MONSANTO CHEMICAL COMPANY

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TO HOLDERS OF MONSANTO MANAGEMENT GUIDE:

Enclosed are revised sections for your Monsanto Management Guide, as follows:

Section A - Table of Contents;
Section C - Organization;
Section D - Position Guides;
Section E - Corporate Policies and Procedures;
Section F - Personnel Policies and Procedures;
Section G - Security Guide;
Section H - Company By-Laws;
Section I - Organization Charts;
Section J - Index.

Pages for Section B - Monsanto Business Principles - are not included; this section in your Management Guide, Fourth Edition, as issued June, 1959, is to be retained.

PLEASE RETAIN: Section dividers;
Your Assignment Page and Title Page (both pages show the number of the Guide issued to you and for which you are responsible);
Page containing explanatory letter from Charles Allen Thomas;
Preface;
Pages for Section B - Monsanto Business Principles.

You are requested to DESTROY pages for all sections except Section B and replace them with the enclosed, revised pages dated 4/60. We emphasize the importance of your destroying (by tearing or burning) superseded pages so that you will not refer inadvertently to obsolete material and so that security of company information may be maintained.

Changes in policy in this revision are not extensive. We have, however, added information in pertinent areas; revised sections to reflect organizational changes; and in rephrasing certain portions, we hope we have added clarity of meaning to enable you to use the book more easily.

Shea Smith

Shea Smith
Assistant to the President

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SECTION C

ORGANIZATION

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ORGANIZATION

The purpose of organization is to enable a group of persons to work together effectively and happily toward a common goal. An organization is something dynamic—it changes and must change with the times. Therefore, Monsanto will continuously study the type and the facets of its organization and strive for improvement as the situation warrants.

The attainment of corporate objectives requires three definite areas of responsibility: trustee, executive, operating.

I. TRUSTEE AREA

A. Board of Directors:

The Board of Directors is elected by the shareowners to whom the board is responsible for the affairs of the company.

Individuals who are or have been President of the company, as well as Directors who are not officers or otherwise employed by the company, are eligible for continued service as Directors until they reach 68 years of age. All other Directors must retire from the board upon reaching age 65.

No general manager of a division or director of a staff department may be simultaneously a member of the Board of Directors.

The Secretary of the company is secretary of the board.

All employes of the company are ultimately responsible to the board through the President.

The Board of Directors shall:

1. Act on all matters involving major corporate policies or transactions and exercise general control over the business and property of the company. It may designate committees to exercise certain powers of the board.

2. Elect officers of the company and fix their salaries.

3. Exercise all powers of the company and do all lawful acts and things as are not by statute, the Certificate of Incorporation or the bylaws required to be exercised by the shareowners, including amendment or repeal of company bylaws.

4. Review and approve requests for capital appropriations for (1) new projects, (2) replacements, (3) overruns, (4) changes in scope or (5) retirement of assets by obsolescence, which exceed $250,000 per item and have been recommended by the Executive Committee.

5. Review and approve the sale of all tangible and/or intangible assets which involve payments to the company in excess of $250,000 for any one transaction, except sales of technical know-how and services and sales wherein the buyer requires specific board authority.

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6. Hold regular meetings at the offices of the company at St. Louis County, unless some other place is specified, on dates set by the board.

7. Hold special meetings as called by the President on two days' notice to each Director or by the President or Secretary similarly on the written request of two Directors. Four Directors are necessary to constitute a quorum. The act of a majority of the Directors present at any meeting at which there is a quorum is the act of the board except as may be otherwise specifically provided by statute, the Certificate of Incorporation or the bylaws.

B. Chairman of the Board

The Chairman of the Board presides at all meetings of the Board of Directors and of the shareowners, except such as under the law must be presided over by the President or a specially appointed chairman. In the absence of the Chairman of the Board, the President may take his place. The Chairman acts in an advisory capacity with respect to matters of policy and other matters of importance pertaining to the affairs of the company. He and the President send out reports and other messages to shareowners from time to time.

The Chairman of the Board is a member of the Finance and Executive Committees.

C. Executive Committee

The Executive Committee is elected by the Board of Directors and is responsible to it. It shall include the Chairman of the Board and the President, who serves as its chairman. The committee appoints its own secretary. Three members shall constitute a quorum. Division general managers and staff department directors may not be members.

The Executive Committee shall:

1. In the interval between meetings of the board, have and exercise the powers of the board, except those pertaining to:

   a. Financial matters within the jurisdiction of the Finance Committee,

   b. Those matters on which the board has given other specific directions,

   c. Matters relating to corporate organization, changes of capital structure and financing, the closing of stock transfer books, the declaration of dividends and voting stock of other companies.

2. Have authority not in excess of $250,000 per item, and in an aggregate amount of $1,250,000 per month averaged over the calendar year, to approve requests for capital appropriations for:

   a. New projects;

b. Replacements;

c. Retirement of assets by obsolescence.

It may delegate authority to approve such expenditures in lesser dollar amounts.

The President, as chairman of the Executive Committee, has authority to approve requests for capital expenditures not to exceed $200,000 per project. In addition, each other Executive Committee member has authority to approve requests for capital expenditures in his sphere of interest not to exceed $150,000 each project. The chairman and each member of the Executive Committee has authority to approve other expenditures not to exceed $10,000 each item.

As a matter of policy, requests for capital expenditures between $100,000 and $150,000 are ruled upon by the appropriate Executive Committee member rather than by the full committee.

Proposals exceeding the limits shown above are referred by the committee with its approval to the board for action.

In all cases where an appropriation request involves a question of policy, wide departure from long-range plans, or ultimately will involve substantially larger amounts of money, the individual to whom such request has been referred for approval must bring it before the full Executive Committee for approval, regardless of size of request.

3. Have authority to approve each underrun, overrun or change in scope of capital appropriations when the amount of such overrun, underrun or change in scope is beyond the general manager's authority or in excess of five per cent of the approved project cost or $100,000, whichever is less.

4. Have authority to approve sale of tangible and/or intangible assets which involve payments to the company of up to $250,000 for any one transaction, except that in the sales of technical know-how and services its authority shall not be limited by dollar amount. Authority to sell any intangible assets such as trademarks, trade names, technical know-how and services, patents, etc., or real estate shall not be delegated by the Executive Committee, except that the Vice President of research, development and engineering shall be consulted on all matters concerning the sale of technical know-how and services and shall have authority to approve sale of technical know-how and services for any transaction which is estimated will result in payments to Monsanto of not more than either an average of $150,000 per year or a total of $500,000 over a five-year period. Proposals for sales of assets, except technical know-how and services, which exceed the dollar limits shown above, or wherein the buyer requires specific board authority, shall be referred to the board for action.

5. Approve appropriation forecasts in accordance with established procedures.

6. Authorize signers of checks on Monsanto accounts.

7. Develop and evaluate the long-term objectives of the company.

8. Be responsible for and evaluate the long-range plans of the company.

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9. Evaluate short-term plans of the divisions and staff departments to assure that they are adequate to attain established goals.

10. Resolve disagreements between any units of the company which have not been settled by the President or by one of the Vice Presidents.

11. Report its acts and proceedings to the board at the board's next regular meeting.

Communication with Executive Committee:

All appropriation requests and forecasts are addressed to the President, with copies indicated for the other members of the Executive Committee and the members of Corporate Planning.

All other matters directed to the Executive Committee for action are addressed to the President, with copies indicated for the other members of the Executive Committee.

All copies of every communication to the Executive Committee are sent to the secretary of the Executive Committee for distribution. The number of copies required are as follows:

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D. Finance Committee

The Finance Committee is elected by the Board of Directors and is responsible to it. It has general supervision and control of all the usual and ordinary financial affairs of the company and it is of equal rank with the Executive Committee.

The Finance Committee is composed of the Chairman of the Board, the President and one or more members of the board.

The Finance Committee shall:

1. Keep informed of the company's financial condition and its requirements for funds.

2. Recommend to the board on:

a. Investment of surplus funds;

b. Designation of depositories;

c. Time, kind and amount of securities to be issued by the company for supplying its requirements for funds;

d. Payment of dividends and the conditions thereof;

e. Salaries for all officers, after receiving recommendation of the Executive Committee.

3. Comment to the board, in the light of the financial situation at any one time, upon the necessity of the funds requested.

4. Report its acts and proceedings to the board at the board's next regular meeting.

II. EXECUTIVE AREA

A. President

The President is the chief executive officer of the company. Responsibility for implementing the plans and policies of the Board of Directors and its Executive Committee is lodged, under the laws of Delaware and the company's bylaws, in the President. However, he may delegate authority and responsibility to subordinates in the company but remains accountable to the board and its Executive Committee for their performance.

The following report to him:

Vice Presidents

General Managers

Director of the Public Relations Department

Chairman of the Budget Committee

Manager of the Washington Office

Assistant to the President

Corporate Planning Chairman

In the absence of the Chairman of the Board, the President shall preside at all meetings of the shareowners and of the Board of Directors. He shall have general and active management of the business of the corporation, see that all orders and resolutions of the Board of Directors are carried out. He also shall execute bonds, mortgages and other contracts under the seal of the corporation. Unless otherwise ordered by the Board of Directors, the President shall attend on behalf of the company and vote at any meeting of shareowners of any corporation in which the company may hold stock. He also may execute proxies in favor of other persons so to act for the company.

In addition to his over-all duties, he has responsibility for:

1. Maintaining control over company operations and assigning to staff the responsibility for devising techniques for measuring performance against standards of accountability.

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2. Selecting division general managers and staff department directors.

3. Serving as chairman of the Executive Committee, member of the Finance Committee and, ex-officio, all other committees, except Bonus and Stock Option.

4. Establishing a plan of organization, with approval of the Board of Directors, which will enable all parts and members of the company to function most effectively in reaching established objectives.

5. Fixing, or delegating the responsibility for fixing, salaries for all employes, not officers.

6. Approving basic programs in public relations, overseeing their execution and evaluating their results.

7. Approving the broad program of activities of the Washington Office and evaluating the results.

The President shall have authority to approve requests for capital expenditures not to exceed $200,000 per project and authority to approve other expenditures not to exceed $10,000 each item.

B. Executive Committee Members

Each member of the Executive Committee, except the Chairman of the Board and the President, is responsible for functional coordination of an area of company activity by counseling, planning, setting standards, evaluating budgets and performance, and reporting results and recommendations. Each Executive Committee member has responsibility for the following:

1. Evaluating the plans of the divisions and staff departments to assure that they are adequate in his functional sphere to attain established goals.

2. Determining and eliminating points of interdivisional conflict by acting as coordinator in matters coming within his sphere of activity when plans or policies appear to jeopardize greater Monsanto's profitability or competitive position.

3. Keeping abreast of the most progressive thinking and experience in his field, and constantly studying and arranging for use within the company of new and better methods of performance in his field of specialization.

4. In his assigned area of activity, promoting standardization among the operating divisions and staff departments on policies and procedures relating to procurement, training and compensation of personnel and evaluating performance of top level personnel to help assure that adequate replacements are provided for key positions in the company.

5. Making recommendations to the President and Budget Committee on company-wide budgets in his field of specialization.

6. Reviewing and reporting to the President on those aspects of all appropriation requests and forecasts which come within his sphere of activity.

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The President (with the approval of the Board of Directors) shall designate the sphere of interest and responsibilty for each Executive Committee member.

For other responsibilities of Executive Committee members see "Executive Committee Members," page D-1.

C. Corporate Planning

1. Function

The Corporate Planning group's principal role is to provide staff help to the President and to the Executive Committee in areas assigned to it by the President.

2. Accountability

Corporate Planning is accountable to the President. All members of the group are appointed by the President, to whom the chairman reports.

3. Responsibility

a. Long-Range Planning:

(1) Developing, in cooperation with the divisions and the staff departments, a procedure and format for presentation of divisional long-range plans with particular reference to improvement in significance and reliability;

(2) Fostering coordination between the divisions and the staff departments in the preparation of plans;

(3) Pointing out to the President and to the Executive Committee conflicts and/or inconsistencies in the plans of various segments of the company as soon as they become evident;

(4) Consolidating the divisional long-range plans into an over-all company forward projection;

(5) Evaluating the financial and technological aspects of the consolidated plan in terms of their reliability, significance and relationship to the over-all objectives of the company;

(6) Presenting to the President, by December 1 of each year, the consolidated long-range projection and an evaluation of it;

(7) Acquiring, appraising and utilizing information from within or without the company on techniques for corporate planning.

b. Appropriation Forecasts and Proposed Company Investments:

(1) Revising, in cooperation with the divisions, procedure and format for the preparation of appropriation forecasts and divisional requests for company investment to improve their reliability, significance and utility;

(2) Assisting the President, at his request, in the appraisal of individual forecasts and proposed company investments with particular reference to their financial and technological content and the significance to over-all company objectives, immediate and long-range;

(3) Making recommendations to the President as to the disposition of these forecasts and proposed company investments;

(4) Submitting recommendations on all appropriation requests in amounts over $250,000 of new capital.

III. OPERATING AREA

A. Divisions

There are seven divisions:

Inorganic Chemicals Lion Oil Company Organic Chemicals Plastics	Manufacturing and selling products

Overseas—Selling products and know-how overseas and managing overseas investments.

Research & Engineering — Researching, developing, buying know-how world-wide and buying and selling know-how domestically.

Domestic Subsidiaries & Affiliates—Supervising the company's interests in subsidiaries, associated and affiliated companies in the United States.

The differentiation between the four manufacturing divisions is based on product lines. While these fit the chemical nomenclature in most cases, the product line is the ultimate criterion, e.g., the Inorganic Chemicals Division sells synthetic detergents even though they are organic in nature because detergents are one of its product lines. Exceptions may be made also in some cases of by-products. Allocation of a product or product line to a division is made by the President.

There is no limit to the size or assets of a division as long as it confines itself to its assigned fields of operation.

Since the demarcation of divisions is by product lines and not by history or geography, two or more divisions may operate at the same location. The manufacturing investment of any given product line may be wholly or only partly owned by the guest division, which is responsible for any idle plant charges on its share and receives goods at cost to the extent of its ownership. Further details will be found under "Purchases Into the Producing Plants of Another Division," page E-20, and under "Transfer Prices of Products," page E-23.

1. Domestic Subsidiaries & Affiliates Division

The Domestic Subsidiaries & Affiliates Division is responsible for Monsanto's interests in domestic subsidiaries, associated and affiliated companies and for seeing that they are operated to the best interest of Monsanto Chemical Company.

The general manager of the division is the Monsanto representative on the Boards of Directors of all domestic companies where Monsanto

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has such a member. In carrying out his duties, he may enlist the services of personnel of Monsanto and of these domestic companies with the approval of their respective line officers.

Specifically, the division maintains contact with all the affairs of all such subsidiaries and associated and affiliated companies, receiving copies of all reports made by them to Monsanto or by Monsanto personnel about them, and studies their problems, advising Monsanto members of the various Board of Directors of desirable action to be taken. This division acts as coordinator between other divisions of Monsanto and the domestic companies, keeping members of each group informed of activities in their particular spheres of interest.

2. Inorganic Chemicals Division

The Inorganic Chemicals Division is responsible for all inorganic products, with a few agreed exceptions, for all engineering sales and for operation of the Leonard Construction Company of Chicago. The division operates plants at Carondelet, Missouri; Camden, New Jersey; El Dorado, Arkansas (chemical plant); Everett, Massachusetts; Kearny, New Jersey; Luling, Louisiana; Monsanto, Idaho; Monsanto, Tennessee; St. Charles, Missouri; and Trenton, Michigan; and has manufacturing facilities at Avon, California; Monsanto, Illinois; Nitro, West Virginia; and Long Beach, California.

The engineering sales department is responsible for sales of sulfuric acid catalyst and for design and sale of plants involving Monsanto know-how. Further details will be found under "Sale of Processes," page E-21.

3. Lion Oil Company Division

The Lion Oil Company Division is responsible for production, exploration and refining of crude oil and marketing the products. It operates the refinery at El Dorado, Arkansas, and other petroleum-producing units and has manufacturing facilities at Texas City, Texas.

The division is responsible for supplying or negotiating for natural gas or petroleum feedstocks used by other divisions of the company in all cases where the use of such raw materials represents a significant raw material purchase by the other divisions. Lion also has the responsibility of providing chemical raw materials derived from petroleum, particularly where the production of such raw materials results in the concomitant production of other raw materials utilized in part or in whole by the petroleum industry. In general, the Lion division responsibility ends where the first basic chemical raw material product is produced.

The Lion division shall develop both as a supplier of raw materials for chemicals manufactured by other divisions and as a progressive oil company, extending all of its operations and facilities as opportunities and profitability warrant.

In the petrochemicals area the division shall seek (1) to develop sources of raw materials for divisional operations, based on methane,

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light gases, field gasoline and refinery streams, so as to optimize the profitability of manufacture of the company's own raw materials from these basic resources, and (2) to find profitable opportunities to produce for commercial sale new (to Monsanto) chemicals from petroleum resourses listed above.

These activities shall be carried out with the purpose of enhancing over-all profitability of the company's chemical and petroleum businesses and shall employ, to the maximum extent possible, technology developed by and unique to Monsanto.

4. Organic Chemicals Division

The Organic Chemicals Division is responsible for all organic chemicals, with a few agreed exceptions, and for operation of the Filtered Rosin Products Company of Baxley, Georgia, and the Nitro Industrial Corporation of Nitro, West Virginia. The division operates plants at Anniston, Alabama; Avon, California; Monsanto, Illinois; Nitro, West Virginia; and St. Louis, Missouri; and has manufacturing facilities at Everett, Massachusetts; Luling, Louisiana; Seattle, Washington; and Texas City, Texas.

5. Overseas Division

The Overseas Division is responsible for foreign sales of the company's products and know-how and for supervision and development of other foreign commercial activities and investments in close cooperation and agreement with the affected domestic divisions, staff departments and the Executive Committee.

6. Plastics Division

The Plastics Division is responsible for maintaining and improving its position as a leading technological and commercial factor in the field of all monomers and polymers entering into or ordinarily classified as plastics, elastomers or raw materials for synthetic fibers, with the exception of some resin raw materials produced by the Organic Chemicals Division. The Plastics Division also is responsible for upgrading and utilization of raw materials, intermediates and co-products related to its monomer and polymer manufacturing. The division operates plants at Addyston, Ohio; Long Beach, California; Santa Clara, California; Seattle, Washington; Springfield, Massachusetts; and Texas City, Texas; and has manufacturing facilities at Everett, Massachusetts, and Trenton, Michigan.

7. Research & Engineering Division

The Research & Engineering Division has as its major assignment the forward technical development of Monsanto, an assignment it shares with the operating divisions. The Research & Engineering Division emphasizes research on new or improved products, new or improved processes, and new scientific knowledge to open avenues for diversification and to increase profits. The division works closely with the operating divisions in all phases of process and product development, from pre-research planning to final commercialization. The division operates Mound Laboratory, a Government-owned laboratory at Miamisburg, Ohio, engaged in nuclear research.

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a. Research Department

The research department, located at Dayton, Ohio, conducts fundamental, applied and exploratory research in organic, physical, polymer and inorganic chemistry, biochemistry, engineering research and solid state physics. The goals are new products and new chemistry, preferably based on Monsanto raw materials; new techniques or equipment; new lines of endeavor that will lead to diversification; and new fundamental knowledge to strengthen the company's technological foundation.

b. Development Department

The development department accumulates, transmits and interprets information that relates to the economic basis and potential of Research & Engineering Division projects. Included is information on new markets, new industries, new processes, new products, new technologies, forward plans of operating divisions and of consumer industries and activities of competitors. The department maintains a chemical economics information center at the General Offices, screens purchasable know-how and inventions, expedites transfer of information and new research developments to the cognate divisions and is responsible for technical representation in Europe. It supervises the company's university fellowship, scholarship and grants-in-aid programs, and coordinates the consultant program.

c. Engineering Department

The engineering department is devoted to the improvement of the company's engineering technology. It investigates, develops and adapts for Monsanto use new engineering sciences and techniques and is spearheading the company's use of electronic computers and machine simulation as research, engineering and management tools. It furnishes a versatile and experienced force of engineering consultants to assist the operating divisions in maintaining engineering leadership.

d. Special Projects Department

The special projects department, located at Everett, Massachusetts, conducts research under contract for agencies of the United States Government. The highly exploratory research is related to products of long-range interest to Monsanto, but for which the Government is at present the only customer. The department operates the only laboratory in Monsanto whose *sole* goal is to detect important needs for chemicals, plastics and petroleum products, and to develop materials to fill those needs.

B. STAFF DEPARTMENTS

Staff Departments are the company's specialized expert units which are of service and guidance to:

1. The top management or corporate level,
2. The divisions,
3. Other staff departments.

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Each staff department director is responsible to a particular member of the Executive Committee for the proper performance of that department's functions. Each staff department shall assist the Executive Committee member to whom it reports in the fulfillment of his responsibility for functional appraisal, service and coordination.

There shall be only so many staff departments as the type and extent of the company's operations may from time to time require. Except as modified below, the existence of any such department must be justified on the basis that its function and activities can be carried out more efficiently, economically and logically in a centralized setup than by having responsibility for such activities distributed among the several divisions. A division shall be responsible for only those staff activities which are of peculiar interest or use to it.

