be required to refund all or part of the $5.3 million of additional proceeds received in 2004.

On March 9, 2005, the Company and Great Lakes Chemical Corporation (Great Lakes) announced the signing of a definitive merger agreement for an all-stock merger transaction, which would create the third largest publicly traded U.S. specialty chemicals company. Under the terms of the agreement, the Great Lakes shareholders will receive 2.2232 shares of the Company s common stock for each share of Great Lakes common stock they hold. The transaction, which is subject to regulatory approval and approval by shareholders of both companies, is expected to close in mid-2005. The merger is estimated to result in annual pre-tax synergy cost savings of approximately $90 to $100 million, the majority of which are expected to be achieved in 2006. In addition, the merger is expected to result in one-time expenditures of approximately $35 to $40 million relating to the closing of the transaction and one-time expenditures of approximately $90 to $100 million relating to the integration of both companies.

(b) Financial Information About Industry Segments

Information as to the sales, operating profit (loss), depreciation and amortization, assets, capital expenditures and equity method investments attributable to each of the Corporation s business segments during each of its last three fiscal years is set forth in the Business Segment Data footnote included in the Notes to Consolidated Financial Statements on pages 88 through 90 of this Report.

The Corporation s businesses are grouped into two units, Polymer Products and Specialty Products. Polymer Products consists of separate reporting segments for Polymer Additives (plastic additives, rubber additives, urethane additives and petroleum additives), Polymers (EPDM and urethane polymers) and Polymer Processing Equipment (Davis-Standard). Specialty Products consists of separate reporting segments for Crop Protection and Other (refined products and industrial specialties, which was sold in June 2002).

(c) Narrative Description of Business

Products and Services

The Corporation manufactures and markets a wide variety of polymer and specialty products. Most of the Corporation s products are sold to industrial customers for use as additives, ingredients or intermediates that impart particular characteristics to the customers end products. The Corporation s products are currently marketed in more than 100 countries and serve a wide variety of end-use markets including transportation, construction, packaging, agriculture, lubricants, plastics for durable and non-durable goods, and personal care products.

The principal products and services offered by the Corporation are described below.

POLYMER PRODUCTS

Polymer Additives

Polymer Additives, our largest business segment, supplies specialty additives used to manufacture plastic, rubber, urethane and petroleum products. Our additives are used to impart specific qualities in our customers products, such as strength, durability, or flexibility. Our products are sold to formulators, compounders and fabricators of vinyl, olefins, styrenics, rubber, polyurethanes, and high performance lubricants, and are ultimately used in the transportation, packaging, construction, durable and non-durable goods, and telecom industries.

Polymer Additives are sold through a specialized sales force, including technical service professionals who address customer inquiries and problems. The technical service professionals generally have degrees in chemistry and/or chemical engineering and are knowledgeable in specific product application fields. The sales and technical service professionals identify and focus on customers growth opportunities, working not only with the customers headquarters staff, but also with their research and development and manufacturing personnel on a worldwide basis.

The Polymer Additives business, which had net sales for fiscal 2004 of $1,465.6 million, has four principal product lines: plastic additives, rubber additives, urethane additives and petroleum additives.

Plastic Additives

The Corporation is a global leader in supplying a broad line of additives to the plastics industry. Our Plastic Additives business primarily serves two separate aspects of the specialty chemicals market, PVC and olefins/styrenics. Many of our products are specially developed and formulated in collaboration with customers for their specific manufacturing requirements. Customers use our plastic additives in their high-end manufacturing processes to impart such characteristics as stability, flexibility, and durability to their end products. The added stability, functionality and value of the finished products result in gains in customer productivity and cost effectiveness. We target particular applications and customers that require high-performance and specialty additives. For our PVC additives, for example, we seek high-value end uses that entail specialized, demanding manufacturing processes and aesthetic standards, such as window profiles.

Olefins and styrenics products improve the processing characteristics of resin as well as the performance of the polymer in end-use applications. Our product offerings include critical ingredients that initiate, catalyze, or inhibit a polymer reaction or enhance polymer performance, provide thermal stability, or impact strength. Our olefins and styrenics business is a global manufacturer and marketer of polymer products and specialty chemicals, and we offer a broad portfolio of products, including well-known branded products. Our olefins and styrenics products are essential to the manufacture of resins, which are used in applications such as plastic bags, food packaging, plastic packaging for compact discs, wire and cable, automotive parts, and fiberglass.

In addition, with the acquisition of GE s Specialty Chemicals business in 2003, we expanded our plastics additives business by adding a manufacturing facility, increasing our antioxidant product offerings, and adding impact modifiers and processing aids to our range of products.

The Corporation is also backward integrated in fatty acids for use in the plastic additives business. Fatty acids and glycerin are produced for internal consumption and the merchant market. Derivatives of fatty acids (esters, stearates and amides) are produced for surface modification as direct lubricants, emulsifiers or as intermediates for ingredients that modify surfaces. Fatty acids are used as lubricants in polymers (rubber and plastic), for personal care products and in curing systems for rubber. Glycerin is used to provide lubrication in pharmaceutical and personal care applications.

Net sales of plastic additives during fiscal 2004, 2003 and 2002 were 35%, 32.4% and 28.3% of the Corporation s net sales, respectively.

Rubber Additives

Our rubber additives business includes approximately 100 products for use in processing rubber. These products include accelerators, antioxidants, antiozonants, chemical foaming agents, and specialty waxes. Accelerators are used for curing natural and synthetic rubber and have a wide range of activation temperatures, curing ranges, and use forms which give our customers the flexibility to make many different products. Antiozonants protect rubber compounds from flex cracking and ozone, oxygen and heat degradation. Antioxidants provide rubber compounds with protection against oxygen, light, and heat. Foaming agents produce gas by thermal decomposition or via a chemical reaction with other components of a polymer system and are mixed with rubber to produce sponge rubber products. Waxes inhibit static atmospheric ozone cracking in rubber. We are a global supplier of rubber additives, and we believe our customers value our ability to provide high quality, consistent products world-wide to complement their international expansion. Tire manufacturers accounted for approximately 60% of our rubber additives sales in fiscal 2004, with the balance going to manufacturers of industrial rubber goods, including hoses, belting, sponges, and a wide variety of other engineered rubber products.

Urethane Additives

Our urethane additives business provides key products to global polyurethane processors. Urethane additives is comprised of three product lines: Fomrez® saturated polyester polyols, Witcobond® polyurethane dispersions, and Witcothane® polyurethane systems. Polyester polyols are employed in industrial applications such as flexible foam for seating. Our polyurethane dispersions are sold to a larger and more diverse customer base primarily for coating applications such as flooring, fiberglass sizing, and textiles. Polyurethane systems are used in applications such as the soles of workboots to provide resistance against harsh and corrosive environments. The major markets served by our urethane additives business are automotive, construction, surface coatings, leather, and textile finishing. Sub-markets include coatings, adhesives, sealants, elastomers, and insulation.

Baxenden Chemicals Limited, the Corporation s 53.5% owned subsidiary (Croda Inc. owns 46.5%), is engaged in the manufacture and marketing of isocyanate derivatives, polyester polyols and specialty polymer systems used in a wide range of applications. The major markets served by Baxenden are transportation, construction, surface coatings, leather and textile finishing. Baxenden is focused on specialty polymer and resin chemistry and novel curing mechanisms for such polymers. The core technology is urethane and acrylic chemistry and also includes novel polyesters and esterification processes.

Petroleum Additives

We are a global manufacturer and marketer of high-performance additive components used in transport and industrial lubricant applications. The component product line includes overbased and neutral calcium sulfonates used in motor oils and marine lubricants. These sulfonates, marketed as Hybase® and Lobase®, are oil-soluble surfactants and their properties include detergency and corrosion protection to help lubricants keep car, truck, and ship engines clean with minimal wear.

We provide a variety of other highly specialized, high value products. Foremost, our high-viscosity polyalphaolefins (PAOs), marketed as Synton®, are used in the production of synthetic lubricants for automotive, aviation, and industrial applications. We are also the global leader for alkylated diphenalamines antioxidants (ADPAs), marketed as Naugalubes®, used predominantly in motor oils. Additionally, we manufacture barium and sodium sulfonates, which provide corrosion protection and emulsification in metalworking fluids and antioxidants, which are widely used by our customers in engine oils, gear oils, industrial oils, and greases.