The staff departments of the company are:

- Accounting Department
- Law Department
- Marketing Services Department
- Medical Department
- Patent Department
- Personnel & Administrative Services Department
- Public Relations Department
- Purchasing & Traffic Department
- Treasury Department

Further information on the authority, responsibility and accountability of these departments will be found on pages D-14 to D-26.

C. SUBSIDIARIES, ASSOCIATED AND AFFILIATED COMPANIES

Subsidiaries are companies in which Monsanto directly or indirectly has a controlling interest; associated companies are those in which Monsanto has 50 per cent interest; affiliated companies are those in which Monsanto has less than 50 per cent interest.

1. Subsidiaries—more than 50 per cent owned:

a. Australian Petrochemicals Pty. Limited

A company organized to manufacture and sell styrene monomer and other chemical products based on raw materials derived from petroleum gas produced by Monsanto's partner in the venture, Petroleum and Chemical Corporation (Australia) Limited. It operates a plant at Sydney, Australia.

b. Filtered Rosin Products Company

A wholly owned subsidiary with manufacturing facilities at Baxley and Douglas, Georgia, for the production of rosin, turpentine and fortified gum rosin size (Mersize). This company is under the jurisdiction of the Organic Chemicals Division.

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c. Fome-Cor Corporation

Jointly owned with St. Regis Paper Company to develop markets for foamed polystyrene. It is headquartered at Springfield, Massachusetts, and has manufacturing facilities at Addyston, Ohio, and Mount Wolf, Pennsylvania.

d. L-M Oil Company, Limited

An oil prospecting company in Canada. This company is under the jurisdiction of the Lion Oil Company Division.

e. Leonard Construction Company

A wholly owned subsidiary with offices at Chicago, Illinois, engaged in engineering and construction chiefly for the process industry and particularly of chemical plants designed by Monsanto's engineering sales department. It has a Canadian subsidiary, Lenconco Construction Limited, with its main office at Ottawa. Leonard Construction Company is under the jurisdiction of the Inorganic Chemicals Division.

f. Monsanto Andes S A I C

A company organized to manufacture and sell in Argentina products which can be produced economically in that country. It manufactures products of the Plastics Division.

g. Monsanto Argentina, S A I C

A company organized to manufacture and to sell in Argentina products which can be produced economically in that country. It manufactures products of the Organic Chemicals and Plastics Divisions.

h. Monsanto Bolivia, Inc.

An oil prospecting company in Bolivia. This company is under the jurisdiction of the Lion Oil Company Division.

i. Monsanto Canada Limited

A Canadian corporation operating plants at Montreal, Vancouver, Edmonton, and (through its subsidiary, Monsanto Oakville Limited) at Oakville, Ontario. It makes chemicals, plastics and adhesives.

j. Monsanto Chemicals (Australia) Limited

A jointly owned subsidiary of Monsanto Chemicals Limited (England) and Monsanto Chemical Company (U.S.A.) which operates plants at Melbourne, Sydney and Brisbane. It manufactures products of the Inorganic Chemicals, Organic Chemicals and Plastics Divisions.

k. Monsanto Chemicals Limited (England)

An English corporation which operates plants at Ruabon, North Wales, and at Fawley and Newport, England. While it has products of indigenous origin, it also manufactures products of the Inorganic Chemicals, Organic Chemicals and Plastics Divisions.

l. Monsanto Chemicals of India Private Ltd.

An Indian corporation jointly owned by Monsanto Chemical Company (U.S.A.) and Monsanto Chemicals Limited (England). Its activities are the handling of sales within India of Monsanto products from the United States, England, Canada and Australia.

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m. Monsanto Export Company

A Western Hemisphere trade corporation, which functions as seller of Monsanto products from domestic plants to all territories in the Western Hemisphere except the United States and Puerto Rico.

n. Monsanto Japan Limited

A Japanese company which provides assistance in connection with Monsanto's activities in Japan other than local manufacturing interests of Mitsubishi Monsanto Chemical Company.

o. Monsanto Mexicana, S.A.

A Mexican corporation with a manufacturing plant located at Lecheria (near Mexico City), Mexico, for the production of products which can be manufactured economically and sold in Mexico. It manufactures products of the Inorganic Chemicals, Organic Chemicals and Plastics Divisions.

p. Monsanto of Brazil, Inc.

Inactive.

q. Monsanto Overseas S.A.

A Panama corporation operated by the Overseas Division. It sells Monsanto products abroad, licenses patents and know-how and holds investments in foreign countries.

r. Monsanto Research S.A.

A research laboratory established in Switzerland, staffed with European scientists, to undertake exploratory research of a fundamental nature.

s. Monsanto Venezuela, Inc.

An oil prospecting company in Venezuela. This company is under the jurisdiction of the Lion Oil Company Division.

t. Nitro Industrial Corporation

A wholly owned subsidiary engaged in the rental, development and sale of residential, commercial and industrial property in and around Nitro, West Virginia. This company is under the jurisdiction of the Organic Chemicals Division.

2. Associated Companies—50 per cent owned:

a. The Chemstrand Corporation

A Delaware corporation formed and jointly owned with American Viscose Corporation for the development and manufacture of certain classes of synthetic fibers, primarily nylon and acrylics.

b. Mitsubishi Monsanto Chemical Company

A Japanese corporation operating two manufacturing plants in Japan. It manufactures products of the Inorganic Chemicals, Organic Chemicals and Plastics Divisions.

c. Mobay Chemical Company

A Delaware corporation jointly owned with Farbenfabriken Bayer, A.G. of Germany for the development and manufacture of isocyanates and polyesters for sale and ultimate use in solid and rigid foams, solid rubberlike materials, surface coatings and adhesives.

d. Plax Corporation

A Delaware corporation, jointly owned with Emhart Manufacturing Company of Hartford, Connecticut, for the manufacture of formed plastic bottles and containers and plastic film and sheeting.

e. Shawinigan Resins Corporation

A Massachusetts corporation jointly owned with Shawinigan Chemicals Limited (Montreal, Canada) for the manufacture of resins and resin emulsions.

f. Societe Monsanto Boussois

A French corporation to manufacture in France products (of the Plastics Division) which can be produced economically there.

3. Affiliated Companies—less than 50 per cent owned:

a. A/B Casco

A Swedish corporation with plants in Sweden for the manufacture of adhesives.

b. Etino-Quimica, S.A.

A company organized in Spain for the manufacture of products which can be produced economically in that country. It manufactures products of the Inorganic Chemicals and Plastics Divisions.

c. Sicedison S.p.A.

An Italian corporation operating two manufacturing plants in Italy. It manufactures products of the Inorganic Chemicals, Organic Chemicals and Plastics Divisions.

d. Societe des Produits Chimiques Coignet

A French corporation with plants in France for the manufacture of phosphorus and phosphates.

e. Societe Industrielle de la Cellulose (Sidac) S.A.

A Belgian corporation with plants in Belgium. It is engaged primarily in the fabrication of plastics.

IV. COMMITTEES

The Executive and Finance Committees are the principal, permanent committees set up by the Board of Directors but there are several others formed by the board, the Executive Committee or the President for special purposes. These are:

A. *Auditing Committee,* composed of non-officer members of the board, which studies and makes recommendations on auditing policies and practices and recommends yearly to the board on the choice of independent auditors.

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B. *Bonus Committee,* composed of the Chairman of the Board and two non-officer members of the board (all of whom are ineligible to receive bonuses), which determines eligibility of recipients and amount of bonus, if any, to be paid.

C. *Budget Committee,* composed of several members of the Executive Committee and, as chairman, the Vice President of planning and control. It is appointed by the President and assists him in coordinating and preparing the over-all budget of the company, carrying out the budgetary control plan, setting of standards, studying procedures, analyzing results and such other budgetary matters as he may desire.

D. *Housing Committee,* appointed by the President, which is responsible for implementing company policy regarding purchases and sales of houses of employes, incident to transfers. It is composed of one member of the Executive Committee and the director of the Personnel & Administrative Services Department.

E. *Policy Committee for Government Affairs,* appointed by the President to recommend policy and courses of action in dealing with governmental and legislative matters. It consists of two members of the Executive Committee; the Corporate Secretary; the director, civic affairs; and the manager of the Washington Office.

F. *Retirement Plan Committee,* appointed by the Board of Directors, which administers the retirement plans for all employes, assures the adequacy of trust funds to meet these plans, examines all cases of total and permanent disability and rules on payments of salaries to ill and disabled employes. The committee consists of a member of the Executive Committee, the director of the Personnel & Administrative Services Department (as chairman), the Controller and two members drawn from a staff department and an operating division.

G. *Salary Committee,* appointed by the President, and consisting of two Executive Committee members and the director of the Personnel & Administrative Services Department. It is responsible for studying salary policies and administering the company's Salary Plan.

H. *1960 Stock Option* Committee, composed of the Chairman of the Board and two non-officer members of the board (all of whom are ineligible to receive stock options) which recommends to the Board of Directors the names of persons and the amount of options to be granted under the 1960 Stock Option Plan.

I. *Second Employes' Stock Plan Committee,* composed of a member of the Executive Committee, the Corporate Secretary, the Treasurer and two members of the Personnel & Administrative Services Department. It administers this special option-type program which was established for most salaried and hourly employes.

V. MEETINGS

A. Shareowners' Meeting

The annual meeting of shareowners is held on the fourth Thursday of March in each year, if not a legal holiday and, if a legal holiday, then

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on the next secular day following, at 10:00 a.m. At this meeting the shareowners elect by a plurality vote, by ballot, a Board of Directors, and transact such other business as may be properly brought before the meeting. The Chairman of the Board presides or, in his absence, the President.

B. Board of Directors

The Board of Directors meets regularly at 9:00 a.m. on the fourth Thursday of each month. Closing hour for receipt of communications to be presented to the board is 1:00 p.m. on the preceding Thursday.

General Managers' Meetings with the Board of Directors:

General managers of operating divisions meet individually with the Board of Directors annually for a review of operations, performance and programs.

C. Executive Committee

Meetings of the Executive Committee are held regularly at 10:00 a.m. each Monday and at such other times as set by the chairman. Closing hour for receipt of communications to be presented to the committee is 1:00 p.m. the preceding Wednesday.

1. Review Meetings with the Executive Committee:

Each general manager meets with the Executive Committee semi-annually (except annually for the general manager of the Domestic Subsidiaries & Affiliates Division) for a review of his division's operations, performance, forward programs and personnel problems and plans. Similarly, a review meeting with the Executive Committee is scheduled annually for each staff department director, for the Corporate Planning group and for the following subsidiaries and associated companies:

The Chemstrand Corporation	Monsanto Mexicana, S.A.
Fome-Cor Corporation	Plax Corporation
Mobay Chemical Company	Shawinigan Resins Corporation
Monsanto Canada Limited	

A review meeting with the Executive Committee is scheduled each eighteen to twenty-four months with the following subsidiaries and associated companies at such times as the principals of these corporations are in St. Louis for other business reasons:

Monsanto Chemicals Limited (England)

Monsanto Chemicals (Australia) Limited

Mitsubishi Monsanto Chemical Company

The formalized portion of divisional reviews is limited to the period 10:00 a.m. to lunchtime for operating divisions. Other reviews in

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their entirety are limited to the period 10:00 a.m. to lunchtime. Exception to this rule may be made only by the chairman of the Executive Committee.

The divisions, staff departments, subsidiaries and associated companies are to submit proposed agenda to allow Executive Committee members time prior to the meeting to review the subjects selected, to develop necessary data pertaining to them and to request any changes which may be desired.

2. Information Exchange Meetings with the Executive Committee:

Meetings for the exchange of information are scheduled by the Executive Committee as follows: with general managers, as a group, on the first Thursday of every month; with staff department directors, as a group, semi-annually. Substitutions are permitted only on approval of the chairman of the Executive Committee.

Agenda for these meetings usually include brief reports by general managers or staff department directors who have new and significant items to bring before the group. Additional items may be suggested by any individual scheduled to attend the meeting. The Executive Committee reports on general conditions of the company and any other items it considers pertinent.

A luncheon meeting, attended by Executive Committee members, general managers, staff department directors, Corporate Planning members and the Assistant to the President is held each Wednesday for informal discussion of company affairs, or to hear a speaker on a subject of general interest. If a general manager or staff department director cannot attend, he sends one of his staff to represent him.

D. Finance Committee

The Finance Committee meets on the call of the chairman. Normally, a meeting is called for 8:30 a.m. on the fourth Thursday of each month, preceding the board meeting. Closing hour for receipt of communications to be presented to the committee is 1:00 p.m. on the preceding Thursday.

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SECTION D

POSITION GUIDES

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I. GENERAL DUTIES OF AN EXECUTIVE

The following apply to any executive within the limits of his authority and consistent with his relationships. He shall:

A. Support company policies and procedures once they have been decided and see that his subordinates do likewise.

B. Delegate authority and responsibility in accordance with the charts, position guides and this *Management Guide*, follow procedures therein and recommend changes in them to the Assistant to the President.

C. Strive constantly to reduce costs and keep up to date on all possible ways and means of so doing.

D. Endeavor to perfect himself in the knowledge of human relations and to apply that knowledge at all points.

E. Train successors in his group, periodically interview members of his organization, rate them and report thereon to his superiors, constantly endeavoring to build up and strengthen his unit of the organization, personnel-wise.

F. Approve expenditures in his division, department or section within the budget laid down by management.

G. Keep his superior informed on any matters for which the superior is held responsible and of which he should know.

H. Take on additional duties as required by his superiors even though not specified in this *Management Guide*.

I. Constantly analyze and appraise results in his unit and develop plans for improvement.

J. Show a broad interest in the progress of the company beyond his specific interests.

K. Improve himself.

II. EXECUTIVE COMMITTEE MEMBERS

In addition to the general duties of members of the Executive Committee (page C-6), the following duties are specified:

A. FINANCE AND LAW:

The Executive Committee member whose sphere of interest is finance and law is responsible for coordinating all financial, legal and legislative matters of the company, maintaining for financial matters close contact with the Finance Committee of which he is a member. The following report to him:

Director of the Law Department

Director of the Treasury Department

Director of the Accounting Department through the Vice President of planning and control

Director, Civic Affairs

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He is responsible for:

1. Forecasting continually, with the aid of the Accounting and Treasury Departments, the company's and its subsidiaries' needs for new funds for two years ahead.

2. Seeing that the divisions and departments and all other parts of management are advised on legal phases of their activities, present or proposed, and are informed on the effect on their business of new laws, local, state or federal.

3. Coordinating company activities dealing with legislative subjects.

B. MANUFACTURING:

The Executive Committee member whose sphere of interest is manufacturing is responsible for coordinating all phases of manufacture of the company's products from raw materials to finished products delivered to the customers' plants and for coordinating the engineering activities of the operating divisions except engineering of a development nature. The following report to him:

Director of Purchasing & Traffic Department

Director of Medical Department

Director of Personnel & Administrative Services Department—re labor relations and office management

He is responsible for:

1. Evaluating over-all manufacturing and engineering programs of the divisions to determine whether they are adequate to meet prescribed goals.

2. Establishing product performance criteria for cost, quality and quantity; reviewing and evaluating such performances; periodically resetting standards when necessary.

3. Determining basic traffic and purchasing policies, particularly with regard to inventories and prices.

4. Determining basic policies of the Medical Department and supervising its activities.

5. Determining basic labor relations policies and supervising the activities of the Personnel & Administrative Services Department in this field and in the field of office management.

6. Calling to the attention of the Vice President of research, development and engineering, new possibilities of development in the manufacturing field.

7. Coordinating division engineering not of a developmental nature. In areas where there is an overlapping of activities with developmental engineering, resolving these differences, case by case, with the Vice President of research, development and engineering.

8. Providing counsel and advice in his area of interest to the Lion Oil Company Division when requested by the Executive Committee member whose sphere of interest is oil and gas.

9. In a broad way, representing the engineering function in the upper counsels of the company.

C. MARKETING:

The Executive Committee member whose sphere of interest is marketing is responsible for coordinating all marketing activities within the company. The director of the Marketing Services Department reports to him.

He is responsible for:

1. Evaluating the sales programs and budgets of the divisions and determining whether they are adequate to meet short-term sales goals and long-term sales objectives.

2. Establishing criteria of performance by which the effectiveness of marketing operations can be judged and periodically reviewing performance against sales budgets, sales programs, competitive standings, share of market and other established criteria of sales performance.

3. Capitalizing on Monsanto's strength in know-how, locations and sales position by guiding the divisions' sales programs toward more effective product integration and greater interdivisional cooperation on sales.

4. Maintaining surveillance over company-wide relations with principal customers, prospective customers, suppliers (in cooperation with the Vice President of manufacturing) and all other major firms in the chemical and allied industries.

5. Determining basic advertising policies and reviewing and approving the advertising and sales promotional activities needed to maintain company position and sales volume and to create new profitable business. Establishing criteria to evaluate the advertising and sales promotion activities conducted by the divisions.

6. Assuring that adequate information on the company's markets and marketing is available for management decisions, maintaining a marketing research service on products and practices of interest to several divisions and evaluating marketing research conducted by the divisions.

7. Coordinating the activities and maximizing the efficiency of the company's sales offices.

8. Making optimum use of distributors, agents and other channels of distribution by formulating a unified policy with respect to these factors and by encouraging the divisions to use common distributors wherever practical.

9. Providing a design service to assure attractive appearance of the company's packaging and printed material, buildings and interiors and to suggest new forms and applications which may enhance the sale of products.

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10. Appointing and supervising, where appropriate, regional staff marketing executives whose activities augment and assist divisional programs in their assigned areas.

11. Monitoring economic trends and interpreting their impact on the company's sales and policies.

D. Oil and Gas Operations:

The Executive Committee member whose principal sphere of interest is oil and gas operations is responsible for coordinating all matters concerning the exploration, production, refining and marketing of petroleum and natural gas products. He is assigned also the responsibility for coordinating all phases of personnel relations outside of labor relations through the director of the Personnel & Administrative Services Department.

He is responsible for:

1. Evaluating the programs of the Lion Oil Company Division to determine whether they are adequate to meet both short- and long-term objectives.

2. Calling to the attention of appropriate members of the Executive Committee, new possibilities of development in the petroleum field.

3. Providing counsel and advice to other management personnel in the company on matters concerning oil and gas exploration, production and refining and marketing operations.

4. Coordinating with other members of the Executive Committee, activities carried out in oil and gas operations which overlap or are related to the sphere of interest of another Executive Committee member.

E. Research, Development and Engineering:

The Executive Committee member whose sphere of interest is research, development and engineering is responsible for coordinating the whole technical development of the company and for seeing that such development follows sound and integrated over-all plans and policies. The director of the Patent Department reports to him.

He is responsible for:

1. Evaluating the research and development programs and budgets of the divisions and determining whether they are adequate to meet the long-range goals for the company's technological development.

2. Integrating such research, development and engineering plans of the divisions into a logical entity.

3. Measuring the accomplishments of the divisions in his sphere by developing criteria of efficiency and effectiveness. To this end, maintaining close contacts with cognate forces in all other major chemical companies.

4. Evaluating the activities, programs and budgets for the company's engineering research programs and also for the Patent Department.

5. Approving expenditures for educational purposes not otherwise provided for.

6. In areas where there is an overlapping of interest between divisional engineering and developmental engineering, resolving these differences, case by case, with the Vice President of manufacturing.

7. Providing counsel and advice in his area of interest to the Lion Oil Company Division when requested by the Executive Committee member whose sphere of interest is oil and gas.

8. Consulting on all matters concerning the sale of technical know-how and services. He has authority to approve the sale of technical know-how and services for any transaction which is estimated will result in payments to Monsanto of not to exceed either an average of $150,000 per year or a total of $500,000 over a five-year period.

9. Coordinating programs concerned with the Atomic Energy Commission.

10. Coordinating all phases of the Research Center administration through the director of the Personnel & Administrative Services Department.

III. VICE PRESIDENT OF PLANNING AND CONTROL

The Vice President of planning and control is responsible for coordinating and/or directing all activities of the company in areas of long-range planning, corporate control, methods and procedures and shareowner relations. The Controller reports to him and in this area he reports to the Executive Committee member whose sphere of interest is finance and law; in all other activities he reports to the President.

In addition to the general duties of this Vice President as outlined above, he has responsibility for:

A. Acting as chairman of Corporate Planning and in this capacity coordinating and supervising the activities of this group and contributing to Corporate Planning's effort where appropriate in appraising capital requests and forecasts; developing and directing long-range planning activities of the company, and developing and initiating new, effective planning methods.

B. Supervising the over-all activities of the Accounting Department and providing counsel and advice to the Controller.

C. Establishing and maintaining effective control systems for capital budgets, cash requirements forecasts, and for evaluating performance of the company and its divisions.

D. Presiding as chairman of the Budget Committee. (See page C-16.)

E. Maintaining and promoting favorable relations among shareowners and groups who influence the purchase of Monsanto stock, such as security analysts, financial editors, etc.

IV. GENERAL MANAGER

A. Positional Activities

The general manager of a division is appointed by the President after approval by the Board of Directors and his election by it as Vice

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President. He is responsible to the President. Responsible to him in the manufacturing divisions are the directors of manufacturing, marketing, research and engineering, and personnel and, in the case of the Lion Oil Company Division, of production and exploration. In the non-manufacturing divisions, a director for each main section is responsible to the general manager. A general manager may delegate any or all of his responsibilities to assistant general managers. The general manager shall:

1. Operate his division with as high a percentage return on operating investment as possible on a long-range basis.

2. Approve all divisional quotas and budgets and expenditures.

3. Maintain constant long-range planning programs to improve present products and to develop new ones and new processes.

4. Prepare and supply to the Budget Committee all necessary data required for budgetary control.

5. Have authority to make capital appropriations for new projects, replacements, retirement of assets by obsolescence, overruns or changes in scope at maximums as follows:

	Per Project	Monthly Average over Calendar Year
a. Inorganic Chemicals Division	$100,000	$350,000
b. Lion Oil Company Division	100,000	150,000
c. Organic Chemicals Division	100,000	350,000
d. Plastics Division	100,000	250,000
e. Research & Engineering Division	50,000	50,000
f. Overseas Division		
(1) Funds from MCC* or MOSA*	50,000	50,000
(2) Funds from earnings of foreign companies except MCL*, MCAL*, or MOCAN*	75,000	75,000

In addition to the above, the general manager of the Lion Oil Company Division shall have all the authority which he has delegated to the director of production and exploration as set forth in the description of the latter's duties and authorities (see page D-32).

All requests beyond a general manager's authority shall be submitted to the Executive Committee for approval.

**MCC—Monsanto Chemical Company*
MOSA—Monsanto Overseas S.A.
MCL—Monsanto Chemicals Limited
MCAL—Monsanto Chemicals (Australia) Limited
MOCAN—Monsanto Canada Limited

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The general manager may delegate all or part of his authority at his discretion.

6. Have authority to sell tangible assets, except real estate, at a maximum of $100,000 per item in case of Lion, Inorganic, Organic and Plastics divisions and $50,000 per item for other divisions, and in a maximum amount per month averaged over the calendar year in accordance with the schedule in paragraph five above; but not technical know-how or services or trademarks, trade names, patents or other intangible assets without appropriate approval, nor items wherein the buyer requires specific board authority for the sale of the said items.

7. Have authority, with power of delegation, to sign sales contracts covering products of his division for such prices and terms of payment as he may fix and under conditions and forms approved by the Law Department. Export prices will be set in cooperation with the Overseas Division.

8. Submit to the Executive Committee, 18 months after the completion date of a project involving expenditure of over $250,000 and on which a return was promised, a report covering total installation costs and the results of operation for the 12 months' period ending with the 18 months mentioned above. If the operation did not come up to forecast, a similar report must be submitted at the end of the following 12 months' period.

9. Prescribe such reports from within his division as he deems necessary and report by the 15th of each month to the President and others in conformance with "Distribution of Reports" outlined on page E-11.

10. Direct the efforts of the employes in his division, with continuous attention to human relations. He shall be responsible for all phases of personnel administration as related to such employes within the scope of established company policies and shall coordinate all these activities, including labor relations, with the Personnel & Administrative Services Department.

11. Prepare and submit a key personnel report to the President by November 1 of each year to carry out proper planning for replacements of key personnel and to assist in other aspects of organization planning.

12. Follow and enforce the procedures for transfer prices of products between divisions as outlined under "Transfer Prices Between Divisions," page E-23. Disagreements shall be brought to the attention of the Vice Presidents of manufacturing and marketing.

13. Approve giving to foreign subsidiaries Class C (preliminary) information, when requested and approved by the Overseas Division, and Class B (full) information when approved by the Overseas Division and the Vice President of research, development and engineering.

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14. Approve and have approved by the Overseas Division and the Vice President of research, development and engineering, with clearance from the Law Department and the Patent Department, before final action is taken, the principle points of agreement and final contracts for sale of services and technology abroad.

15. Negotiate purchases of technical know-how and services abroad in cooperation with the Research & Engineering Division, keeping the Overseas Division completely informed and getting approval of the Vice President of research, development and engineering before final action.

16. Make a report to the Executive Committee of his division's activities and plans at intervals as requested by the President.

B. Degrees of Authority, Responsibility, Accountability

In order further to clarify the authority of general managers, five degrees of authority have been defined and are set forth here, together with groupings of functions for which such authority and responsibility have been assigned.

The five degrees of authority are defined as follows:

Degree 1—Complete Independent Delegation of Authority

Action or decision is initiated and executed independently by the general manager; general manager's reporting and accountability is therefore periodic and routine in nature.

Degree 2—Coordinated Independent Delegation of Authority

Action or decision is taken only after obtaining prior advice and counsel from the appropriate Executive Committee member or other appropriate company personnel (such as staff department directors, head of Washington Office, etc.). However, the divisional decision is not determined by such counsel and advice; authority, responsibility and accountability therefore rests entirely with the general manager.

Degree 3—Approval Prior to Decision for Action

The general manager obtains approval and authority from the Executive Committee, appropriate Executive Committee member or other appropriate company personnel before proceeding; authority, responsibility and accountability is thereby divided and shared.

Degree 4—No Authority, Responsibility or Accountability of General Manager

Initiation of action and complete decision is with the Executive Committee, appropriate Executive Committee member or other appropriate company personnel but decision is made only after consultation with the general manager or other appropriate divisional personnel.

Degree 5—No Authority, Responsibility or Accountability of General Manager

Complete decision is with the Executive Committee, appropriate

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Executive Committee member or other appropriate company personnel. The general manager shall refer decisions on items in this category to the appropriate company personnel and then may be expected in some instances to carry out the decision and be accountable for the follow-through.

Nothing stated herein limits the responsibility of the staff department directors to take the initiative in bringing to the attention of the divisions those trends, developments or incipient problems that might come to the directors' attention.

In all cases the degree of authority delegated should be construed to be within the framework of existing policy, either written or unwritten.

The items for which degrees of authority have been established are grouped by functions in order to facilitate the use of this document by the various central and divisional departments. The few items which are applicable to all functions are listed separately rather than restated under each department or function heading. All items listed refer only to divisional operations.

	General Manager Degree of Authority, Responsibility, Accountability
a. APPLICABLE TO ALL FUNCTIONS	
1—Expenses (within approved budgets)	1
2—Manpower count and assignment (within approved budgets)	1
3—Taxes—Federal income taxes	3
—Local property taxes	3
4—Central staff personnel assigned to a division	
—Recommendations for salary increase or bonus	3
—Approval of salary increase or bonus for top man	3
—Approval of salary increase or bonus below top man	4
b. GENERAL ADMINISTRATION	
1—Organization planning	2
2—Organization structure changes—Minor	1
—Major (requires approval of the President)	3
3—Creation of new titles	3
4—Promotions	
—Assistant General Manager	3
—Through level of department heads (except Assistant General Manager)	2
—All others	1
5—Maintain effective working relationships with other divisions, departments and top company management	1
6—Maintain adequate communications and accountability to the President and members of his office	1
7—Divisional employe communications	1

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General Manager
Degree of Authority,
Responsibility, Accountability

c. ACCOUNTING

1—Budgeting (within corporate budget policies)	2
2—Corporation accounting	5
3—Plant and cost accounting—application and scope	4
4—Plant and cost accounting—practice and procedure	4
5—Interdivision transfers of goods, and investment, within established policy	1
—Outside established policy	3
6—Inventory evaluation and devaluation	
—Minor (up to $10,000)	1
—Major (over $10,000)	4

d. ADVERTISING

1—Corporate—Involving a division	3
—Other	5
2—Product	2
3—Outdoor plant signs	3
4—Selection of advertising agencies	3

e. DOMESTIC ASSOCIATES AND AFFILIATES (in cooperation with DSA Division)

1—Corporate representation	3
2—Operational policy (where involved)	3
3—Development responsibility (where involved)	2

f. ENGINEERING

1—Capital budget—Major	3
2—Capital planning and appropriation forecasts—Major	3
3—Appropriation requests—Major	3
4—Capital retirement requests	3
5—Standardization	2
6—Process and technical decisions	2
7—Engineering-research program: scope, direction and priority	2
8—Contracts—construction, engineering-research, engineering-development: scope and selection	2
9—Spare parts inventory	1
10—Know-how exchange, purchase or sale	3

g. LAW

1—Legislation	4
2—Litigation (excluding patent litigation)	
—Initiation	3
—Prosecution and Defense	5

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LAW (cont'd)

3—Negotiation and drafting of agreements (Technical Contracts via Patent and Law Departments)	3
4—Antitrust	4
5—Corporate matters	5
6—Government contracts concerning legal matters	3
7—Legal and litigation matters and problems not otherwise listed	3

h. MANUFACTURING

1—Cost of goods sold budget	2
2—Purchases	3
3—Inventory management—raw materials, in process, finished goods	1
4—Inventory management—where more than one division is involved	2
5—Safety	2
6—Civic relations in divisional plant, laboratory, office locations	1
7—Public relations—Broad corporate	5
—Local limited situations	2
8—Traffic	3
9—Utilities management (power contracts, etc.)	1
10—Plant location at present plant sites	2
11—New plant sites	3

i. MARKETING

1—Sales budget	2
2—Sales volume and sales plan	1
3—Pricing, including trade practices	2
4—Product advertising and promotion	2
5—Product and field sales management	1
6—Reciprocity situations	3
7—Major sales contracts—No reciprocity involved	2
—Where reciprocity is involved	3
8—Sales and market development management, manpower count and assignment, project selection	1
9—Marketing research	2
10—Sales incentives, compensation plans, etc.	2

General Manager
Degree of Authority,
Responsibility, Accountability

MARKETING (cont'd)

11—Finished goods inventory management	1
12—Packaging and containers	2
13—Labeling	3

j. MEDICAL

1—Establish health standards and direct health maintenance of employes	3
2—Obtain, assemble and interpret toxicology data on products and disseminate such data	3
3—Select and supervise medical and industrial hygiene personnel	3
4—Maintain healthful working environment	3
5—Air and stream pollution control	3
6—Maintain relationships with appropriate governmental, research, public and private agencies in fields of industrial health, toxicology and pollution control	3

k. OVERSEAS (Applicable to all divisions except Overseas Division)

1—Sales	4
2—Investment	4
3—Contractual relations with foreign associates and affiliates	4-5
4—Sale of know-how and patents	3
5—Purchase of know-how and patents	3

l. PATENT

1—Applications and interferences (via Patent Dept.)	3
2—Licensing—domestic and foreign	3
3—Know-how exchanges	3
4—Trademarks	3
5—Technical contracts (via Patent and Law Depts.)	3
6—Litigation of patents, trademarks, trade names and copyrights	3

m. PERSONNEL

1—Salary administration—Within Salary Plan (except general increases)—Part I	1
—Within Salary Plan—Part II	1

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PERSONNEL (cont'd)

2—Labor relations—Clearly within broad corporate policy	1
—Outside broad corporate policy	3
—Union contract negotiations	2
3—Wage administration	1
—Wage increases	3
4—Bonus and stock options	4
5—Recruitment—Technical	2
—Non-technical	1
6—Management development and training	2

n. PUBLIC RELATIONS

1—Community relations—With public in respective local areas (except St. Louis)	1
—With local business (except St. Louis)	2
—With public and local business in St. Louis	3
2—Corporate relations	5
3—Product publicity—Selection of products and gathering of information	1
—Releasability of publicity outside Monsanto	3
—Product publicity personnel	3
4—Press, radio-TV relations—Non-local	3
—Local	2
5—Financial communications	5
6—Government relations—Federal (excluding Legislation)	3
—Community and State	1
7—Shareowner relations	5
8—Corporate publications (*Monsanto Magazine*, etc.)	5
9—Photography (stills, motion pictures, film distribution)	5
10—Charitable contributions	3

o. PURCHASING AND TRAFFIC

1—Major contracts involving legal and policy matters	3
2—Selection of suppliers	3
3—Packaging and containers (design only)	2
4—Labeling	3
5—Freight, rail, water transportation, etc.	3
6—Reciprocity situations	3

p. RESEARCH AND DEVELOPMENT

1—Research planning	2
2—Specific project selection	2

General Manager
Degree of Authority,
Responsibility, Accountability

RESEARCH AND DEVELOPMENT (cont'd.)

3—Outside research or development	3
4—Grants-In-Aid	2
5—Patent support and prosecution, budget and manpower	3
—Coordination and relations with Central Patent Department	3
6—Know-how exchange, purchase, sale	3
7—Central Research liaison	2
8—Government research liaison	2
9—Foreign research liaison (European technical representative thru R&E Division)	2

q. TREASURY

1—Credit, including credit to foreign and domestic subsidiaries, associated and affiliated companies, within reasonable limits and company policy	3
2—Capital procurement	5
3—Bank relations and control of bank balances (*)	5
4—Insurance (**)	5
5—Federal social security, withholding, excise and miscellaneous taxes	5
6—State income, franchise, intangible and miscellaneous taxes	5
7—State unemployment compensation	5
8—Investment of company working capital	5
9—Employes' Stock Purchase Plan	5
10—Second Employes' Stock Plan	5
*—For Lion Oil Company Division	3
**—Except for insurance applicable to a particular division	4

V. STAFF DEPARTMENT DIRECTOR

A. Positional Activities

The directors of staff departments are appointed by the President after consultation with the appropriate member of the Executive Committee. Each is responsible to a member of the Executive Committee and is on his staff.

In general, a staff department director shall:

1. Prepare over-all plans and company policies in his field of activity for approval and adoption.
2. Advise and assist all elements of the company in the field of his

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department without authority over any but the official members of his department.

3. Prepare and supply to the Budget Committee all necessary data for budgetary control.

4. Undertake such special assignments as may be given to him by the Board of Directors, the Executive or Finance Committees or the President.

5. Approve expenditures in his department within the budget assigned.

6. Report on the activities of his department to the President and others in conformance with "Distribution of Reports" outlined on page E-11.

7. Direct the efforts of employes in his department with continuous attention to human relations. He shall be responsible for all phases of personnel relations as related to such employes within the scope of established company personnel policies and shall coordinate all these activities with the Personnel & Administrative Services Department.

8. Prepare and submit a key personnel report to the President by November 1 of each year to carry out proper planning for replacements of key personnel and to assist in other aspects of organization planning.

9. Make annual reports on the activities of his department to the Executive Committee at times set by that committee.

B. Specific Duties

1. Accounting Department

The director of the Accounting Department is also the Controller. He is elected by the Board of Directors and shall be the principal officer in charge of the accounts of the company. He is responsible to the Vice President of finance and law through the Vice President of planning and control. Appropriate Accounting Department personnel, wherever located, are responsible to the department director but those at plant locations must obey the rules and regulations of the local management.

The director of the Accounting Department shall:

a. Keep full and accurate accounts of receipts and disbursements in books belonging to the company.

b. Render to the President and the Board of Directors, whenever they require it, an account of all his transactions as Controller and of the financial condition of the company.

c. If required by the board, give the company a bond in such sum and with such surety or sureties as shall be satisfactory to the board for the faithful performance of the duties of his office.

d. Establish, with the approval of the Vice President of finance and law and the Finance Committee, all accounting policies, procedures and practices and supervise them.

e. Prepare and interpret all financial statements and reports, pointing out inefficiencies where developed.

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f. Assist the Law Department with the preparation of registration statements for the Securities and Exchange Commission and prepare annual and monthly reports to the SEC.

g. Prepare income tax returns in conjunction with the Treasury Department.

h. Approve financial data in statements to be given out for publication.

i. Maintain continuous audit of accounts and records of the company wherever located and carry out a complete physical inventory once a year.

j. Make periodic checks of general cash funds and various payroll and cash funds and approve cash disbursements.

k. Cooperate with division management in preparation of estimates for capital expenditures, maintain adequate records of authorized estimated expenditures, and prepare semi-annual reports comparing actual new earnings with new earnings originally projected on projects costing over $250,000.

l. Prepare and disburse payrolls.

m. Invoice shipments to customers, except from some of the district offices by agreement with the marketing departments of the divisions.

n. Cooperate with the division general managers, staff department directors and Budget Committee in carrying out the budgetary control plan.

o. Carry out all accounting relations with subsidiaries and associated companies.

p. Furnish such reports to the Board of Directors and all other units of the company as they may from time to time require.

2. Law Department—Corporate Secretary

The director of the Law Department is also Secretary of the corporation, elected by the Board of Directors. He is responsible for all law and legislative activities, except those dealing with patents and trademarks. He reports to the Vice President of finance and law, and members of the law staff at all locations report to him.

The director of the Law Department shall:

a. Participate in contract negotiations with third parties.

b. Handle all legal and legislative matters, including:

(1) All court cases and proceedings before governmental regulatory and quasi-judicial agencies, except the U. S. Patent Office;

(2) Legal matters connected with the acquisition of new businesses and companies; where indicated, with businesses and affairs of subsidiaries and associated companies which do not

have lawyers on their staffs or on retainer, and with the formation and dissolution of subsidiaries and associated companies;

(3) Charter amendments, qualification to do business, issuance and retirement of securities and corporate debt, supervision of work of transfer agent and registrar for all classes of stock and handling of transactions with Securities and Exchange Commission and national securities exchanges;

(4) All functions of the Secretary of the corporation including preparation of notices, proxy statements, prospectuses and resolutions; attendance at and keeping minutes of directors', shareholders' and, where indicated, standing committees' meetings; corresponding with shareowners on corporate matters, other than financial; and maintaining safe custody of all basic and important corporate documents and agreements;

(5) Employment and supervision of outside counsel, except for patent and trademark work.

c. Counsel and advise officers of the company, committees and divisions and staff departments on all legal and legislative matters including:

(1) Contracts and agreements,
(2) Compliance with governmental laws and regulations,
(3) Forms of licensing arrangements,
(4) Tax questions and returns,
(5) Antitrust and fair trade practices,
(6) Third-party liability claims,
(7) Labor law,
(8) Labeling requirements.

d. Review and pass upon:

(1) Contracts, purchase orders, leases and agreements except (a) sales contracts entered into on approved forms and (b) purchase contracts and orders involving amounts less than limits established by the Law Department;

(2) Sales, purchase and acknowledgment forms.

e. Be responsible for coordination of all company real estate activity, except with respect to the production and marketing properties of the Lion Oil Company Division, and shall:

(1) Establish procedures so the Law Department is informed of all proposed real estate transactions and is kept informed, and make available experience and know-how from previous transactions;

(2) Keep current a central real estate record file;

(3) Supervise all company relationships with real estate agents;

(4) Coordinate pertinent political contacts at each property location.

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NOTE: Nothing in the assignment of real estate responsibility to the director of the Law Department shall relieve the divisions of responsibility for initiating and going forward with property matters in connection with division operations; nor is the director of the Treasury Department relieved of any responsibility for matters dealing with property taxes and property insurance except that the Law Department will assist the Treasury Department if counseling, court, legislative or administrative proceedings are necessary.

3. Marketing Services Department

The director of the Marketing Services Department is responsible to the Vice President of marketing. The functions of the department fall into four categories: advertising, marketing research, industrial design and marketing administration, each headed by a manager responsible to the director of the department. The divisional personnel in these functions are responsible to their respective directors of marketing.

The director of the Marketing Services Department shall, with respect to:

a. Advertising

(1) Coordinate all advertising activities of the company and have complete responsibility for corporate advertising.

(2) Assist, advise and counsel divisional advertising departments where necessary or desirable.

(3) Prepare annual over-all advertising budgets with the assistance of divisional directors of marketing and divisional advertising managers.

(4) Evaluate all advertising programs, advertising agencies and personnel.

b. Marketing Research

(1) Coordinate all market and marketing research in the company, assisting and counseling divisional marketing research departments where necessary or desirable.

(2) Conduct research into markets and marketing methods of interest to several divisions or to the company as a whole.

(3) Collect and analyze the short- and long-range marketing plans of the company for the Vice President of marketing.

(4) Assist the Vice President of marketing in establishing standards and controls to enable him to keep abreast of the company's over-all sales performance.

(5) Report to interested parties the possible impact of economic trends on Monsanto's sales and policies.

(6) Evaluate the effectiveness of the company's corporate advertising and assist and advise divisional advertising personnel in making similar evaluations of their advertising.

(7) Implement company-wide programs and meetings to improve communications, promote interdivisional cooperation and improved individual and group performance in marketing.

(8) Keep informed of the kinds and quality of services available from outside agencies, public and private.

(9) Help introduce to the company such new marketing research techniques as may prove applicable and effective.

(10) Evaluate all marketing research programs and personnel.

c. Industrial Design

(1) Design and produce at the request of the divisions or staff departments such advertising and promotion materials as literature, direct mail, displays, signs and exhibits.

(2) Advise the divisions and the Purchasing & Traffic Department in all design and appearance aspects of packaging.

(3) Be responsible for the design aspects of all uses of Monsanto's trademarks.

(4) At the request of the departments and divisions, advise on the design of buildings and interiors.

(5) Develop new forms and design new applications of the company's products based on their physical properties and appearance (rather than their chemistry).

d. Marketing Administration

(1) Coordinate the non-selling operating procedures of all sales offices to maximize efficiency, reduce cost and standardize clerical procedures within and between the operating divisions.

(2) Study and recommend the location of new sales offices and facilities and initiate studies related to the relocation of present marketing facilities in an effort to reduce costs and maximize efficiency based upon the marketing requirements of the operating divisions.

(3) Coordinate the clerical staffing of all sales offices, establish requirements based upon workload studies, and implement Monsanto's salary plan for clerical personnel based upon the standards established for each locale.

(4) Develop and implement, in conjunction with divisional marketing management, a sound distribution cost program.

(5) Develop and coordinate, in cooperation with the divisions, an over-all company program in the effective use of distributors as a marketing channel for Monsanto products.