Polymers

The Polymers business, which had net sales for fiscal 2004 of $334.0 million, has two principal product lines: Royalene® EPDM rubber and Adiprene®/Vibrathane® urethane prepolymers.

EPDM

Ethylene propylene diene monomer rubber (EPDM), commonly known as crackless rubber, is a material that is able to retain elasticity despite exposure to elements such as sunlight and ozone. Over 40% of our EPDM is used in new and replacement automotive parts, including tires, hoses, belts, weatherstripping, brake components, and seals and gaskets. Other applications range from high density, long-lasting commercial roofing membranes to low density, liquified viscosity modifiers for better performing lubricants.

5

We have a large and flexible manufacturing facility, which gives us the ability to manufacture over 30 grades of EPDM that provide our customers with cost effective performance polymers. Although a significant portion of the materials used in the production of EPDM are commodities, these specialized elastomers are marketed and sold on the basis of their value and performance in specified applications. Many of our products are adapted to the needs of our customers and provide high performance and technical and customer service, supported by specialists with extensive field and rubber processing experience.

Royalene® products are primarily sold through a dedicated sales force. However, in order to better serve a diverse customer base, in certain geographic areas, including the United States, Royalene® products are sold through distributors.

Urethane Polymers

We are a leading supplier of high-performance castable urethanes, with more than 200 prepolymers in our product offering. Our urethanes offer high abrasion resistance and durability in industrial and performance-specific applications. These characteristics allow us to market our urethanes to niche manufacturers where such qualities are imperative, including for industrial and printing rolls, mining machinery and equipment, mechanical goods, solid industrial tires and wheels, and sporting and recreational goods, including golf ball covers and skate wheels. The relatively low capital costs of this business provide us with the ability to operate cost effectively. We differentiate ourselves in these markets by tailoring our products to these specialized businesses, which sets us apart from our competitors.

Adiprene®/Vibrathane® urethane prepolymers are sold directly by a dedicated sales force in the United States, Canada and Australia and through direct sales distributorships in Europe, Latin America and the Far East. Adiprene®/Vibrathane® customers are serviced worldwide by a dedicated technical staff. Technical service personnel support field sales, while a research and development staff is dedicated to support new product and process development to meet rapidly changing customer needs. Technical support is a critical component of the product offering.

Polymer Processing Equipment

The Corporation s wholly-owned subsidiary, Davis-Standard Corporation, is a global leader in the manufacture of integrated polymer processing equipment, including rubber and plastic single-screw extrusion equipment and industrial blow-molding machines. We also provide installation, training, and maintenance services for our equipment, and we refurbish and upgrade polymer processing equipment manufactured by others. Integrated polymer processing systems, which include extruders in combination with other equipment, are used to process polymers into various products such as plastic sheets, extruded shapes, extruded coating, and cast and blown film.

Our customers for rubber and plastic single-screw extrusion equipment are processors of extruded products, including plastic sheets and profiles used in appliances, automobiles, home construction, and furniture; extruded shapes used as window profiles, vinyl house siding, and substitutes for wood molding; and cast and blown film used to package many consumer products. Our industrial blow-molding equipment is sold to manufacturers of non-disposable plastic items such as tool cases and beverage coolers.

In the United States, most of the Corporation s sales of polymer processing equipment are made by its own dedicated sales force and sales agents. In other parts of the world, and for export sales from the United States, the Corporation s sales of such equipment are made largely through agents.

The Polymer Processing Equipment segment had net sales for fiscal 2004 of $180.0 million.

SPECIALTY PRODUCTS

Crop Protection

The Crop Protection segment had record net sales for fiscal 2004 of $320.6 million compared to $270.9 million for 2003 and $240.1 million for 2002. Our Crop Protection business focuses on specific niches in four major product lines: fungicides, miticides and other insecticides, growth regulants, and herbicides. We have primarily developed our products for use on high-value cash crops, such as tree and vine fruits, ornamentals, nuts and turf, and secondarily for commodity crops, such as soybeans and corn. Our dedicated sales force works with growers and distributors to coordinate the use of our products throughout a crop s growth cycle and to address selective regional, climate, and growth challenges. We expand our presence in worldwide niche markets by developing new crop protection products and obtaining registrations for new uses and geographies, where demand for our products and services has potential for growth. We develop and sell our own products, and we also sell and register products manufactured by others on a licensed basis.