(6) Keep marketing management advised on new developments in the use of distributors as a marketing channel for chemicals and plastics, and maintain information on distributors and agents used or available to the divisions.

4. Medical Department

The director of the Medical Department has general charge of all medical activities of the company and reports to the Vice President of manufacturing. He approves choice of medical officers at divisional locations but they are responsible to divisional management.

The director of the Medical Department shall:

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a. Standardize and carry out medical practices throughout the company and keep them up to date.

b. Obtain and disseminate toxicological data on the company's products and have charge of all outside work in this field.

c. Clear in advance any material to be published on toxicological phases of Monsanto's products.

d. Follow legislation on medical matters in cooperation with the Vice President of finance and law and/or the Law Department.

e. Make regular industrial hygiene inspections of the various plants and submit reports to divisional and plant management.

f. Coordinate the air and stream pollution aspects of waste disposal activities.

5. Patent Department

The director of the Patent Department is responsible for all patent and trademark activities. He reports to the Vice President of research, development and engineering, and personnel of the patent staff at all locations report to him.

The director of the Patent Department shall:

a. Prepare, prosecute and obtain all patents, trademark and copyright registrations.

b. Carry out all litigation involving patents, trademarks, trade names and copyrights.

c. Prepare all contracts and licenses pertaining to rights under patent, trademarks and copyrights and technical information, whether such rights are being acquired or conveyed. Non-technical aspects of such contracts and licenses shall be coordinated with the Law Department.

d. Approve any technical information prior to its being published or given out.

e. Assist any unit of the company at its request on any kind of negotiations with others, particularly when technical matters are concerned.

6. Personnel & Administrative Services Department

The director of the Personnel & Administrative Services Department is responsible for three areas of activity, grouped under the general headings of personnel relations, office management and Research Center administration. He reports on all general personnel matters to the Vice President of oil and gas operations; on labor relations and office management activities to the Vice President of manufacturing; and on Research Center administration to the Vice President of research, development and engineering.

a. The director of Personnel & Administrative Services has personal responsibility for:

(1) The development of Monsanto's human resources especially in the management area through the establishment of optimum educational and developmental activities, working with executive and divisional management and periodically reviewing programs undertaken.

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(2) Long-range plans in the field of technical personnel* recruiting, selection, development and administration, working closely with the divisions and the Vice President of research, development and engineering, and in the field of marketing personnel with the Vice President of marketing.

(3) The approval of all new personnel policies and changes in existing ones.

(4) The coordination and evaluation of all personnel programs throughout the company.

(5) The following specific programs: interdivisional residential development courses and outside management courses; the summer technical personnel program; academic and industrial leave programs; the Key Scientist and Technologist Advancement Plan. (Approval of participants in the leave programs and Advancement Plan rests with the Vice President of research, development and engineering.)

b. He serves as chairman of the Retirement Plan Committee and the Salary Committee, and as a member of the Fellowship and Scholarship Committee, the Housing Committee and the John and Olga Queeny Educational Foundation.

c. He is, through the assistant director of Personnel & Administrative Services, responsible for direction of corporate personnel relations activities and shall:

(1) Formulate, revise and provide uniform interpretation of all personnel policies and practices.

(2) Assist the divisions and staff departments by providing advice, counsel and guidance in all areas of personnel management; assist in the selection, placement and development of staff employes doing personnel work wherever utilized.

(3) Coordinate personnel relations activities with all staff departments.

(4) Administer company-wide the pension and group insurance plans and programs, the salary plan, service awards, and other matters affecting employe compensation, benefits or practices.

(5) Formulate and interpret labor relations policy and practices, coordinate action, and advise management throughout the company; in addition, assist divisions and locations in planning, coordinating and implementing labor relations training and development.

**Where used in this Management Guide, "technical personnel" is defined as persons with college degrees who majored in chemistry, physics, mathematics, biology, bacteriology, geology, entomology, related sciences and engineering (chemical, mechanical, civil, electrical, petroleum, etc.) related to the chemical and petroleum industries, in whatever capacity utilized. All other persons are considered non-technical.*

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(6) Coordinate college recruitment of technical personnel throughout the company and, at those colleges and universities agreed upon with the divisions, carry out screening interviews and send likely candidates to divisional centers for final decision.

(7) Coordinate and evaluate programs of personnel selection, indoctrination and development for both salaried and hourly employes throughout the company; study and develop new techniques, catalyze their introduction and furnish continuing advice and counsel to all locations on these activities.

(8) Formulate safety policy and practices and establish safety standards, coordinating these matters throughout the company; furnish advice and counsel to all locations on safety and fire protection matters; administer company-wide safety programs.

d. He is, through the General Offices manager, responsible for direction of office management activities and shall:

(1) Provide office services and building and grounds maintenance for the Creve Coeur site.

(2) Furnish staff assistance to other company offices on office management matters.

(3) Conduct or coordinate methods and procedures studies on a company-wide basis to effect improvements and cost reductions in clerical activities.

(4) Plan and coordinate the company's forms control, records management, work simplification and work measurement programs.

(5) Plan and supervise the operation of the company-wide communications systems, including telecommunications and leased long-distance telephone circuits.

(6) Recruit all clerical, stenographic and other non-exempt personnel for the General Offices and Research Center. Administer certain compensation and benefit programs for this group, coordinate employe appraisals, benefits, practices, etc.

(7) Plan, coordinate and administer the General Offices safety program.

(8) Plan and coordinate the allocation of space, maintaining appropriate physical and decorative standards, and furniture and equipment standards.

(9) Supervise purchasing activities for the General Offices, coordinating with the Purchasing & Traffic Department.

(10) Develop and maintain a community relations program for the General Offices and Research Center locations with local governmental and civic groups.

e. He is, through the administrative director of the Research Center, responsible for the administration of the Research Center (now under construction) and shall:

(1) Develop a Research Center organization to insure adequate service to divisional research departments.

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(2) Determine the requirements (both space and personnel) for each phase of service by working with the Research Center's planning committee, research directors and architects so that proper facilities are provided and duplications eliminated.

(3) Approve design information developed by the architects for the central areas and general facilities.

(4) Arrange for cost estimates for activities beyond the scope of the original Research Center appropriation and report such information to the Vice President of research, development and engineering.

(5) Maintain effective contact with the technical programs in the divisions and technological developments elsewhere, to guide plans for technical work in analytical, instrumentation and technical information programs.

(6) Report to the Vice President of research, development and engineering and to the research directors on the progress of the Research Center facilities and organization.

7. Public Relations Department

The director of the Public Relations Department is responsible to the President. All members of the public relations staff, wherever located, are responsible to the director of public relations. Members of the public relations staff assigned to work with divisions have a primary responsibility to the director of public relations and a secondary responsibility to the division general manager.

The director of the Public Relations Department shall:

a. Be responsible for furnishing factual information on Monsanto, within the bounds of the company's security policy, to all public information outlets. He shall clear all material with pertinent divisions and departments and, additionally, make such factual information on Monsanto available to employes promptly by use of proper internal media.

b. Be responsible for editing and publishing *Monsanto Magazine*.

c. Provide press, radio and TV product publicity service for the divisions and for the company, working in coordination with marketing plans.

d. Assist the President and other members of the Executive Committee in the planning and formulation of special communications, speeches and letters.

e. Keep the President, as the chief public relations officer of the company, informed on matters of public opinion concerning Monsanto.

f. Acquire information for and produce shareowner publications, such as the *Annual Report and Review*, quarterly statements and dividend stuffers; plan the annual meeting of shareowners.

g. Provide assistance and counsel in designated areas of employe communications and community relations.

h. Be responsible for acquiring, clearing and distributing photographs and maintaining an up-to-date file of photos.

i. Produce and distribute corporate and multidivisional motion pictures.

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8. Purchasing & Traffic Department

The director of the Purchasing & Traffic Department is responsible for the purchasing and movement of all goods, materials and supplies. He reports to the Vice President of manufacturing. The local purchasing and traffic agents and buyers as well as the central purchasing and traffic staff members report to him. He is responsible for staffing these positions. The divisions may appoint a liaison officer.

The director of the Purchasing & Traffic Department shall:

a. For Purchasing:

(1) Purchase all goods, materials and supplies and have same available at proper points at times and in quantities agreed upon with the respective divisions.

(2) Submit to the Law Department for review all contracts and purchase orders except those involving less than limits established by the Law Department.

(3) Submit to the Vice President of manufacturing for approval all contracts amounting to $100,000 or more and which include also a term of more than one year, or a provision for liquidated damages or penalties, or which lack a price protection clause.

(4) Develop new sources of supply, substitute raw materials, price trends and future availability studies—tieing in closely with the divisions.

(5) Keep various units of the company informed on the following:

(a) Package specifications required under Interstate Commerce Commission regulations for the transportation of all hazardous commodities and by Consolidated Freight Classification Committee for non-hazardous commodities;

(b) New developments in packages, packaging machinery and associated activities;

(c) Opportunities for effecting cost reduction in packaging.

(6) Consult with and assist, in advisory capacity, those divisional personnel having responsibility for implementing container improvements.

(7) Keep various units of the company informed on all labeling regulations and related federal, state and municipal laws, and supervise the divisions' compliance with them.

b. For Traffic:

(1) Arrange for the movement of all goods, materials and supplies at the lowest cost applicable to the required transportation service. Appropriate traffic personnel at plant locations performing this function are responsible to the director of the Purchasing & Traffic Department through the general traffic manager. Rates, rules and regulations covering all phases of transportation are described in exacting terms, and their interpretation is solely the responsibility of the director of the Purchasing & Traffic Department.

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(2) Conduct all negotiations with transportation companies and car leasing companies for rates, track leases, tank cars, tank trucks, all water movements and other transportation subjects.

(3) Supply correct description for bills of lading.

(4) Provide routing via most economical mode of transportation consistent with service and most efficient distribution of tonnage.

(5) Effect payment of proper freight charges.

(6) Plan and arrange for efficient and adequate storage and distribution of finished goods in the sales warehouses throughout the nation.

(7) Administer all transactions with the Interstate Commerce Commission and state regulatory bodies with regard to transportation matters.

9. Treasury Department

The director of the Treasury Department is the Treasurer of the company and is elected by the Board of Directors. He reports to the Vice President of finance and law or, in his absence, to the President. Managers of banking, insurance, credit and taxes report to the Treasurer.

The director of the Treasury Department shall:

a. Have and assure the safe custody of the funds and securities of the company and deposit all monies and other valuable effects in the name of and to the credit of the company in such depositories as may be designated by the Board of Directors.

b. Disburse the company's funds when properly authorized by vouchers prepared and approved by the Controller and invest funds of the company when approved by the Board of Directors or the Finance Committee.

c. Render to the President and the Board of Directors, whenever they shall require it, an account of all his transactions as Treasurer.

d. If required by the Board of Directors, give the company a bond in such sum and with such surety or sureties as shall be satisfactory to the board for the faithful performance of the duties of his office and for the restoration to the company, in case of his death, resignation, retirement or removal from office, of all books, papers, vouchers, money and other property of whatever kind in his possession or under his control belonging to the company.

e. Be responsible for tax matters, including the filing of tax returns. Problems involving tax law or legislation shall be coordinated with the Law Department.

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f. Control all insurance activities, except group insurance, collaborating where suitable with the staff departments and divisions. These activities include:

(1) Analysis and evaluation of exposures to loss.

(2) Determination of extent to which such exposures should be protected by insurance.

(3) Administration of a program for purchase of insurance to cover loss of physical assets from such hazards as fire, windstorm, explosion and kindred risks, including the loss of earnings, and to cover legal liabilities and liabilities assumed under contract for injury to persons and damage to property of others.

(4) Preparation, adjustment and collection of claims for losses involving properties and earnings and, in cooperation with the Law Department, in settlement of third-party liability claims, including Workmen's Compensation.

(5) Maintenance of a property loss prevention program to supplement the service that is furnished by the insurance carriers, cooperating with the division general managers, plant managers and staff department directors.

g. Have company-wide responsibility for domestic and overseas credits and collections.

h. Administer employes' stock purchase plans.

VI. OTHER POSITIONS

A. Manager of Washington Office

The manager of the Washington Office is appointed by the President and reports directly to the President.

The Washington Office manager shall:

1. Advise and assist all elements of the company in their contracts with the departments of the U. S. Government and others in the Washington area. Sales to the U. S. Government are outside his jurisdiction.

2. Maintain such contacts with the Government as are necessary for Monsanto's interest.

3. Be apprised in advance of contacts which other personnel make with the Government and assist when necessary in arranging such contacts.

4. Be a member of the Policy Committee for Government Affairs and advise this committee on legislation and on other matters of interest to Monsanto.

5. Keep abreast of the research negotiations of the special projects department and the divisions with the U. S. Government.

6. Make a monthly report to the President, the Executive Committee and the Corporate Secretary.

B. Director, Civic Affairs

The director, civic affairs has company-wide responsibility for each of the areas of interest and activity outlined below; for research in these areas; for keeping all concerned informed of developments in such areas and for recommending policy and action.

The major responsibilities of the director, civic affairs are:

1. Employe Political and Governmental Activity

   a. Assume full responsibility for developing, on a non-partisan basis, an effective company-wide program of employe participation in political action, under policy as established by the Policy Committee for Government Affairs. Work through divisions and staff departments in developing courses and course leaders and follow up regularly to see programs are carried out.

   b. Be alert to opportunities for the company to communicate effectively with employes on political issues. Upon clearance with the chairman of the Policy Committee for Government Affairs, he will follow through with Public Relations Department on preparation of such communications.

   c. Review policy from time to time as conditions change and recommend revisions.

   d. Develop company-wide program for recognition of employes for outstanding work in political or governmental activity.

2. Legislation

   a. Coordinate his activities closely with the Law Department and the Washington Office. Primary responsibility for legislative matters is in the Law Department; the Washington Office is concerned with federal aspects of legislation.

   b. State:
   Arrange with plant and other location managers to keep him and the Law Department informed on legislation pending in state assemblies which may affect Monsanto. Advise the Law Department where action seems indicated. Where action is to be taken, advise the location manager on how to organize political effort, working through local people. Keep abreast of pending legislation until the situation is cleared up.

   c. Federal:
   Assist the Law Department and the Washington Office, as requested, on any federal legislation. Clear with the Washington Office before any contact is made with members of Congress. Serve as adviser to both offices on, and be particularly alert to, legislation in his particular field of competence.

3. State and Federal Commissions and Agencies
   When requested, assist company spokesmen in preparation of material and advise on manner of presentation for company appearances before state or federal commissions or agencies.

4. National and Local Issues Affecting Business
   Study and evaluate national and local issues affecting business and recommend company, industry or community action or counteraction if indicated. Clear policy and proposed action with the Policy Committee for Government Affairs and the Law Department before proceeding. Make recommendations to and coordinate the activities of Business Climate Committees which are set up in each state in which the company maintains an operating unit.

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5. Public Appearances

Serve as company spokesman, or as a private citizen, where a definite purpose would be served, on public forums (radio, TV, town meetings) on issues in which company interest or the principles of good government are involved, clearing policy prior to such appearances with the department or division most concerned.

6. Policy Committee for Government Affairs

Serve as a member of the Policy Committee for Government Affairs.

The director, civic affairs reports to the Vice President of finance and law, who is chairman of the Policy Committee for Government Affairs. He has supervisory responsibility for such persons as may, temporarily or permanently, be designated to assist him.

C. Division Director of Development

The director of development is appointed by the general manager with the approval of the Vice President of research, engineering and development, and reports to the general manager.

In the Overseas Division, the director of development is responsible primarily for the development of the various overseas subsidiaries in all their phases and for the study and recommendation of new projects to be entered into either with present subsidiaries or allied companies or under completely new conditions.

In the Research & Engineering Division, the director of development is responsible for keeping his general manager informed on new processes, products, applications and ideas from outside which may be of value to the company. Those new fields chosen for further investigation shall be under his direction until such time as they are reassigned to another unit of the company for detailed follow-up work.

The other directors of development have responsibility for commercial chemical development and technical service with degrees of emphasis indicated by the varying lines of organization.

In general, the director of development shall:

1. Establish new uses for old or new products with sufficient customers to make certain of their value and methods of use, then turn the product over to the sales department.

2. Develop with the research department new products to satisfy existing new demands, solve new problems or improve old solutions.

3. As instructed by the general manager, render service and advice on technical matters within the company and to consumers, handle complaints and technical inquiries.

4. Maintain close contact with the chemical and chemical consuming industries to foresee trends, new possibilities, make market surveys.

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D. Division Director of Engineering

The director of engineering in a manufacturing division is appointed by the general manager with the approval of the Vice President of manufacturing, and is responsible to the general manager. Responsible to him are the associate and assistant directors of engineering.

The director of engineering in a manufacturing division shall:

1. Handle studies for and construction of plant expansion requirements and improvements in plant processes.

2. Cooperate with and exercise budgetary control over outside engineering and construction firms when they are being employed.

3. Work closely with the Research & Engineering Division on any divisional projects assigned to them and where agreed upon, work on engineering research projects set up by the Research & Engineering Division.

4. Evaluate, design and construct plants for foreign subsidiaries and/ or supply engineering assistance to them as requested by the Overseas Division.

The director of engineering, Research & Engineering Division, is appointed by the general manager of that division with the approval of the Vice President of research, development and engineering, and is responsible to the general manager.

The director of engineering, Research & Engineering Division, shall:

1. Do process engineering research, supported by fundamental engineering research, to investigate the application of new equipment and engineering techniques to new and existing processes.

2. Provide all types of engineering consulting services as required.

3. Direct the design and construction of new facilities, evaluation of new processes, new equipment or new enterprises and plant site studies, as requested.

4. Maintain a program of governmental, academic and industrial contacts, both here and abroad, to keep the company informed of engineering advances.

5. Organize and operate, whenever economical or advisable, facilities for the manufacture of equipment items for use in the company's operations, and when advisable create an organization to construct chemical plant facilities for the company or for its customers.

6. Create a Monsanto disaster emergency plan in consultation with pertinent divisional and departmental personnel.

7. Collaborate with research, development and other technical departments in the training and development of the company's engineering personnel.

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E. Division Director of Manufacturing

The director of manufacturing is appointed by the general manager with the approval of the Vice President of manufacturing, and is responsible to the general manager. Divisional plant managers report directly to the director of manufacturing.

The director of manufacturing shall:

1. Take every possible means to keep costs at the lowest level, improve production techniques and plan new production developments, working closely with research and development directors.

2. Maintain the budget set by divisional management and improve upon it wherever possible.

3. Authorize capital expenditures within such limits as are prescribed by the general manager.

4. Regulate production to the needs of sales and inventory, keeping the latter as low as safely possible.

5. Be responsible for direct handling of labor relations and personnel in the plants in close cooperation with the plant managers and the Personnel & Administrative Services Department.

F. Division Director of Marketing

The director of marketing is appointed by the general manager after consultation with the Vice President of marketing, and is responsible to the general manager. Divisional directors of sales report directly to the director of marketing.

The director of marketing shall:

1. Take the initiative in the establishment of long-range sales objectives of the division with the collaboration of other deparment heads.

2. Arrange for the development of detailed sales programs designed to maximize profits, improve competitive positions, reduce distribution costs and reach established sales goals.

3. Review and approve sales policies and strategies and pricing policies and strategies for all products to insure that short-term operations are in accord with long-term profitability and do not jeopardize other phases of the company's operations.

4. Consult with the director of manufacturing so that production rates and inventories are geared as closely as possible to actual sales needs.

5. Review and approve sales and expense budgets and evaluate periodically the performance of all sales activities in relation to sales goals, budgets and costs and take such corrective actions as are required.

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6. Establish an effective plan of organization and methods of control that will provide sufficient time for carrying out the full line of responsibilities and that capitalizes on the potential of each individual.

7. Provide leadership to all levels of the sales organization in establishing a sound basis for each individual's self development and in making certain that compensation is in line with responsibilities and performance.

8. Develop effective working relationships with other department heads and the general manager so that every significant sales development can be translated into an appropriate course of action and every significant development in other departments can be translated into appropriate sales action.

9. Develop relationships with key customers that will provide maximum long-term participation in their available business.

10. Keep the general manager and Vice President of marketing fully informed on sales results and future plans of operation.

11. Establish a system of communications with sales management and supervisory personnel that will keep them informed of over-all divisional sales objectives, results and problems.

12. Train sales personnel so as to have an adequate supply of sales executive talent for replacements up through and including the marketing director's position.

G. Division Director of Personnel

The director of personnel in a division is appointed by and is responsible to the general manager of the division. The director of personnel is responsible for advising the general management and furnishing functional guidance to all line and staff departments to accomplish the selection, development and maintenance of an effective personnel organization for the division. He is charged with the interpretation, application and coordination of personnel and administrative service policies and programs on a division-wide basis. He is responsible for periodic review and evaluation of divisional personnel relations and administrative service functions to assure the efficient operation and maintenance of personnel services for an optimum return on the personnel investment.

The director of personnel shall:

1. Establish and conduct a divisional headquarters personnel office for the administration of personnel relations matters.

2. Develop, coordinate and administer a division-wide program for salary administration.

3. Formulate or receive and recommend for approval proposals for policies on personnel relations and administrative services.

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4. Guide and assist all line and staff departments in plant and office locations in the coordination and implementation of the following activities as may be required outside of the line responsibility assigned to the various functional departments, plant managers and district office managers:

a. Employment practices,

b. Training programs,

c. Management development programs,

d. Salary administration,

e. Employe benefit plans,

f. Employe relations,

g. Labor relations,

h. Medical services,

i. Safety policies,

j. Community relations,

k. Administrative methods and systems,

l. Charitable contributions,

m. Government security and clearances.