Our fungicides and insecticides are also used to coat seeds in order to protect the seed during germination and initial growth phases. Seed treatment is an environmentally attractive form of crop protection, involving localized use of agricultural chemicals at much lower use rates than other agrichemical treatments. We anticipate growth in seed treatment resulting from the expanded use of higher value genetically modified seed, which provides better protection during germination.

A central factor to the success of our Crop Protection business is our ability to work closely with our customers, both distributors and individual growers, as part of an on-the-ground coordinated effort. We develop products in response to ongoing customer demands, drawing upon existing technologies and tailoring them to match immediate needs. For example, a grower s crops may require varying levels of treatment depending on weather conditions and the degree of infestation. Our research and technology is therefore geared towards responding to threats to crops around the world as they emerge under a variety of conditions.

Our Crop Protection business benefits from nearly 50 years of experience in the field, along with product registrations in more than 100 countries. Our experience with registering products is a valuable asset, as registration is a significant barrier to entry, particularly in developed countries. Registration of products is a complex process in which we have developed proficiency over time. The breadth of our distribution network and the depth of our experience enable us to focus on profitable market niches that are less sensitive to competitive pricing pressures than broad commodity segments of the market.

The Crop Protection business markets its products in North America through a direct sales force selling to a distribution network consisting of more than 100 distributors and direct customers. In the international market, the Crop Protection business direct sales force services over 1,400 distributors, dealers, cooperatives, seed companies and large grower customers.

Gustafson Joint Venture

In November 1998, the Corporation formed joint ventures with Bayer Corporation to serve the agricultural seed treatment markets in North America. The Corporation and Bayer each held a 50 percent interest in the seed treatment business operated by Gustafson LLC and Gustafson Partnership (collectively, Gustafson). In March 2004, the Corporation sold its 50 percent interest in Gustafson to Bayer Corporation for proceeds of $128.9 million.

Other

The Other segment, with net sales for fiscal 2004 of $264.5 million, consists of our Refined Products business in 2004.

Refined Products

The Refined Products business manufactures and markets a wide range of high-purity hydrocarbon products, including white oils, petrolatums, specialty waxes, and other refined products. Our products are used as emollients and moisture barriers in personal care products, such as baby oils and cosmetics; as lubricants in refrigerators and air conditioners; and as plasticizers and carriers in plastic products such as PVC pipe and

protective barriers for copper telecommunications cables.

In 1998, Petro-Canada Lubricants (Petro-Canada) of Mississauga, Ontario, Canada, became Refined Products supplier for most grades of paraffinic white oils used in certain applications and Refined Products became Petro-Canada s exclusive distributor of these white oils in North America, Latin America and Asia Pacific.

Refined products are sold primarily through our own specialized sales force, including technical service professionals who address customer inquiries.

Sources of Raw Materials

Chemicals, steel, castings, parts, machine components and other raw materials required in the manufacture of the Corporation s products are generally available from a number of sources, some of which are foreign. The Corporation uses significant amounts of ethylene, propylene, benzene, caustic, tin, soybean oil, and tallow in many of our chemical manufacturing processes. Large increases in the cost of such key raw materials, particularly for sustained periods of time, could adversely affect the Corporation s operating margins. While temporary shortages of raw materials used by the Corporation may occur occasionally, such raw materials are currently readily available. However, their continuing availability and price are subject to domestic and world market and political conditions and regulations. Major requirements for key raw materials are typically purchased pursuant to multi-year contracts. The Corporation is not dependent on any one supplier for a material amount of its raw material requirements, except one supplier provides the Corporation with approximately 10% to 15% of diverse raw materials sourced from the supplier s multiple manufacturing/processing locations.

The Corporation holds a 50% interest in Rubicon Inc. (Rubicon), a manufacturing joint venture between Uniroyal and Huntsman Corporation, located in Geismar, Louisiana, which supplies both Huntsman and the Corporation with aniline, and the Corporation with diphenylamine (DPA). The Corporation believes that its aniline and DPA needs in the foreseeable future will be met by production from Rubicon.