5. Maintain a close liaison with the company's Personnel & Administrative Services, Medical and Public Relations Department staffs located at St. Louis to assure effective coordination of the divisional functions with broad policies of the company and activities within other divisions.

6. Prepare and submit for approval an annual budget to cover the operating expenses of his department.

7. Administer funds allotted under the approved annual budget or recommend any unusual capital or expense expenditures that may be required and justified outside the scope of approved budgets.

8. Receive, review and recommend for approval, expenditures under the company's transfer and housing policy.

9. Receive, review and recommend for approval, expenditures under the company's tuition payment program.

H. Division Director of Production and Exploration (Lion Oil Company Division Only)

The director of production and exploration (vice president and general manager of production and exploration, Lion Oil Company Division), with the approval of the Vice President of manufacturing, is appointed by that division general manager, and is responsible to him. Regional managers, staff managers of the department and the general superintendent of the gas-gasoline and pipeline department report to the director of production and exploration.

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The director of production and exploration shall:

1. Be responsible for the discovery, acquisition and exploitation of oil and gas reserves.

2. Analyze and appraise regularly and systematically the effectiveness of all production and exploration activities and take corrective action when needed.

3. In addition to acquiring as many new reserves as possible, see that the present ones are utilized to the best possible advantage.

4. Buy, sell and trade crude oil, natural gas and products from the natural gasoline plant to the best profit.

5. Approve, by delegation from the president and general manager of the division:

a. Capital Expenditures

(1) Not restricted by the divisional president and general manager and covered by approved budgets up to $150,000;

(2) Drilling of unbudgeted wells costing less than $150,000 where funds are available from an uncommitted portion of an approved budget;

(3) Minor items up to $15,000;

b. Operating Expenditures

Unbudgeted items of maintenance and operation up to $25,000 for production activities and $10,000 for others;

c. Acquisition Expenditures

(1) Acquisition of oil and gas leases up to—

$100,000 for any one block of leases,
$100,000 for any semi-proven lease;

(2) Commitment for drilling of wells up to $150,000 provided there are not more than two outstanding. Authority of the divisional president and general manager is required on purchase of any producing property or mineral interest or on farmouts;

(3) Dry hole and bottom hole contributions up to $15,000;

(4) Disposition of real estate or leaseholds, sales of surplus materials, settlement of claims up to $25,000.

I. Division Director of Research

The director of research is appointed by the general manager with the approval of the Vice President of research, development and engineering, and is responsible to the general manager. Divisional associate and assistant directors report to the director of research.

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The director of research shall:

1. Improve constantly, by research, present products and processes; bring out new products and develop processes for them; through pilot plant operation, supply engineering with data for design and construction and supply commercial development or sales sample quantities for testing and carrying out application work.

2. Set proportions of budgetary allowance to be spent on the various research categories listed above and approve expenditures within the budget established by the general manager.

3. Facilitate utilization of products of other divisions as raw materials in his division, particularly where excess capacity is available.

4. Notify, in summary form, all directors of research, the director of development of the Research & Engineering Division, and the Patent Department, on final reports completed in his laboratories.

5. By studying technical literature and through technical contacts, develop new possibilities for manufacture or use.

Work on products of another division must not be inaugurated until cleared by the general manager concerned or, failing agreement, with the Vice President of research, development and engineering.

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SECTION E

CORPORATE POLICIES AND PROCEDURES

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CORPORATE POLICIES AND PROCEDURES

I. ACQUISITIONS

Caution should be exercised in handling inquiries regarding Monsanto's interest in the acquisition of another company, particularly as to the company's liability for a "finder fee."

The method of handling investigation of possible acquisitions is guided by the circumstances surrounding each individual case. In general, however, each division will carry out investigations of those companies that fall within its orbit of interest; investigations of companies that fall outside the general area of interest of any one division will be carried out by the Research & Engineering Division.

The clearing house on files concerning domestic acquisitions is maintained by the development department of the Research & Engineering Division. This does not require that a complete set of files be maintained with the development department on each company studied but rather that the development department, at a time compatible with security, be notified as to the location of these files.

The President shall be informed of all acquisition studies before contact is made with anyone employed by or representing the company being considered for purchase. Also, the matter shall be submitted to the director of the Law Department for study of possible antitrust implications.

II. APPROPRIATION REQUESTS AND FORECASTS AND RETIREMENT REQUESTS

The format for these requests and forecasts is provided by the Controller's office.

The procedure for handling requests and forecasts, the number of copies required, and practices for approving such requests and forecasts are outlined under "The Executive Committee," page C-2.

A. Appropriation Requests

Requests for capital appropriations for fixed property or investment in other companies, for (1) new projects, (2) replacements, (3) overruns, (4) underruns or (5) changes in scope, requiring approval of the Executive Committee and / or the Board of Directors shall follow the outline provided by the Controller's office.

Terms listed above are defined as follows:

Overrun is the additional expenditure, beyond the original appropriation, for any purpose necessary to achieve the original project objectives.

Underrun is any fund, already approved in the original appropriation, the expenditure of which is unnecessary to achieve the original project objectives.

Change in scope is a change of the objectives of the original project which will require additional expenditure beyond the original appropriation.

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Whenever it appears that an overrun or underrun or change in scope will require additional funds beyond the amount approved, a supplemental request must be submitted where the change is:

1. $100,000 or over;

2. Less than $100,000 but five per cent or greater of the approved project and the amount is beyond the authority of approval of the general manager.

The supplemental request requires the same type form as the original request and should recite briefly the points covered in the original request and explain the reasons for requesting additional funds.

B. Appropriation Forecasts

In order to have the best possible estimate of future total company capital expenditures, appropriation forecasts are prepared for all capital expenditures anticipated in the two years forward which are not covered by appropriation requests. These forecasts apply to both fixed and working capital and include investments in and advances to subsidiaries, associated and affiliated companies, whether such investments or advances be in cash or in product value.

Individual forecasts are required for projects of $250,000 and over. The information and format required for these forecasts, as well as forecasts for projects of lesser amounts, are outlined by the Controller's office.

C. Retirement Requests

Requests for retirement of fixed property having an undepreciated value requiring the approval of the Executive Committee and/or the Board of Directors must include the information and follow the format outlined by the Controller's office.

Where applicable, retirement requests are attached to appropriation requests. Overruns and underruns of retirements are subject to the same requirements for approval as those established for appropriation requests.

III. APPROPRIATION REQUEST PROJECT PERFORMANCE REPORTS

The results of actual operation of completed projects as approved under appropriation requests are reported for all appropriation requests for $250,000 or more of new fixed capital which indicate new earnings and/or cost savings. These reports show a comparison of actual results with those estimated in the appropriation request.

Subsequent follow-up reports are prepared for those projects where the original report indicates the project failed to earn 80 per cent or more of gross profit predicted in the appropriation request and which involves $1,000,000 or more of new fixed capital.

IV. ASSOCIATED COMPANIES—POLICY

A. General

In those areas where Monsanto competes with an associated company,

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Monsanto treats that company as it does any other competitor. In those areas where Monsanto competes for the business of an associated company, Monsanto treats the associated company as it does any other customer.

B. Production of Chemical Raw Materials

As a general policy, Monsanto's domestic subsidiaries and associated companies shall have the first right of refusal for the production of chemicals which would be substantially captive and comprise an integral part of a subsidiary's or associated company's business; on the other hand, such first right of refusal will not be automatic but rather each instance shall be considered on a case-by-case basis.

C. The Chemstrand Corporation

The Chemstrand Corporation is owned in equal shares by Monsanto and American Viscose Corporation. It was established to produce and sell synthetic fibers. Nylon and Acrilan are its first two fibers.

Neither Monsanto nor Viscose is precluded from competing with The Chemstrand Corporation in any field, if such action seems to be desirable for Monsanto or Viscose. However, Monsanto and The Chemstrand Corporation have entered into an agreement which is summarized as follows:

"When either Monsanto or Chemstrand has available technical information relating to the field of the agreement which it does not desire to utilize in the manufacture of fibers, it will advise the other party, and if the other party is interested in receiving such technical information, such information will be made available to it; provided neither party will be required to transmit information which it is not free to transmit. If after receiving such technical information the other party desires to use such information on a commercial scale, the parties will negotiate the terms and conditions for such use on a non-exclusive basis, but there shall be no obligation on the part of either party to enter into such a licensing arrangement."

V. BUDGETARY CONTROL PLAN

A. Operating Forecasts—First Year

Each division and staff department, in the fall of each year, prepares a forecast of income and a budget of selling, administrative, research, engineering and patent expenses (SARE expense) for the ensuing calendar year (designated the Operating Forecast—First Year).

Forecasts and budgets of the divisions and staff departments are consolidated by the Accounting Department and reported to the Budget Commitee in December prior to the ensuing year. On approval by the Budget Committee, the forecast and budget is reported to the President and Executive Committee for final action. On final approval, SARE budgets for the Operating Forecast—First Year remain fixed and in effect throughout the year unless revised with the approval of the Budget Committee.

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All interim revisions to approved SARE budgets for the Operating Forecast—First Year of the divisions and staff departments are submitted on a standard form, "Request to Revise SARE Budget." The intent of this form is to provide a formal and orderly manner of revising SARE budgets and to assure complete estimates of expense prior to approval of revisions. Particularly, the form requires an estimate of expense at a full annual rate as well as the amount to be added to the Operating Forecast—First Year budget. Often a revision may require only a modest addition to the current year's budget but results in a substantial increase in the annual rate of expenditure.

Quarterly reports of actual SARE expenses in comparison with budget are prepared for the review and action of the Budget Committee which reports these comparisons to the President.

Also, the Operating Forecast—First Year is reported in Budgetary Control data form. These data segregate the operations of each division into product groups. Data are reported for each quarter of this year.

Budgetary Control data are reported to facilitate corporate understanding of the various revenue-producing areas of the company below division levels, i.e., the product groups. A product group is usually, but not necessarily, made up of related products selected by division management for certain common characteristics.

Various data reported for the product groups include:

Sales amount,
Gross investment amount,
Income after tax amount,
Per cent return on investment,
Income as a per cent of sales,
Dollar of sales per dollar of investment.

Actual performance of product groups for each quarter is reported to the Budget Committee. All data, forecast and actual, are graphed on display charts which may serve as a basis for review of each division with the Executive Committtee.

B. Operating Forecast—Second Year

By February 1 of the Operating Forecast—First Year each division and staff department prepares a forecast of sales and income and estimates of SARE expenses for the calendar year subsequent to the Operating Forecast—First Year.

The Operating Forecast—Second Year is prepared for the total year only and not by quarters. Projections of SARE expenses used do not have authorization, real or implied, for actual expenditure.

The Operating Forecast—Second Year is also prepared by product groups.

C. Use in Long-Range Plan

The Operating Forecast—First Year as approved at January 1 and the Operating Forecast—Second Year as submitted at February 1 are used for the first two years of the five-year forecast for the Long-Range Plan (see "Corporate Planning," page C-7).

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D. Quarterly Revisions

By March 1 of the Operating Forecast—First Year each division revises sales and income for significant changes for each of the remaining calendar quarters of such year. Also, at the same time, SARE budgets are revised for any approved changes.

By June 1 and September 1, respectively, each division and staff department revises the Operating Forecast—First Year for each of the remaining quarters for significant changes. Also, by these dates, each division and staff department revises the Operating Forecast—Second Year. The latter revision covers the whole calendar year and is not prepared by quarters.

All revisions include revision of product group data.

E. Significant Changes

As indicated above, forecasts are revised for significant changes. To facilitate such revisions the term "significant change" has been defined for company-wide use.

Objectives in developing the definition were (1) to insure that estimates of future company performance and cash position reflect current and up-to-date knowledge, and (2) to permit the assembly of such estimates at a minimum of effort and expense.

To serve these corporate objectives, a certain number of cents-per-share earnings was agreed on as the maximum allowable deviation in company forecasts.

This deviation has been translated into dollars of earnings before tax and allocated to the company's product groups relative to their size. These maximum allowable deviations by product groups are in the hands of the divisions. The amount as determined for each product group represents the minimum amount of foreseeable change which requires a revision of the forecast of each product group.

By and large, as SARE expenses are separately controlled, the amount determined for each product group applies to changes foreseen in sales and/or cost of goods sold.

If the established amounts for each product group are judged too broad for purposes of *intra*division control, each general manager is free to revise forecasts for smaller amounts as he deems necessary.

In the control of SARE expenses the divisions and staff departments are required to furnish explanations of underruns and/or overruns amounting to five per cent or more of SARE budgets when such underruns and/or overruns exceed $1,000.

The routine of procedures and time schedules, which may change from time to time as required, is coordinated by the Accounting Department. Questions regarding procedure in greater detail should be directed to that department.

VI. CAPITAL EXPENDITURE FORECASTS

In order to forecast capital expenditures, all projects are classified as follows:

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A. Group I—Capital outlays of $250,000 and over:

Appropriation forecasts (on forms available from the Accounting Department) are prepared on such projects and submitted to the Executive Committee for approval; whenever possible, this is done on an individual project basis; where circumstances warrant, however, appropriation forecasts can be submitted on a blanket basis.

B. Group II—Capital outlays from $100,000 to $250,000:

This class of project does not require appropriation forecasts. The divisions, however, must prepare a listing of contemplated expenditures, identifying them by name wherever possible and indicating whether they are "must" or "deferrable" projects. Where necessary, projects can be identified on a blanket basis. These listings receive quarterly review by the Executive Committee.

C. Group III—Capital outlays of $100,000 or less:

No appropriation forecasts or listings are prepared for Group III projects; monthly lump sums already established by the Executive Committee for each division to cover projects in this classification are used.

These forecasts apply to both fixed and working capital and to advances to or investment in subsidiaries, associated and affiliated companies, whether such investment be in cash or in product value.

VII. CAPITALIZATION OF LEASES

Leasing of a facility:

A. The capital value of which can be determined readily, or

B. The capital value of which is in excess of $100,000, or

C. Which commits Monsanto to a predetermined amount of capital payment to the lessor, or

D. Which cannot be cancelled on up to two years' notice,

requires inclusion of the capital value of the facility in the division investment for purposes of determining divisional rates of return.

Approval of such lease agreements requires Executive Committee action if the capital value is $250,000 or less; above $250,000, approval of the Board of Directors is required.

VIII. CIVIC RELATIONS

Division general managers, production managers and plant managers and their principal assistants should become acquainted with and maintain frequent contact with the men and women in their communities who may be classified as "key citizens" and "molders of public opinion" and with municipal, county and state officials and any federal officials who happen to be resident there. Monsanto's policy is to be a good citizen.

Each division general manager (excluding general managers of Domestic Subsidiaries & Affiliates, and Overseas Divisions) is responsible for setting up a Business Climate Committee in each state in which he is responsible

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for an operating unit. When two or more divisions are responsible for operating units in a single state, general managers concerned cooperate in setting up the Business Climate Committee for that state. In general, such groups are comprised of representatives, such as the following, who serve in the state in which they are located:

Assistant general manager	Division or plant public relations manager
Division department director	Division or plant controller
Plant manager	Law Department representative
Division personnel director	Regional or district sales manager
Plant personnel manager	Assistant to general manager
Plant superintendent or general superintendent	Public affairs representative

The number of persons on the committee may vary. A minimum of three or four members is desirable, each participating on an equitable basis.

In those states where there is a single operating unit, the Business Climate Committee is made up of individuals from that unit. In those states with multiple operating units, the Business Climate Committee is made up of persons designated by their respective general managers from each unit. If there is any question as to the practicability of a Business Climate Committee because of limited company interests in a particular state, the decision rests with the general manager concerned.

Coordination of the work of the various Business Climate Committees is the responsibility of the director, civic affairs.

The principal functions of each Business Climate Committee are:

A. Keep informed on political and legislative trends in the state and local community and make reports or recommendations thereon to those concerned.

B. Take such action as may be directed by the company with regard to legislative developments affecting the company or as may appear appropriate to the committee in specific instances.

C. Arrange for the conduct of training programs in practical politics and stimulate interest on the part of employes to be of service to the political party of their choice.

D. Take such action as may be warranted to improve the relations of the company with state and local government agencies and with national government officials representing the state or the community.

E. Establish a speakers' bureau.

F. Conduct or participate in business climate surveys.

G. Encourage and stimulate other companies to take a more active part in political and governmental affairs, looking toward the development of a better understanding on the part of legislators and the general public of issues affecting industry.

H. Wherever possible, work closely with business or trade associations, labor unions, professional associations, citizens' committees and other groups in the interest of good government.

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I. Coordinate activities with the director, civic affairs, keeping him informed of all significant developments in the areas mentioned and utilizing, as needed, the services of the office of civic affairs, the Law Department, Washington Office, Public Relations Department, Personnel & Administrative Services Department and other staff departments and specialists.

J. Keep minutes of meetings and furnish copies of them to the director, civic affairs.

Note: In all instances where action is to be taken with or through employes, this shall be done by means of the established line organization.

IX. CONTRACTS

A. Research Contracts Between Divisions

To avoid confusion when one division makes a contract with another division to carry out research, the former division shall appoint a coordinator from its staff who handles all matters pertaining to the project with the research department of the latter division.

B. Contracts With Employes Covering Confidential Matters and Inventions

This is covered in detail in Section G, *Security Guide.*

C. Contracts or Agreements for Barge Transactions

In instances where the company is to obligate itself to pay, either by lease or purchase, for transportation of raw materials or company products by barge, details of the transaction are to be submitted to the Board of Directors through the Executive and Finance Committees when they exceed $250,000 per transaction. Lesser amounts follow the rules for capital appropriations.

D. Sales Contracts

The Law Department must be furnished copies of all sales contracts entered into by the Lion Oil Company Division or by the Plastics Division which have an annual value in excess of $250,000. The director of the Law Department makes such contracts available, on request, to members of the Executive Committee and other general managers.

E. Contracts—General

The Law Department is responsible for giving counsel and advice to officers, committees, divisions and departments on contracts and agreements; it reviews and passes on basic and important company agreements and documents, participates in their development and maintains vault files for original executed copies of them. For further details, see "Law Department," page D-16.

X. CORPORATE CONTRIBUTIONS AND MEMBERSHIPS

A. The Charitable Trust Fund

A trust fund was established in 1948 for the purpose of covering company contributions for charity, welfare and education. The

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Charitable Trust Fund is managed by a Board of Control, appointed by the Board of Directors. The Board of Control appoints the secretary of the trust. All requests with recommendations for contributions should be sent to Secretary, Monsanto Charitable Trust, St. Louis. Local United Funds are given principal consideration in making contributions from any plant or office location. Where the Red Cross is not included in a united drive, small contributions to the Red Cross are permissible with the understanding that should a disaster occur the Red Cross contributions will be increased.

A complete budget for the calendar year, listing specifically all contributions for charity, welfare and education for all locations, is submitted for approval to the Board of Control by the secretary, with the understanding that additional recommendations may be made during the year to the Board of Control for contributions which cannot be anticipated.

Checks drawn on this trust fund can originate only at St. Louis but may be sent to the general manager, plant manager or district office manager for presentation. Checks or credit cannot be issued by the trust to reimburse for a contribution already made. All checks issued by the trust must be made payable to a specific charity, welfare or educational organization. Contributions cannot be made to any political or labor organization. Contributions cannot be made to denominational groups when funds are to be used primarily for sectarian purposes.

As a matter of policy, commitments of no longer than one year are made; policy favors large contributions for times of special need rather than small contributions for annually recurring needs.

Contributions for the purchase of advertising in programs or publications cannot be considered. This fund is not intended to cover any memberships, subscriptions, direct advertising or contributions made as a business expense.

B. The Educational Fund

The Educational Fund, under the control of the Vice President of research, development and engineering, receives money annually, based on a percentage of net sales or net profit as set by the Board of Directors. The fund is administered by a member of the Research & Engineering Division who acts as chairman of the Fellowship and Scholarship Committee. The Fellowship and Scholarship Committee advises on the distribution of money from the fund. Contributions for fellowships, scholarships and grants-in-aid are made from the Educational Fund. Requests should be addressed to the Secretary, Fellowship and Scholarship Committee, St. Louis. (Contributions for buildings, equipment and endowment to educational institutions are made from the Charitable Trust Fund.)

C. Contributions to Non-Charitable or Non-Educational Activities or Organizations

There are non-charitable and non-educational contributions of a corporate nature, i.e., they relate to activities of the company as a

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whole. These "corporate" contributions are handled by the secretary of the Charitable Trust; requests for such contributions should be forwarded to him. He seeks advice on these matters from company personnel best qualified to recommend action. Those pertaining to activities related to interests of the Policy Committee for Government Affairs are sent to the chairman of that committee for approval, and copies are sent to other members of the committee. If a contribution is indicated, he obtains authorizations as needed to make payment from corporate accounts. Contributions of this nature are not payable from the Charitable Trust Fund. No contributions are made for political purposes, or to political parties or candidates.

D. Corporate Memberships

Corporate memberships are memberships in organizations, neither charitable nor educational, performing services locally or nationally which directly or indirectly benefit the company as a whole. All requests for memberships to be paid out of corporate funds shall be funneled through the secretary of the Charitable Trust to avoid duplication or conflict and to provide a central source of information on corporate memberships. The secretary seeks advice on these matters from company personnel best qualified to recommend action. Those pertaining to activities related to interests of the Policy Committee for Government Affairs are sent to the chairman of that committee for approval, and copies are sent to other members of the committee. If membership is indicated, he obtains authorizations as needed to make payment. Corporate memberships are not payable from the Charitable Trust Fund. No contributions are made for political purposes, or to political parties or candidates.

XI. DIRECTORSHIPS IN OTHER COMPANIES

No officer, general manager or staff department director shall serve as a director of another industrial or insurance company unless it is pursuant to an exception made by the Board of Directors in a particular case. Furthermore, divisional personnel at the level of department head or above shall not serve as a director of another industrial or insurance company except by approval of the general manager concerned.

For purposes of implementing this policy, banks, transportation companies and public utilities are not to be considered industrial corporations.

XII. DISASTER PLANS

A. Succession of Management Responsibility in Case of Emergency or Disaster

For the purpose of over-all company direction, in the event of an emergency or disaster incapacitating either the Chairman of the Board or the President, a replacement schedule has been established.

In the event of the incapacity of the Chairman of the Board, the first replacement shall be the President. Thereafter, responsibility shall be assumed by the senior member of the board, in point of service with the board. If all members of the board should become incapacitated, the responsibility shall devolve upon the senior general manager in point of service as a general manager.

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In the case of the President, the first replacement shall be the Chairman of the Board; thereafter responsibility shall be assumed by the senior member of the Executive Committee in point of service on that committee. If none of these is available because of incapacity, responsibility devolves upon the senior general manager in the manner described above.

If two or more members of the board or of the Executive Committee or general managers have equal service in those positions, the one with the longest Monsanto service is the senior.

These plans are effective during the *immediate emergency only*. If the Chairman and the President become incapacitated, the senior board member assuming the chairmanship shall call a board meeting to elect a new Chairman and a new President. If a general manager assumes the Chairmanship, he shall call an emergency shareowners' meeting as promptly as possible to elect a new board.

B. Central Headquarters in a Disaster

In the event of a disaster affecting the central company headquarters, Oro Farm (near O'Fallon, Missouri) is designated as the assembly point pending selection of another headquarters location.

XIII. DISTRIBUTION OF REPORTS

Monsanto's general policy with respect to distribution of periodic reports covering progress and developments of divisional and staff department activities is to maintain an optimum balance of security of confidential company information and good communications. Whereas the following outline of policies and practices is directed at improving this balance, it is recognized that effectiveness of security is largely dependent upon individual attitutes achieved through constant indoctrination of employes by supervisors at all levels of the company. It is important that each supervisor recognize this responsibility and include security in his day-to-day coaching and other training programs.

A. Policies

1. Distribution must be limited to maintain necessary security.

2. Practices for distribution within Monsanto apply also to distribution to the company's subsidiaries.

3. The criterion for distribution is need of information, not prestige or curiosity.

4. No one with real need must be deprived of necessary information.

5. Eventual destruction (with the exception of necessary records maintained in accordance with established practices) is as necessary as initial distribution.

B. Practices

1. The general practice is not to circulate entire reports beyond the authorized recipients. Where it is deemed necessary for some personnel to have knowledge of definite items contained in reports, such information wherever possible should be transmitted verbally, or by specific excerpts or properly censored copies. On the other hand, where this practice is not feasible for administrative reasons or because of conflicts in the interest of maintaining good communications, whole reports may be circulated within the immediate organization of the authorized recipient. In such instances, however, the authorized recipient remains responsible and accountable for security of the report and is expected to use utmost discretion in allowing it to be used by others. He is responsible for indoctrinating personnel under his jurisdiction in proper security practices.

2. All contractual agreements on reports shall be carried out as defined in the agreements.

3. Originating authors of reports are responsible for setting up a system of recording dates of issue, of their return, and of their destruction except in the case of research, engineering or development personnel where the department heads involved are responsible; originating authors maintain such files of their own reports as they deem necessary and keep them locked except when in use by personnel authorized to receive them.

4. All reports must be returned to the originating author within a maximum of two months after receipt, except for the following:

a. Overseas recipients need not return reports but are required to set up a similar system of restricted circulation and destruction for copies received by them.

b. The President and Assistant to the President will keep copies of reports addressed to them for a period of one year, following which they shall be destroyed.

c. Patent attorneys may retain in the files of the patent applications involved, Patent Department copies of those reports which contain information pertinent to patent applications, but only through agreement of the recipient and the issuing authority.

d. Technical reports on active projects may be extended for as long as the recipient is concerned with the project but only through agreement of the recipient and the issuing authority.

5. All reports must bear the official "confidential information" stamp.

C. General Managers' and Staff Department Directors' Reports

By the 15th day of each month each division general manager shall present a report of his unit's activities and developments for the preceding month.

Each staff department director shall present a report of his unit's activities and developments bi-monthly, except the Controller who is not required to file a report, and the director of the Purchasing &

Traffic Department who shall file a report monthly. The Law, Medical and Patent Departments shall submit their reports by the 15th day of the odd months and the other departments by the 15th day of the even months.

These reports shall be addressed to the President and carry a listing of persons receiving copies who are outside of the division or staff department originating the report. A schedule of personnel authorized to receive copies of these reports is contained in a directive from the President's office titled *Policies and Practices for the Distribution of Reports;* general managers and staff department directors have the authority to distribute copies of their respective reports beyond this schedule but they shall be held responsible and accountable for maintaining required security.

D. TECHNICAL REPORTS

Technical reports covering specific research, engineering or development projects are made periodically by the technical personnel assigned to the projects. These reports include formal, numbered interim and final project reports; progress reports; special reports such as Engineering Coordination Reports, etc.; monthly and annual summary reports from research, development and engineering departments. Each report shows, in addition to the addressee, the list of persons who receive a copy. A schedule of personnel authorized to receive copies of the various reports is contained in a directive from the President's office titled *Policies and Practices for the Distribution of Reports.*

A file of all technical reports is kept by Central Technical Files, a section of the Research & Engineering Division. A copy of each domestic technical report is sent directly to Central Technical Files by the author; the general manager of the Research & Engineering Division forwards his copy of technical reports from overseas subsidiaries to Central Technical Files.

Central Technical Files distributes coded, cross-referenced index cards on formal project reports to persons authorized to receive them. The Central Technical Files and their index are open only to those authorized by general managers, research directors, development directors and the Vice President of research, engineering and development.

Distribution of technical reports to Monsanto Chemicals Limited (MCL), Monsanto Canada Limited (MOCAN) and Monsanto Chemicals (Australia) Limited (MCAL) follow special rules:

1. Research, development and engineering monthly summary reports, properly censored by the issuing division according to Technical Information Exchange (TIE) procedure, are sent to the director of research, Overseas Division, for transmittal to MCL, MOCAN and MCAL.

2. Research job titles on projects of mutual interest are exchanged between domestic laboratories and these foreign subsidiaries.

3. Research monthly job progress reports on non-common as well common products may be exchanged between laboratories by agreement of the directors of research concerned.

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XIV. DISTRICT SALES OFFICE OPERATIONS

In district offices where more than one division is represented, a single division is assigned the office management responsibilities. Selection of the division is made by mutual agreement of the directors of field operations of the participating divisions with the approval of the Vice President of marketing.

Wherever possible in a given city or town, multiple district offices will be in a single location.

Each district sales manager reports to his divisional director of marketing or his deputy.

The division assigned responsibility for office management in a multi-division district office (or the person so designated in a district office which represents a single division) is responsible for all details of office management and broad company policy affecting all personnel domiciled in that office. The person designated for this responsibility reports to his district sales manager for the conduct of his sales work; in addition, he receives direction from and is responsible to the Vice President of marketing on matters of general policy and procedure relating to office management.

The contact of field personnel is exclusively with and through the divisional district managers (except as provided below) who are responsible to their respective directors of sales for all sales activities.

Sales development and technical service personnel, when in a district office territory, shall inform the district manager of the division with whose field personnel they may be working of their presence in the territory and the contacts they propose to make in order that he will be officially informed of activity within his areas.

XV. FIA INSURANCE CLAIMS

As a matter of policy, no insurance claims are filed with Factory Insurance Association for losses of less than $25,000 each. Losses of less than $25,000 are absorbed by the divisions as expense.

XVI. FELLOWSHIPS AND SCHOLARSHIPS

The company maintains and finances a number of fellowships and scholarships at well known universities. The institution is entirely free to choose the recipient as well as the course of study. For additional information, see "The Educational Fund," page E-9.

XVII. GOVERNMENT BUSINESS AND RESEARCH

A. Government Business

The following govern Monsanto's business relations with government agencies:

1. Sales of Regular Products

Sales to the Government of products regularly manufactured by Monsanto are handled as normal divisional matters.

2. Production of Special Products in Existing Plants

If production of products not regularly of Monsanto manufacture can be handled without difficulty in existing plants, the decision to proceed shall be made by the division concerned and the general manager shall so advise the Executive Committee.

3. Business Involving Construction of New Plant

If the proposed business involves a present or related product, or one which fits the company's economy and has civilian uses in addition to those of the Government, yet cannot be handled without the construction of new facilities, then the division concerned shall handle it like any other new capital project.

4. Construction of Plants for the Government

If the business involves a product for which the Government is the only foreseeable customer, and for which a new plant must be built at Government expense, either for operation by Monsanto or by the Government, the general manager concerned advises the Executive Committee of the circumstances and gives his recommendations.

5. Purchase of Materials from the Government

On occasion, the Government offers for sale, usually on a negotiated basis, substantial quantities of materials resulting from its own manufacturing operations, materials reclaimed from Government equipment or materials surplus from prior purchases. Where such offerings involve substantial quantities of material which Monsanto also manufactures or uses, the general manager concerned handles as a divisional matter.

B. GOVERNMENT RESEARCH

The company has established the special projects department of the Research & Engineering Division at Everett, Massachusetts, as its primary facility to conduct research for the Government at Government expense.

Projects will be sought which will enable Monsanto to become familiar with new and developing areas of technology and which will facilitate development of products related to the company's long-range interests. Such projects will assist in acquiring technical specialists who are not now directly needed by Monsanto but who will be needed a few years hence.

It may be desirable to conduct a Government project at another location, particularly where a worthwhile market can be foreseen for a product which can be exploited by normal business methods; this may be done at the discretion of the division concerned.

The director of the special projects department shall be notified promptly of any Government research projects under consideration, and shall be kept informed on the status of any negotiations.

Monsanto will continue to operate Mound Laboratory for the Atomic Energy Commission. Any other matters involving Government research for the atomic energy program shall be referred to the general manager of the Research & Engineering Division, who is responsible for the operation of Mound Laboratory.

C. NOTIFICATION TO THE WASHINGTON OFFICE

The Washington Office shall be notified promptly when Government

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business is accepted or rejected (together with reasons for rejection) and shall be kept advised on the status of important negotiations in progress.

XVIII. JOINT VENTURES—POLICY

Monsanto's policy is to enter into joint projects with others when such ventures integrate well with corporate strengths and long-term objectives, and when the contribution of both parties to the venture is such that the combined effect will provide greater return and growth for Monsanto than if Monsanto acted alone, or than if Monsanto took no action because it could not act alone.

When joint projects require the formation of separate companies, it shall be Monsanto's preference to acquire controlling interest in such companies; however, each joint venture will be studied on its own merits and, even though controlling interest shall be preferred, it is not intended that this preference will preclude a fifty-fifty or a minority interest.

XIX. MANAGEMENT GUIDE DISTRIBUTION POLICY

The *Management Guide* is distributed to all salaried personnel who have appreciable management or supervisory responsibilities; all other employes, however, may have access to the *Management Guide* through their supervisors.

Distribution control is through job classifications and salary grade; all employes in salary grade G or above are eligible to receive the *Management Guide* as well as are all supervisory employes holding job classifications on an approved job classification list, a copy of which may be obtained from the Public Relations Department or consulted through the offices of divisional personnel directors or staff department directors.

Distribution is handled by the Public Relations Department for the Assistant to the President in cooperation with divisional personnel directors and staff department directors.

Requests for *Management Guides* to individuals who do not qualify for a copy under the distribution policy must be directed to the Assistant to the President.

Detailed instructions concerning distribution of the *Management Guide* may be obtained from the Public Relations Department.

XX. MERCHANDISING TO THE CONSUMER

Monsanto will remain alert to the opportunities of merchandising chemical and plastics or specialty products directly to the consumer and may, in the future, develop an aggressive approach to such activities, depending upon circumstances.

Each opportunity will be explored on a case-by-case basis taking into consideration the following factors:

A. Degree and effect of competition with customers;

B. Ability to maintain a strong patent position;

C. Opportunity to provide better growth and profit for the company;

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D. Protection of capital investment;

E. Opportunity to circumvent an unsatisfactory marketing situation;

F. Opportunity to provide a large captive market for Monsanto products.

XXI. OVERSEAS OPERATIONS

A. Overseas Investments

All invested capital outside the continental United States of America, except that related to the search for oil reserves, is assigned to the Overseas Division and all such future expansion shall be so assigned. Invested capital pertaining to the exploration for oil reserves is assigned to the Lion Oil Company Division. All dividends from investments assigned to the Overseas Division are retained by it but all royalty income and the proceeds of lump-sum sales of know-how for cash or shares are assigned to the division which supplied the know-how.

Working cash, customer notes and accounts receivable, intercompany accounts receivable, inventories of consigned stock and similar items resulting from export sales shall be assigned to the appropriate divisions.

Projects for new or additional investments and for financing sales of know-how outside the U.S.A., with the agreement of the domestic division involved, are handled with the Executive Committee in the same manner as appropriation requests. In case of sales of technical know-how or services abroad, the heads of agreement and final contract must be reviewed by the Law Department and the Patent Department and approved by the manufacturing division, the Overseas Division and the Vice President or research, development and engineering.

With respect to present foreign investments, Monsanto will continue to support the expansion of individual companies now in existence in which Monsanto has an interest. In general, such expansion should be accomplished with the financial resources of the companies in question although this should not be a limiting factor if profitable opportunities are presented.

In making future foreign investments, no one method of securing equity will be used preferentially over other methods, but rather all of the following will be used to the best possible advantage:

1. Sale of know-how or patents;
2. Use of cash;
3. Use of manufacturing, management and sales techniques;
4. Use of incremental production;
5. Use of idle domestic equipment.

Overseas companies in which Monsanto has an interest report to the parent company through the general manager of the Overseas Division, except those companies engaged in oil prospecting abroad which report to the general manager of the Lion Oil Company Division.

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B. Export Sales

Export sales are sales of products from domestic Monsanto production to areas outside the continental limits of the United States. Such sales provide profit opportunities by:

1. Maintaining Monsanto's international reputation as a reliable source of chemicals and plastics;

2. Offering an offset to seasonal domestic demand;

3. Preselling markets in advance of possible local foreign manufacture;

4. Providing outlets for products for which Monsanto has unusual plant capacity in excess of domestic requirements.

Establishing export trade markets are protected by allocation of minimum domestic capacity on a product-by-product basis on terms negotiated between the Overseas Division and the operating division concerned.

Prices for foreign sales are determined by agreement with the domestic producing divisions. Profits are credited to the domestic divisions on the basis of goods supplied after deduction of applicable expenses.

XXII. PERSONNEL POLICIES

The company has established certain basic personnel policies, among which are:

A. Compensation and Employe Benefits

Fairly compensate employes to reward achievement and recognize potential, and in addition, provide optimum employe benefits.

B. Employment

Recruit and select employes of high ability, character and potential and place them in work assignments which maximize the use of their talents and provide them opportunity for development and advancement.

C. Labor Relations

Recognize the right of employes, under federal and state laws, to join or refrain from joining a labor union. Where employes freely vote to join a labor union, in a National Labor Relations Board election, the company shall recognize the duly certified collective bargaining agent.

D. Personnel Development

Extend to each employe the opportunity to develop fully his individual capabilities, both to excel in present performance and to increase his potential.

E. Safety and Fire Protection

Provide each employe with a safe and healthful place in which to work; make every reasonable effort in the interest of accident prevention, fire protection and health preservation.

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XXIII. PLANT INSPECTIONS

A. Purpose

In order to encourage a high standard of maintenance, safety and appearance of all plants and to assure that employe facilities are maintained on a high plane, all major domestic, Canadian and Mexican operations are inspected once each year.

B. Committees

For inspection purposes, plants are divided on a geographical basis into three groups (Eastern, Midwestern & Southern, and Western). An inspection committee, to serve only for the duration of the inspection tour, is appointed by the President for each group of plants. Each committee consists of three men, chosen from levels of management as follows: chairman—director of manufacturing or higher; two others—plant manager, assistant plant manager or personnel at approximately similar level in general staff or divisional departments. In order to provide continuity of inspection and to establish a basis for judging plant improvement, one of the members other than the chairman is a hold-over from the previous inspection committee.

A detailed outline of procedure for plant inspections may be obtained from the Personnel & Administrative Services Department.

XXIV. PUBLIC RELATIONS POLICY

A. Policy

The relationships of the company with its employes, its shareowners, its customers and suppliers and with other major audiences including the general public, are the concern of every employe. The total impression made by Monsanto in any or all of these areas is directly related to the individual impressions made by individual employes cumulatively.

Advice and assistance in the planning, development and execution of communications to such audiences, as well as in establishing methods for listening to what such audiences have to say about Monsanto, are the principal functions of the Public Relations Department.

It is Monsanto's policy to be forthright in its communications with its principal audiences, furnishing accurate and prompt information about its activities, assuming such information is not confidential or competitive in nature, and assuming it is cleared by proper administrative or supervisory personnel who have the basic responsibility to determine what information should be released.

It is Monsanto's policy to make every effort to cooperate with newspapers, magazines, trade and business publications, radio and TV stations and other general media.

1. Information Initiated by Monsanto to the Press

The gathering or assigning, writing, clearing and distribution of all such information is the responsibility of the Public Relations Department staff and is to be released only by this group.

2. Queries Which Come from the Press to Monsanto

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Such queries shall be funneled to and handled by the Public Relations Department, which has the responsibility of obtaining information and clearance from pertinent divisions and departments of the company.

Queries of a local nature directed to division or plant personnel by local media can be answered without the assistance of the Public Relations Department. However, wherever possible, Public Relations should be consulted first. And, in all instances, Public Relations should be advised as soon as practicable as to the contents of the statements.

B. COMMUNITY PRESS RELATIONS

All plant managers shall maintain cordial relationships with representatives of the working press in their areas as well as with the publishers, editors and editorial writers of newspapers and the officers of the local radio and TV stations. The Public Relations Department is available at all times to give advice and counsel in local press relations.

C. EMERGENCY PRESS COVERAGE

Each plant or identifiable unit of the company shall be prepared to work with representatives of the local press in accordance with the *Emergency Press Manual* of the Public Relations Department.

In the event of any serious accident, explosion, fire, labor disturbance or other major event, a plant manager shall immediately notify his division general manager who shall call the President or a member of the Public Relations Department whether it is day or night, weekend or holiday, so that headquarters may be fully informed, In the event a plant manager is unable to reach his division general manager immediately, he shall call the director or the assistant director of the Public Relations Department.

XXV. PURCHASES INTO THE PRODUCING PLANTS OF ANOTHER DIVISION

The divisions may negotiate purchases into the producing plants of another division without Executive Committee approval if the purchase involves at least 20 per cent of the producing capacity of a plant and if the difference between the annual transfer value of product and the market value of product would equal or exceed $200,000; negotiations for plants involving less than these amounts require Executive Committee approval.

The contracting division shall pay the producing division its pro rata share (based on pounds) of current research and engineering expense applied by the producing division to the specific product transferred and some payment for research and engineering expense previously incurred—the amount to be settled between the general managers.

If for any reason it appears to either party in the negotiations for purchase into a producing plant that this policy does not operate in the best interests of the company on an over-all basis because of unusual circumstances, such negotiations shall be brought before the Executive Committee for determination of whether an exception should be made.

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To insure that existing problems under the present system receive proper attention, each general manager shall report to the Executive Committee early in December of each year on any unresolved problems or new problems resulting from the present transfer policy.

In a divided ownership installation, any excess goods not used by the guest division shall be sold as far as possible by the operating division at a commission agreed on by the interested general managers. The location as a whole is managed by one division and the plant manager is responsible only to the director of manufacturing for the general manager of his own division.

Superintendents of guest division investments in a jointly owned plant are employes of, and subject to, the orders of the guest division but must conform to local ground rules. Arrangements for joint plants will be made by the general managers concerned on a case-by-case basis and are likely to vary with circumstances, such as proportion of divisional investment, degree of integration, etc. These arrangements are subject to approval of the President. Further details will be found under "Transfer Prices of Products," page E-23.

XXVI. SALE OF KNOW-HOW

A. General

Know-how on chemical processes or operating technology is a company asset. It is not to be regarded as available for sale or transfer to outsiders except upon specific authorization by the Executive Committee or Vice President of research, development and engineering (see page D-4) or advance blanket authorization in the case of certain standard processes such as those which are presently being offered on a routine basis by the engineering sales department.

B. Sale of Technical Know-How Overseas

Sale of technical know-how in areas outside the continental United States, which can readily be acquired also from other companies or individuals, is looked upon more favorably than the sale of know-how which is unique to Monsanto. However, as a matter of operating policy, all requests for sale of technical know-how are explored on a case-by-case basis with the objective of consummation of those arrangements which will provide optimum return to shareowners. Divisions are under no compulsion to license know-how in overseas markets unless it is clearly evident that such action will provide long-run optimum benefit to shareowners.