Intellectual Property and Licenses

The Corporation has approximately 3,300 United States and foreign patents and pending applications and has trademark protection for approximately 500 product names. Patents, trade names, trademarks, know-how, trade secrets, formulae, and manufacturing techniques assist in maintaining the competitive position of certain of the Corporation s products. Patents, formulae, and know-how are of particular importance in the manufacture of a number of specialty chemicals manufactured and sold by the Corporation, and patents and know-how are also significant in the manufacture of certain wire insulating and polymer processing machinery product lines. The Corporation is licensed to use certain patents and technology owned by other companies, including some foreign companies, to manufacture products complementary to its own products, for which it pays royalties in amounts not considered material to the consolidated results of the Corporation. Products to which the Corporation has such rights include certain crop protection chemicals and polymer processing machinery.

Seasonal Business

With the exception of the Crop Protection business, no material portion of any segment of the business of the Corporation is significantly seasonal. The sales of our Crop Protection business are influenced by agricultural growing seasons, which causes the most notable decline in the fourth quarter as sales in our predominant Northern Hemisphere regions decline.

Customers

The Corporation does not consider any reporting segment of its business to be dependent on a single customer or a few customers, the loss of any one or more of whom would have a material adverse effect on the reporting segment. No one customer s business accounts for more than ten percent of the Corporation s consolidated revenues.

Backlog

Because machinery production schedules range from about 60 days to 11 months, backlog is significant to the Corporation s polymer processing equipment business. Firm backlog of customers orders for this business at the end of 2004 totaled approximately $86 million compared with $62 million at the end of 2003. It is expected that most of the 2004 backlog will be shipped during 2005. Orders for specialty chemicals and polymers are generally filled from inventory stocks and thus are excluded from backlog.

Competitive Conditions

We produce a broad range of products for a wide variety of end-use markets, principally including transportation, construction, packaging, agriculture, lubricants, plastics for durable and non-durable goods, and personal care products. The breadth of our product offering provides multiple channels for growth and lessens our dependence on any one market. We sell our products in more than 100 countries, and this worldwide presence further reduces our exposure to any one country s or region s economy.

We have a broad client base and believe that our products, many of which we customize for the specific needs of our customers, allow us to enhance customer loyalty and attract customers that value product innovation and reliable supply.

Competition varies by product and by geographic region, except that in rubber chemicals the market is fairly concentrated. In that market, the Corporation believes that it is one of the three largest suppliers of rubber chemicals in the world. In addition, the EPDM market is fairly concentrated. The Corporation believes that it is one of the five largest suppliers of EPDM polymers in the world, and the third largest producer of EPDM in North America.

Product performance, quality, technical and customer service, and price are all important factors in competing in the polymer product and specialty product businesses.

Research and Development

Research and development expenditures by the Corporation totaled $49.6 million for the year 2004, $51.5 million for the year 2003, and $54.3 million for the year 2002. We expect research and development expenditures to decrease in 2005 by approximately $8 million as a result of the activity-based restructuring initiative. We have reorganized the research and development activities into a centrally managed function rather than embedded in each business. We believe this will provide a greater focus on the overall strategy, better project prioritization and more sharing of best practices within the Company. We will maintain a customer-driven approach to help us discover new products and applications while we continue to improve the technical refinement of our existing product offerings. As of December 31, 2004 the Company had approximately 300 research and other technology personnel.

Environmental Matters

Chemical companies are subject to extensive environmental laws and regulations concerning, among other things, emissions to the air, discharges to land, surface, subsurface strata and water and the generation, handling, storage, transportation, treatment and disposal of waste and other materials. Chemical companies are also subject to other federal, state and local laws and regulations regarding health and safety matters.

Environmental Regulation. The Corporation believes that its business, operations and facilities have been and are being operated in substantial compliance in all material respects with applicable environmental and health and safety laws and regulations, many of which provide for substantial fines and criminal sanctions for violations. The ongoing operations of chemical manufacturing plants, however, entail risks in these areas and there can be no assurance that material costs or liabilities will not be incurred. In addition, future developments, such as increasingly strict requirements of environmental and health and safety laws and regulations and enforcement policies thereunder, could bring into question the handling, manufacture, use, emission or disposal of substances or pollutants at facilities owned, used or controlled by the Corporation or the manufacture, use or disposal of

certain products or wastes by the Corporation and could involve potentially significant expenditures. To meet changing permitting and regulatory standards, the Corporation may be required to make significant site or operational modifications, potentially involving substantial expenditures and reduction or suspension of certain operations. The Corporation incurred $15.5 million of costs for capital projects and $44 million for operating and maintenance costs related to environmental compliance at its facilities during fiscal 2004. In fiscal 2005, the Corporation expects to incur approximately $20.7 million of costs for capital projects and $44.5 million for operating and maintenance costs related to environmental compliance at its facilities. During fiscal 2004, the Corporation paid $18.7 million to clean up previously utilized waste disposal sites and to remediate current and past facilities. The Corporation expects to spend approximately $24.3 million during fiscal 2005 to clean up such waste disposal sites and to remediate current and former facilities.

Pesticide Regulation. The Corporation s Crop Protection business is subject to regulation under various federal, state, and foreign laws and regulations relating to the manufacture, sales and use of pesticide products.

In August, 1996, Congress enacted the Food Quality Protection Act of 1996 (FQPA), which made significant changes to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), governing U.S. sale and use of pesticide products, and the Federal Food, Drug, and Cosmetic Act (FFDCA), which limits pesticide residues on food. FQPA facilitated registrations and reregistrations of pesticides for special (so called minor) uses under FIFRA and authorized collection of maintenance fees to support pesticide reregistrations. Coordination of regulations implementing FIFRA and FFDCA is now required. Food safety provisions of FQPA establish a single standard of safety for pesticide residue on raw and processed foods; require that information be provided through large food retail stores to consumers about the health risks of pesticide residues and how to avoid them; preempt state and local food safety laws if they are based on concentrations of pesticide residues below recently established federal residue limits (called tolerances); and ensure that tolerances protect the health of infants and children.

FFDCA, as amended by FQPA, authorizes the Environmental Protection Agency (EPA) to set a tolerance for a pesticide in or on food at a level, which poses a reasonable certainty of no harm to consumers. The EPA is required to review all tolerances for all pesticide products by August 2006. Some of the Corporation s products have successfully completed review, others are currently under review and other products will be reviewed under this standard in the future.

The European Commission (EC) has established procedures whereby all existing active ingredient pesticides will be reviewed. This EC regulation became effective in 1993 and will result in a review of all commercial products. The initial round of reviews covered ninety products, four of which are the Corporation s products. Data from the Corporation pertaining to these products was submitted for review in mid-2003. Other of the Corporation s products will be reviewed in future years. The process may lead to full reregistration in member states of the EC or may lead to some restrictions, or cancellation of registrations if adverse data is discovered.

Employees

The Corporation had approximately 4,800 employees on December 31, 2004.

Available Information

The Corporation s internet website address is www.cromptoncorp.com. The Corporation makes available free of charge on or through its internet website the Corporation s Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as soon as reasonably practicable after the Corporation electronically files such material with, or furnishes it to, the Securities and Exchange Commission (Commission).

The Corporation s Corporate Governance Principles, Code of Business Conduct and charters for its Audit Committee and its Organization, Compensation and Governance Committee are available on the Corporation s website and will be available, free of charge, to any stockholder who requests them from the Corporate Secretary at Crompton Corporation, 199 Benson Road, Middlebury, CT 06749 USA. The information contained on the Corporation s website is not incorporated by reference in this annual report on Form 10-K and should not be considered a part of this report.

Geographic Information

The information with respect to sales and property, plant and equipment attributable to each of the major geographic areas served by the Corporation for each of the Corporation s last three fiscal years, is set forth in the Notes to Consolidated Financial Statements on page 91 of this Report.

The Corporation considers that the risks relating to operations of its foreign subsidiaries are comparable to those of other U.S. companies, which operate subsidiaries in developed countries. These risks include risks of political change, change in tax regulations, change in business climate, economic changes and foreign currency volatility.

ITEM 2. PROPERTIES

The following table sets forth information as to the principal operating properties and other significant properties of the Corporation and its subsidiaries. All properties are owned in fee except where otherwise indicated:

Location	Facility	Reporting Segment
UNITED STATES		
Alabama		
Bay Minette	Plant	Polymer Additives
Connecticut		
Bethany	Research Center	Crop Protection
Middlebury	Corporate Offices, Research Center*	Corporate Headquarters
Naugatuck	Research Center	Polymer Additives, Polymers
Pawcatuck		