C. Sale of Processes

Monsanto designs, sells and builds, through authorized engineering and construction companies, the following types of plant and equipment:

Sulfuric acid and sulfuric acid catalyst;

Electrolytic chlorine and caustic soda or potash;

Electrolytic sodium sulfide;

Electrolysis of by-product hydrochloric acid for chlorine recovery;

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Water electrolysis;
Wet process phosphoric acid;
Phosphorus burning units;
Sulfur burning units for high concentration of SO_2;
Brink Mist Eliminator for elimination of atmospheric pollution.

If an adequate return is indicated, it is Monsanto policy to design and sell additional processes.

D. Sale of Mechanical Innovations

Whether to license and disclose or to maintain know-how monopoly of mechanical innovations is decided on a case-by-case basis.

XXVII. SECURITY OF CLASSIFIED GOVERNMENT INFORMATION

To permit participation in classified government business, Monsanto is required by the Department of Defense to provide and maintain a system of controls for safeguarding information that is received or generated internally on classified government projects.

The organization that has been established for maintaining required security procedures is shown in the Security Organization Chart, included in the Organization Chart section of this manual. This security organization scheme provides for the appointment of an individual (called a "facility security officer") at each location involved in handling classified data, who is responsible for the maintenance of controls described by the system outlined in the *Standard Practice Procedure for Safeguarding Classified Information* manual. Copies may be obtained when needed from the local facility security officer.

The general policy of obtaining government clearances for individuals to see classified data is to restrict the number to only those who have a "need to know." The determination of whether an individual of the company has a "need to know" shall be made, and stated in writing, by an administrative officer of the company or the division general manager who controls the facility in question—except that all officers of the company are automatically required to have clearance at a level equal to the highest degree of classified matter received or held by the company which, in the case of Monsanto, is "top secret."

Problems involving security matters are handled directly with the local facility security officer, whenever possible. The corporate security officer or his assistant shall be contacted if the local facility officer is not available or if the problem in question falls outside the jurisdiction of the facility security officer.

XXVIII. SECURITY OF COMPANY INFORMATION

The profitability of company operations and the welfare of all employes and shareowners, as well as the development of new products, formulae, processes and equipment have resulted from the diligence and intelligence of Monsanto employes over the years. The company has spent enormous funds in developing confidential information and trade secrets in order successfully to compete and to progress in a highly competitive industry. Revelations of information of this character, innocently or deliberately, represent an irreparable loss to the company and endanger the position of all employes. Each employe is responsible for preserving the company's trade secrets and confidential information.

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Each general manager and each staff department director shall, throughout his organization, make certain that trade secrets and information of a sensitive nature to Monsanto receive the protection deserved. Release of company information outside Monsanto must have prior clearance in accordance with *Security Guide.*

Further security procedures are described in detail in the *Security Guide,* Section G, this manual.

XXIX SHAREOWNER RELATIONS

A. Reports to Shareowners

The Chairman of the Board or, by his delegation the President, sends to shareowners shortly after the end of the first, second and third quarters, statements of the earnings and financial status of the company. Shortly after the close of each calendar year, he reports to the shareowners on the year's activities, earnings and financial status.

B. Visits by Shareowners

Shareowners who may visit plants or offices are to be well received and accorded privileges to which they are entitled as owners of the company, provided they are properly identified and are not associated with competitive organizations or technically trained to an extent that classified processes and other operations should not be revealed to them.

C. Correspondence with Shareowners

The company centralizes relations with shareowners through the Vice President of planning and control who has the responsibility for the company's dealings with security analysts and, additionally, is the focal point for all company communications with shareowners except for such corporate matters as are the responsibility of the Secretary, President or Chairman of the Board.

XXX. TRANSFER PRICES OF PRODUCTS BETWEEN DIVISIONS

The principles laid down by the Executive Committee covering transfers of products at cost are as follows:

A. In order to purchase materials from another division on a cost basis, the using division must contract on a permanent basis for a certain percentage of the plant capacity of a product on an annual basis and assume a portion of the investment in such product.

B. The contracted percentage will be revised at any time that the capacity of the plant is changed or by mutual agreement of the divisions involved. The Executive Committee shall be informed when changes in contracted percentages are agreed upon.

C. Either the producing or using division has the right to request authorization for increasing the plant capacity for a product. The division requesting the increase in capacity has first option on the additional capacity and assumes the additional investment required for such expansion unless it is agreed that the other division will take a portion of the increased capacity and the investment.

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D. When a plant becomes fully utilized or in the opinion of any one of the divisions concerned the plant will be fully utilized within one year, no change shall be made in the assignment of capital unless by mutual agreement.

A plant is considered fully utilized when it is operating at 90 per cent of capacity on a yearly basis.

The opinion of a division that the plant will be fully utilized within one year shall be substantiated by the figures shown for the fourth successive quarter in the continuous budget.

During the three quarters prior to the fourth quarter, in which the plant shows up as fully utilized, the division concerned shall develop definite plans relative to expansion of the facility or for the contractual purchase of the product outside.

The producing division shall have the responsibility for expanding the plant or for making the outside purchases. In the interest of greater Monsanto, the consuming division shall have first priority on any unsold portion of the selling division's share of a product. Such portion shall be transferred to the consuming division at lowest market or other negotiated price.

XXXI. TRAVEL POLICY

A. Automobiles

1. Leasing of Cars

Monsanto follows a policy of leasing cars and trucks instead of owning them.

2. Automobile Usage

Whenever possible, company automobiles are used on regular company business. The term "company automobiles" includes automobiles owned by the company, leased by the company or rented by the company for any period of time.

When employes are driving company automobiles on company business, the company and such employes are protected by the company's insurance against damage claims for injury or damage to the person and property of third parties.

When a company automobile has been assigned to an employe for regular use on company business, it is understood that the employe and members of his family have permission to use the automobile on personal business for a reasonable time unless the employe has received specific notice to the contrary. When the car is used with this permission, the company and the driver are protected by the company's insurance against damage claims for injury or damage to the person and property of a third party.

In certain cases employes may be allowed to use company automobiles on extended personal trips. Permission for such use must be previously obtained from the director of marketing, district manager, division general manager or staff department director, or those to whom they may delegate this authority. Under these circum-

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stances the employe is charged eight cents a mile and the company pays all costs of operating and maintaining the car, including insurance which protects the company and the employe against damage claims for injury or damage to the person and property of third parties.

The company does not carry fire, theft or collision insurance on licensed motor vehicles; consequently, the company is responsible for loss of or damage to a company automobile when the car is being driven on company or personal business as outlined above.

When employe-owned cars must be used, an allowance of eight cents a mile is paid. This mileage fee covers not only operating costs but also all other costs including all types of insurance to protect the individual and his automobile. By payment of this fee, the company discharges all of its obligations to the employe for its use of his automobile.

When an employe uses his own automobile on company business, the company is protected by its insurance against damage claims for injury or damage to the person and property of third parties, but in such cases the employe is not protected by the company's insurance. The employe should procure insurance if he wishes to be protected against claim for injury to the person or property of third parties or for damage to his own automobile.

B. Airplanes

1. Restrictions on Travel

No more than three members of each of the following categories, nor more than a combined total of four members of these categories, may travel in the same airplane:

Members of the Executive Committee
General Managers

In addition, no more than three members of the following categories, counting cognate members of the Executive Committee, nor more than a total of six members of any combination of these categories, may travel in the same airplane:

Directors of engineering

Directors of manufacturing

Directors of marketing

Directors of research

Finally, no more than three members of any one division with the rank of department head or above may travel in the same airplane.

2. Overseas Air Travel

The use of airplanes for transoceanic travel is favored on company business.

3. Company Aircraft

Company aircraft allocated to operating divisions are reserved primarily for sales department use with customers.

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When company planes are used, the pilots have absolute authority as to whether flying conditions permit safe travel. Company pilots are responsible for carrying out regulations pertaining to the periodic grounding of the planes for maintenance work.

The following time limitations are established for the company pilots:

On-duty time—12 hours in any 24-hour period

Flying time—8 hours in any 24-hour period

Insurance in the amount of $75,000 is provided for employes and guests traveling on company aircraft.

XXXII. UNSOLICITED SUGGESTIONS FROM OUTSIDERS

The company receives, from time to time, letters disclosing or asking permission to disclose inventions, advertising themes, slogans and the like which the writer hopes may be of value to the company in its business.

There is danger in accepting or discussing such suggestions from outsiders inasmuch as similar ideas or suggestions may already be under development in the laboratories, plants or the Marketing Services or Public Relations Departments and, when adopted later, may give rise to the belief of an outsider that such development was based on his suggestion.

To avoid such controversies, letters pertaining to new products or processes shall be referred immediately to the research director of the division involved, or if not obviously a divisional matter, to the development director of the Research & Engineering Division at St. Louis, who shall reply after consulting with the resident patent attorney.

Letters pertaining to advertising themes, slogans, trademarks and the like shall be referred immediately to the director of the Marketing Services Department, who shall reply after consulting with the Patent Department.

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SECTION F

PERSONNEL POLICIES AND PROCEDURES

PERSONNEL POLICIES AND PROCEDURES

Monsanto personnel policies apply to Monsanto personnel whether paid directly or under a contract with an agency of the U.S. Government.

I. BENEFITS

A. Cafeterias for Employes

The company provides cafeterias for employes at many of its locations. Food and service are provided at the lowest possible cost. These cafeterias are expected to operate so that they neither lose money nor show a profit. Overhead charges, rent of quarters and facilities are not included in the costs.

B. Death Payments

1. Death in Line of Duty

In the event of the death of an employe arising out of and in the course of his employment, the company seeks to prevent undue financial hardships to the employe's family or dependents. The administration of this policy shall be discretionary with full responsibility vested in the Retirement Plan Committee.

2. Salary Continuance in Case of Death

In the case of death of a salaried employe, his regular salary is continued for the pay period in which the death occurred, plus one additional check for the next pay period.

C. Holidays, Salaried Personnel

Eight holidays are observed each year, except where additional holidays are indicated by state law.

If a holiday falls on Sunday, it is observed on Monday. At those locations which observe no more than eight holidays, a holiday falling on Saturday is observed on Friday.

Complete information on this subject may be obtained from *Personnel Administration Bulletin III.*

D. Insurance

Group life, accident, medical and hospital insurance is provided. Details of such insurance are set forth in booklets available locally and in *Personnel Administration Bulletin I.*

E. John and Olga Queeny Educational Foundation

To help employes continue their education or that of their children, the John and Olga Queeny Educational Foundation was established by Edgar M. Queeny and his sister, Mrs. Thomas P. Berington, as a memorial to their father, John F. Queeny, Monsanto's founder, and their mother, whose maiden name the company bears.

While this is not a company project, loans from this fund are available only to Monsanto employes and their children to enable them to obtain education in the natural sciences. Application should be made to the Vice President of finance and law.

Details concerning this foundation are contained in the booklet entitled *John and Olga Queeny Educational Foundation* which may be obtained from the Personnel & Administrative Services Department.

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F. Leaves of Absence

1. Salaried Employes

a. Military Service

Leaves of absence for both active military service and military reserve training are provided. The policy is covered in detail in *Personnel Administration Bulletin X*.

b. Urgent Personal Business

Leaves of absence with pay for urgent personal business (such as illness in immediate family) may be granted salaried personnel on approval of division general managers or staff department directors for short periods of time only where circumstances warrant. Such absences are not considered as time worked for purposes of computing overtime.

c. Jury Service

The company encourages employes to perform jury service and it is hoped that each employe will respond to this civic obligation when summoned. If special reasons make a postponement of service preferable, arrangements sometimes may be made for service at a later date. However, the company in no event lends aid toward getting summons cancelled.

Full salary is paid while on jury duty and it is considered an approved absence for purposes of computing overtime for non-exempt employes.

d. Death in Family

Full salary is paid during approved absence from duty when such absence is caused by death and attendance at the funeral of a wife, husband, child, parent, grandparent, grandchild, brother, sister, parent-in-law, brother-in-law or sister-in-law. The number of days is left to the discretion of the general manager or staff department director. Approved absences due to death in family are considered as time worked in computing overtime.

e. Illness

See section on sickness and disability payments, page F-5. Approved absences due to illness are considered as time worked in computing overtime.

f. Attendance at Technical Meetings

Selected scientific and technical employes who attend technical conferences are paid their salaries and reimbursed for travel expenses. Travel expense is on the same basis as defined under "Official Travel," page F-17. Technical employes who are not selected but who desire to attend technical conferences are paid their salaries only, upon approval of their attendance by their division general manager or staff department director.

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g. Leaves of Absence Without Pay

Unpaid leaves of absence without loss of benefits rights, are permitted with the approval of division general managers or staff department directors to meet certain personal situations, for government service, for attendance at universities and for emergencies.

Monsanto looks with favor upon an employe's participation in government through elective office. Wherever possible, a division general manager or staff department director may adjust work schedules, vacation periods and other similar matters in order to accommodate the elected individual even at some inconvenience to the company. No employe shall lose benefits rights by accepting a public position under a company-approved leave of absence.

2. Hourly Employes

a. Military Service

Same as under Salaried Employes, above.

If it does not interfere with operation or with relations with a union, the plant manager may, at his discretion, arrange shift changes for personnel, if they so request, to permit them to participate in any established night drill practice carried on by the National Guard.

b. Death in the Family

Full wages up to three days are paid during approved absence from duty when such absence is caused by the death and attendance at the funeral of a wife, husband, child, parent, grandparent, grandchild, brother, sister, parent-in-law, brother-in-law or sister-in-law. These days or hours voluntarily granted by the company are not considered as days worked in computing overtime.

c. Jury Service

The company encourages employes to perform jury service and it is hoped that each employe will respond to this civic obligation when summoned. If special reasons make a postponement of service preferable, arrangements sometimes may be made for service at a later date. However, the company in no event lends aid toward getting a summons cancelled.

To avoid financial hardship while on jury duty, the company pays the difference between jury fees and an employe's regular rate of earnings. The days or hours absent are not considered in computing overtime.

d. Leaves of Absence Without Pay

Unpaid leaves of absence are permitted with the approval of the division general manager or staff department director to meet certain personal situations and emergencies.

G. Pension Plans

The company provides two pension plans, one for salaried and one for hourly employes, details of which are set forth in two booklets described respectively as the *Retirement Plan for Salaried Employes* and the *Retirement Plan for Hourly Employes.*

There is a pension representative in each division and at plant locations. Applications may be made through him or directly to the payroll and pension section of the Accounting Department in St. Louis.

The Monsanto pension plans are administered by the Retirement Plan Committee. This committee is appointed by, is responsible to and operates under the authority of the Board of Directors.

For the most part, the committee's rules and regulations are the various provisions of the pension plans which are set forth in the booklets mentioned above. It is the purpose of this committee to:

1. Administer the Retirement Plans for both salaried and hourly employes.

2. Assure the adequacy of the company's trust funds under both salaried and hourly plans through yearly determination of liability by competent actuaries.

3. Approve all retirements and payments of pensions under the plans.

4. Examine all facts in cases of total and permanent disability.

5. Approve for equitable treatment any salary payments to employes recommended by general managers after the first six months of illness or disability.

6. Formulate any necessary or advisable amendments to pension plans and present them to the Executive Committee for its consideration and approval.

7. Make decisions with respect to questionable pension data, such as hiring dates and credited service.

8. Review and approve each month any deferments of employes who qualify and apply to work beyond age 65.

9. If, when an employe retires, the division for which he worked decides that it will be necessary to retain his services on a retainer-fee or consultant-fee basis (usually a limited number of days each month), the proposed contract for such services shall be submitted to the Retirement Plan Committee for its consideration.

H. Separation Allowance

A separation allowance policy was established to assist financially an employe whose services are terminated through no fault of his own. Whether payment of any separation allowance is to be made is at the discretion of division general managers and staff department directors.

Employes are divided into three groups for purposes of administering the separation allowance plan:

Salaried employes (not under contract regarding termination);
Salaried employes (under contract regarding termination);
Hourly employes.

Under the separation allowance policy new employes will be on probation as follows:

One month for salaried employes;
Four months for hourly employes.

An employe whose services are terminated before or at the end of this probationary period is not given separation allowance.

An employe hired on a temporary assignment shall be so informed at time of employment and is not entitled to separation allowance.

No separation allowance is granted if termination of services is for cause such as dishonesty, disloyalty, insubordination or similar acts; or if an employe is temporarily laid off or voluntarily resigns.

For those permanently employed, separation allowance, if granted, is on the following basis:

1. Salaried Employes (not under contract regarding termination)

If employe has worked:	*But less than:*	*Separation allowance is:*
One month	One year	Two weeks' pay
One year	Five years	One month's pay
Five years	Ten years	Two months' pay
Ten years or more		Three months' pay

Employes who have reached their normal retirement age and who are not eligible to receive a pension, are eligible to receive separation allowance based on length of service outlined above.

2. Salaried Employes (under contract regarding termination)

Terms of contract provisions apply in lieu of the above schedule.

3. Hourly Employes

For employes with dependents the following schedule applies:

If employe has worked:	*But less than:*	*Separation allowance is:*
Four months	Five months	Two days' pay
Five months	Eight months	Three days' pay
Eight months	Ten months	Four days' pay
Ten months	Twelve months	One week's pay
One year	Two years	Two weeks' pay
Two years	Three years	Three weeks' pay
Three years	Five years	Four weeks' pay
Five years	Seven years	Five weeks' pay
Seven years	Ten years	Six weeks' pay
Ten years or more		Eight weeks' pay

For employes without dependents, two-thirds of the rates listed above apply.

I. Sickness and Disability

1. Salaried Employes

Salaried employes may be paid full compensation with approval of division general managers or staff department directors for absences resulting from non-occupational sickness or disability for any period up to six months. Details on this subject may be obtained from *Personnel Administration Bulletin XIII*.

In the case of occupational sickness or disability where the employe receives payment under the Workmen's Compensation Law for time lost from work, the company pays only the difference between his salary and such amount. The employe receives the company's contribution during the first year of his disability; the company's contribution may then be continued at the approval of the Retirement Plan Committee upon request by the division general manager or staff department director.

2. Hourly Employes

Hourly employes receive, as a result of job-incurred disability, compensation provided for by the controlling Workmen's Compensation Law plus a contribution by the company. The legal compensation and the company's contribution equal two-thirds of the employe's wages based on a 40-hour week. A waiting period of three days before beginning payment of such company contributions applies but the disability benefits are extended to cover these three days of waiting period in all cases where absence continues for more than two weeks (14 consecutive days). The company's contribution is paid during the first year of such absence but it may continue at the request of the division general manager or staff department director and on approval of the Retirement Plan Committee.

In case of absence due to occupational disability caused by an accident resulting primarily from inherent hazards of chemical, plastics and petroleum manufacture and which results from causes beyond the control of the disabled employe, the employe may receive, upon approval of the division general manager or staff department director concerned, in addition to Workmen's Compensation, a contribution from the company in an amount which, plus the Workmen's Compensation, will equal the employe's wages based on a regular 40-hour work week. This company contribution may continue during the first six months of such disability but shall continue over a longer period of time only if requested by the division general manager or staff department director and approved by the Retirement Plan Committee.

J. Stock Purchase Plan

The decision to purchase Monsanto stock is one which each employe must make for himself. Realizing the desire of some employes to have a part in the ownership of the company, provision has been made for the purchase of stock in accordance with a stock purchase plan. The employe sets the price and amount of stock he wishes to buy; the company reserves the stock when and if the price of Monsanto Common Stock on the New York Stock Exchange reaches the price set by the employe and makes a payroll deduction over a period of not more than 40 months.

Details are set forth in a booklet entitled *Monsanto Employes' Stock Purchase Plan* as well as in *Personnel Administration Bulletin IV*.

K. Vacations

Vacations with pay are granted to permanent, full-time salaried employes. This policy also extends to those permanent employes who

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work on a regular schedule each work week but for a shorter period each day than the normal period.

April 1 of each year is the official beginning of the vacation year period and vacations may be taken at any time during the vacation year of April 1 to March 31, the scheduling of vacations being subject to departmental working schedules. Vacations may not be carried over to another year unless specific authorization for a carry-over is received from the division general manager or staff department director concerned.

Vacation eligibility during the first year of employment is computed on an accrual basis. Thereafter a vacation of two weeks is granted until the completion of ten years of credited service, at which time salaried employes are granted an additional week's vacation with pay in addition to the annual vacation they normally receive. Upon completion of twenty years or more of credited service, salaried employes are granted two weeks' vacation with pay in addition to the annual vacation they normally receive. Executive vacations, in addition to those above, are provided. Details on policy and rules regarding vacations can be found in *Personnel Administration Bulletin XII.*

II. BONUS PLAN

Under the Bonus Plan, bonuses of common stock of the company and / or cash may be granted to those employes who contribute most to the company's success, including those who have proven themselves qualified to occupy important managerial posts and to succeed to higher positions. It is hoped in this way to compensate not only for services rendered but also to encourage further efforts by making employes participants in the company's prosperity.

Officers and employes (including those employed by any wholly owned domestic subsidiary or transferred to any foreign subsidiary or foreign associated company and those whose employment by the company or a wholly owned subsidiary terminates during the year) who receive a salary at or above such monthly rate as is fixed annually by the Bonus Committee, shall be eligible for consideration for a bonus award. Employes receiving monthly salaries of less than the fixed amount may at the discretion of the committee be given special awards.

The committee considers award recommendations for all employes and officers, who are not board members, as made by the President after he has reviewed with division general managers and staff department directors their recommendations for bonuses to members of their organizations. The Bonus Committee alone deals with awards for eligible members of the board and of the Executive and Finance Committees. It has sole discretion to determine all bonus awards and which persons shall participate in any year's awards. There is no fixed relationship between an individual's salary and his bonus. Recipients are paid bonus awards in four annual installments. A recipient who leaves the company's service shall lose any right to the unpaid balance of his award unless the committee decides otherwise. Members of the Bonus Committee are not eligible to receive bonus awards.

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III. DEVELOPMENT OF PERSONNEL

A. Development Policy

To further individual development, the company offers supplementary educational activities, including training courses, technical seminars and professional and management development programs, in each instance designed to meet the special requirements of particular employe groups. The company assists employes to take advantage of job-related internal and external educational opportunities. These activities contribute in a major way to the development of those well qualified and unusually proficient technical and managerial leaders so vital to the company's continued success.

B. Key Personnel Reports

In order to plan properly for replacements of key personnel, all general managers and staff department directors are required by November 1 of each year, to prepare and submit to the President their Key Personnel Report.

Included in the report is an organization chart to indicate clearly the positions of plant manager and above in the divisions and the echelon below assistant directors in the staff departments.

Also included is a replacement table which includes:

1. Position and present incumbent with his age, his present performance rating and his potential rating for advancement;
2. The number of years or months before a replacement is likely to be needed where some basis for an estimate is possible;
3. Names of persons now qualified for the higher position, age, present performance and potential rating;
4. Those who are partially qualified (expected to be qualified within three years), listed separately with age, present performance and potential rating;
5. Persons who have future possibilities for advancement, listed separately with age and the present performance and potential rating.

In addition, individual performance appraisals accompany the annual Key Personnel Report for all individuals in salary grade K and above, and for individuals in salary grades below K who are:

1. Recommended for bonus consideration, or
2. Included in the replacement chart.

General managers and staff department directors may include appraisal information on other individuals at their own discretion.

Information or questions concerning Key Personnel Reports should be directed to the office of the Assistant to the President.

C. Promotion Policy

Any position is open to any employe in the company capable of filling it. When a position opening occurs requiring special technical or managerial skills, candidates are reviewed on a company-wide basis.

The Personnel & Administrative Services Department maintains a

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Central Personnel Roster to assist divisions and staff departments in selecting the most qualified candidate.

When a candidate from another division or staff department is being considered for a position opportunity, the management of that division or staff department must be consulted before discussions are initiated with the individual.

D. Tuition Payment Policy

This program encourages all full-time permanent employes to improve themselves in areas related to job performance.

Further details are contained in *Personnel Administration Bulletin V.*

IV. EMPLOYE HEALTH AND MEDICAL RULES

A. Employe Health

Whenever there is a change in a plant's operation which might affect the health of employes by a change in occupational exposure, the plant manager shall notify the plant physician and the plant safety engineer in writing. The plant safety engineer shall in turn notify the medical and safety directors at St. Louis, sending complete information on the change. This information shall include full trade name and correct chemical name of the material being substituted (or used for the first time) as well as that of the material in current use; a brief statement concerning the increased or decreased exposure involved; particulars of any contemplated tryout of material wherein the health of employes may be involved.

In addition, the plant manager (for division engineering projects) and the director of the engineering department of the Research & Engineering Division (for general engineering projects) shall provide information regarding new process installations in order that the medical and safety directors may evaluate the possibility of hazards and be in a position to advise as to necessary safeguards.

It is essential that all members of the supervisory staff cooperate to the fullest extent with the medical and safety directors so that all health and accident hazards may be kept to a minimum at all times.

B. Pre-Placement Physical Examination

Every new employe, hourly or salaried, shall have a complete physical examination before starting employment. This examination includes a Kahn or similar blood test, a urinalysis and a chest X-ray. Anterior-posterior and lateral X-rays of the lumbar spine are included in the pre-placement examination of new hourly employes. When temporary employes are hired, it is not necessary to include a chest X-ray until the employe is to be transferred to the permanent payroll unless his duties involve exposure to dust, fumes or irritants. In the case of a temporary hourly employe, the back X-rays are not necessary until he is to be placed on the permanent payroll.

Physical requirements for jobs vary with the type of position. The judgment as to whether an individual is physically qualified for a particular job rests with the examining physician.

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It is the policy of the company to assist handicapped workers, especially veterans, toward economic rehabilitation by placing them in jobs commensurate with their physical abilities. In each of these cases, however, direct consultation among the examining physician, the personnel manager and the safety engineer must be carried out to insure proper placement.

No individual with a communicable disease may be employed until such time as measures have been taken to render the disease incommunicable. An individual with positive blood serology for syphilis may be accepted for employment provided the disease is not in the infectious stage or the individual submits reports regularly to the plant physician showing he is under medical treatment.

Individuals with arrested pulmonary tuberculosis may be employed in certain selected positions. Each case must be decided individually solely by the local examining physician after consultation with the applicant's private medical agency.

It is not recommended that the company employ an individual in manufacturing departments or in any area where he might be exposed to eye injury if he has vision in only one eye or 50 per cent or more loss of vision in one eye. If such a person is presently employed, he shall wear safety glasses while at work.

The age limit for hiring of both men and women depends entirely upon their physical condition; personnel hired after age 55 are automatically excluded from participation in the non-contributory part of the pension plan.

C. Re-Examinations

Every hourly and salaried employe shall have a complete physical examination, preferably yearly, but not less frequently than once every two years. Records are maintained in order to insure these regular examinations. The extent of the examination is determined by the company medical director after consultation with the local examining physician.

Employes, hourly or salaried, may be ordered up for physical examination at any time by plant managers, division general managers or staff department directors, if, in their opinion, examinations seem indicated. In the case of division general managers and staff department directors themselves, the President may order such examinations.

The information obtained from physical examinations is held confidential in the Medical Department.

D. Pregnancies

It is company policy to allow employes who are pregnant to continue work through the fifth month of pregnancy; they are not to return to work until two months following delivery. Any exception to this policy must have the approval of the location physician.

E. Travel Examinations

An employe scheduled by the company for foreign travel shall be sent by his division general manager, staff department director or plant

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manager to the plant physician or, at the General Offices, to the medical director. This is necessary to insure that the various health requirements for foreign travel (vaccinations, inoculations, health certificates) are fulfilled.

In addition, any employe who has suffered any disability that might make air travel inadvisable, shall be sent either to the plant physician or to the medical director for consultation before scheduling any trip where travel by air is required.

F. Medical Records

Accurate medical records are kept on each employe by the plant Medical Department, starting with the first pre-placement physical examination. Subsequent visits to the dispensary are recorded and kept in an approved manner. These records are kept confidential in the Medical Department and, if the employe is transferred to another unit of the company, are forwarded to the Medical Department for that location.

G. Medical Treatment

1. Occupational Conditions

Unless state laws specify otherwise, the local plant physician (company doctor or outside physician engaged by the company) is responsible for the treatment of all occupational disabilities. According to his judgment he may refer cases to appropriate specialists. In all cases strict compliance with the state laws governing the treatment of occupational illnesses and injuries shall be observed.

2. Non-Occupational Conditions

In some of the installations of the company, because of local conditions, it has been the practice to provide treatment by the plant Medical Department for all conditions, occupational or other. This practice will continue and may be changed only by the general manager of the division involved.

Otherwise, the treatment of non-occupational conditions is limited to emergency medical care or treatment of minor medical conditions to prevent loss of productive time. The degree of treatment provided by plant physicians must be governed by local conditions. However, the plant physician will consult with any employe seeking advice on non-occupational conditions and will refer him to a private physician for treatment. In the event that an employe wishes to retain as a private patient the services of a company physician, the physician is at liberty to accept him provided established medical ethics are observed and there is no interference with the physician's plant duties.

In accordance with the practice of good preventive medicine, immunization against infectious diseases may be recommended and offered as needed. Specific practices depend on the threat involved.

V. EMPLOYMENT

A. Employment Policy

It is Monsanto policy to receive and consider all applications for employment.

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B. Recruitment of Technical Personnel

Uniform policy and procedure governing recruitment of technical personnel is contained in *Personnel Administration Bulletin VIII.*

C. Employment of Salaried Personnel of Other Organizations

An application for employment from a person employed by another chemical company, a company related to the chemical industry, a customer or educational institution will be considered. However, before an offer of employment is made, the current employer is notified of Monsanto's intention to make such an offer. Monsanto does not initiate employment discussions with an employe of such an organization without notifying his employer of this intention.

D. Outside Offers of Employment to Monsanto Personnel

In cases where outside organizations or educational institutions express a desire to contact a Monsanto employe with the thought of offering employment, the employe's superior shall immediately inform him of the offer. It is desirable at this point to discuss thoroughly with the employe his future with Monsanto.

E. Employment of Relatives

1. No relative, as defined below, of any member of management in salary grade G or above may be employed.

Relatives include spouse, parents, children, adopted children, stepchildren, grandchildren, brothers, sisters, stepbrothers, stepsisters, sons-in-law, daughters-in-law, brothers-in-law, sisters-in-law and parents-in-law.

Relatives of employes below salary grade G may be hired if at no time they are employed in the same department as their relative.

2. A spouse of anyone whose business interests are in conflict with those of Monsanto may not be hired. If an employe having access to confidential information marries such a person, he shall be terminated or transferred to a position not involving access to confidential information.

It is the responsibility of the division general manager or the staff department director to determine whether an employe has access to confidential information.

Any exception to this policy shall be made only with the consent of the appropriate Vice President.

F. Employment of Personnel Requiring Executive Committee Approval

No new employe may be hired at a starting salary of $18,000 or more per annum without the approval of the Executive Committee.

G. Contracts with Employes Covering Confidential Matters and Inventions

Monsanto is engaged in an industry where emphasis is placed on technological creativeness and superiority. Therefore, corporate success depends in considerable degree upon how well security is maintained. It is a condition of employment that certain employes, as specified in the *Security Guide,* sign an employment agreement.

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The company *Security Guide* outlines in detail the varying contracts, the persons who are required to sign them and the methods of handling such contracts.

H. Termination Report Policy

When an exempt salaried employe is terminated, either voluntarily or involuntarily, a termination interview must be held with the employe. Following this, a termination report (form MG-227) is submitted to the general manager or staff department director concerned. In the event the terminating employe is a technical person, or in salary grade J or higher, a copy of this termination report is forwarded to the director of the Personnel & Administrative Services Department.

VI. FOREIGN SAFETY PERSONNEL

Realizing that certain problems and conditions arise which are peculiar to company personnel assigned to foreign duty, provision has been made therefor in *Personnel Administration Bulletin R-2*. Copies of this policy are available from the Personnel & Administrative Services Department.

VII. KEY SCIENTIST AND TECHNOLOGIST ADVANCEMENT PLAN

Recognizing the great value of purely scientific and technological contributions on the part of outstanding technical personnel as vital to the over-all company objectives, Monsanto provides a program for those who are qualified and wish to follow a scientific or technological career instead of advancing through the administrative line of promotion.

To implement this program, the positions of Scientist and Senior Scientist have been created in the research departments and the positions of Technologist and Senior Technologist have been created in the engineering departments.

Details of this program may be obtained from *Personnel Administration Bulletin XIV*.

VIII. LABOR RELATIONS

The general manager of each division is responsible for labor relations, including collective bargaining, in his division. Plant managers, under the direction of their division general manager, are responsible for labor relations in their plants.

Division general managers and plant managers administer labor relations in conformity with the company-wide policy, and the Personnel & Administrative Services Department furnishes divisions and plants with up-to-date information and advice on policy and practices.

The Personnel & Administrative Services Department assists and advises division and plant management regarding action to be taken in contract negotiations or in specific labor problems. It participates in the planning of contract negotiations and is represented at these negotiations, if requested by the division management or the Vice President of manufacturing, and is kept fully informed of negotiation progress.

Plant managers likewise keep the Personnel & Administrative Services Department informed on other labor relations problems of a precedent-

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setting nature or of significance to Monsanto company-wide, such as organizational campaigns, strikes or impending strikes, plant-union contract proposals, contract interpretations, unusual grievances and arbitrations. National Labor Relations Board and labor law matters are referred by the plants to the Personnel & Administrative Services Department for handling with the Law Department.

The Personnel & Administrative Services Department keeps the Executive Committee, the divisions and the plants fully informed on significant internal labor relations matters and external labor relations developments as they affect the company, including state and national legislation, or interpretations thereof.

IX. SAFETY AND FIRE PROTECTION

A. Basic Monsanto Safety Program

The member of management in charge at each location is fully responsible for the maintenance of safe and healthful working conditions and for setting up and carrying out an effective safety program.

The differences in size, product, operation and organization of the many company locations require each of them to develop and administer its own safety and fire protection program. Even though these programs will of necessity differ, certain fundamental principles are essential to insure well balanced programs.

Basically, every effective program takes into consideration three principles:

1. Management control and participation to assure workers that the plant management is personally interested in safety;

2. Supervisory stimulation and direction to create employe interest in safety, and acceptance by supervisors of accident prevention as their responsibility;

3. Employe cooperation with management and supervision in promoting safety and working safely.

These principles are attainable through conformance to the following six essentials to a well balanced safety program:

1. Safety Policy

It is important that management establish and make known to all employes a definite safety policy based on the realization that safety is just good business; that the company does not expect production at the cost of injury to employes; that the company supports all reasonable means to guarantee the safety of its employes.

2. Safety Organization

A safety program, to be effective, requires top plant management administration to indicate to all employes that management supports and insists upon safety. Depending on the plant's size, the top management group may be supplemented by other plant groups to assist in promoting the safety program.

3. Safety Indoctrination and Education

A definite safety indoctrination plan is essential to the effective safety program. Employes must receive safety instruction before

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they start their jobs and while on the job. A safety educational program must be established to keep employes interested in accident and fire prevention by conducting meetings, contests, campaigns, etc.

4. Supervisory Safety Instruction

The key to maintaining and fostering employe interest in accident prevention and in eliminating and controlling accident and fire hazards lies largely in the supervisor's attitude toward safety. To create supervisory interest and cooperation in the safety program, supervisors must recognize their responsibility for accident prevention; must be instructed in employe training methods; and must know how to detect and eliminate sources of accidents. This can be accomplished through supervisory safety instruction meetings and by appointing supervisors to safety committees and special campaign committees.

5. Hazard Control

To detect, eliminate and control hazards requires analysis of all plant accidents and fires by types and locations to determine sources, and necessitates regularly scheduled plant inspections to discover hazards and to see that protective equipment is properly maintained.

6. Management Review

It is desirable that safety engineers keep their plant managers acquainted with the status of the plant safety program. This can be done by furnishing the plant manager with a monthly report outlining the progress on safety objectives, listing new objectives, number of inspections made, safety meetings held, accidents and loss statistics and comparisons, etc.

Further information on the necessary supporting data required for a well balanced, long-range, accident prevention program, is contained in the *Monsanto Accident Prevention Manual.*

B. Safety Award Plan

To recognize outstanding performance in safety the following five plans are in effect:

The *President's Trophy* is awarded by the President of the company to the location winning the annual safety contest in each of the three groups into which the company's locations are divided.

The *Executive Committee Award* is made by a member of the Executive Committee to the location in each of the three plant groups which has operated the greatest number of hours in its group since the last major injury and without a major injury during the year. This is an annual award.

The *Safety Improvement Plaque* is presented to the location in each of the three plant groups which shows the largest percentage of improvement in its group in injury frequency rate over the most recent five-year period. This is an annual award and is made by the general manager of the division which operates the winning plant.

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The *General Manager's Trophy* is an award made to the location which has worked the greatest number of hours without a major injury in the history of the company. It is presented by the general manager of the division which operates the winning plant.

No-Accident Pennants are provided to locations for display when they have operated for either one, two, three, etc., million manhours or one, two, three, etc., years without a major injury.

The *Monsanto Accident Prevention Manual* contains a complete delineation of the safety award rules and procedures and locations by groups.

X. SALARY PLAN

Monsanto's Salary Plan is designed to attract and retain high-caliber employes, to stimulate and reward excellence in performance, and to provide flexibility to fit individual circumstances.

The Salary Plan provides classifications and salary ranges for all positions. The responsibility of properly classifying employes lies with the divisional general managers or staff department directors. Classifications and evaluations of all salaried positions at each company location are reviewed periodically by the Personnel & Administrative Services Department.

The Salary Plan shall be administered uniformly by all divisions and staff departments.

All employes are considered for a merit increase at least once a year. Salary increases granted under this policy are on the basis of individual performance. The Salary Plan also provides that salaries and salary ranges may be adjusted from time to time as economic conditions indicate. Such adjustments require approval of the Salary Committee.

Details of the Salary Plan are found in the *Salary Administration Manual.*

XI. SOLICITATION OF EMPLOYES

A. Employe Lists

Lists of employes may not be provided anyone outside the company and may not be released to anyone within the company without approval of a general manager or staff department director.

B. Contributions*

Employes may not be solicited or solicit on company time or on company premises for contributions to any organization or fund without the approval of the location manager.

C. Memberships*

Employes may not be solicited or solicit on company time or on company premises, parking lots included, to join any organization whether social, fraternal, business or trade.

D. Purchases

Employes may not be solicited by salesmen on company premises or during working hours.

**The provisions of paragraphs B and C above do not apply to solicitation for union membership or union dues during non-working hours.*

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E. Process or Subpoena Service

Since there is ample time for employes to be served with processes or subpoenas in private litigation matters away from the job, office managers and plant managers should not (except where required by state law) accept or call employes to a reception center for service of such processes or subpoenas. This does not apply to jury summons or to any investigations conducted by an official police organization in matters in which the particular employe is involved.

XII. STOCK OPTION PLANS

A. 1960 Stock Option Plan

Under this Stock Option Plan, the Board of Directors may authorize the grant of options to purchase unissued or reacquired common stock of the company to officers and other employes of the company and its subsidiaries, including members of the Board of Directors of the company who also are salaried officers.

The options are granted to such persons and in such amounts as the Stock Option Committee (composed of the Chairman of the Board and two non-officer board members) shall determine. Under the terms of the plan, members of the committee are ineligible to receive stock options.

An officer or employe who is granted a stock option under this Stock Option Plan is not eligible for a bonus award based on the company's operations for the calendar year during which the stock option is granted.

B. Second Employes' Stock Plan

Under this plan, certain salaried and hourly employes may be granted options to purchase a maximum of 450,000 shares of common stock of the company at not less than 95 per cent of the average market price on the effective date of the plan. On the effective date, to be set at the discretion of the Board of Directors, eligible employes will be granted options to purchase up to that number of whole shares which, at the option price, equals 30 per cent of their base compensation for one year. Employes will authorize payroll deductions in an amount sufficient (exclusive of the four per cent interest that will be credited semi-annually to their stock accounts) to pay over a 35-month period for the number of shares under option. All or part of the money accumulated in this stock account may be withdrawn at any time.

Employes hired after the effective date of the plan may, under the conditions specified in the plan, be eligible to participate. Details of the plan may be obtained locally or from the Personnel & Administrative Services Department in St. Louis.

XIII. TRAVEL AND MOVING EXPENSE AND REAL ESTATE POLICY

A. Official Travel

Employes requested to travel on company business are reimbursed for all transportation and subsistence expense incurred. The following are considered as transportation expense items: first class railroad and pullman fare or plane fare on regularly scheduled airlines, taxis, rental automobiles, toll and parking fees, streetcar and bus fares, and tips.

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If travel is by private automobile, in addition to toll and parking fees, eight cents per mile is paid.

Subsistence expenses include the following items: lodging, meals, valet service, laundry, postage, telephone calls, telegrams and tips.

In order to establish a company-wide standard procedure for handling advances or payment of funds to employes who travel on company business, the Accounting Department has established a *Travel Expense Procedure*, which may be amended from time to time.

B. Travel Accident Insurance

Insurance coverage in the amount of $25,000 is provided for salaried employes while traveling on authorized company business outside of their permanent place of employment. The coverage extends to all forms of transportation (not applicable to company aircraft). Details are set forth in *Personnel Administration Bulletin XV*. (See also "Automobiles and Their Use," page E-24.)

C. Travel and Moving Expense—New Personnel

All new employes, married or unmarried, who are the heads of families with household goods, may be reimbursed for out-of-pocket expense incurred in moving themselves, their furniture and family to the new job site.

All new employes who are unmarried may be paid transportation to their new job site.

New employes may be moved at company expense from their university or from their home as decided by the division or staff department concerned and expressly stipulated in the job offer letter.

The Internal Revenue Service considers these reimbursements as income and the employe shall be informed by the employing division or staff department of the necessary deductions and procedures required.

D. Transfers

1. Travel and Subsistence Expenses

An employe assigned to a new location is reimbursed for reasonable travel and subsistence expenses incurred for himself and for his immediate family for a period normally not to exceed two weeks. In case of personal hardship, expenses may be paid for an additional period on approval of the employe's division general manager or staff department director. Travel and subsistence expenses are defined under "Official Travel," (paragraph A above).

Employes are permitted to return to their transfer point at company expense to assist their families in moving household effects and to take care of other related matters.

Employes who are temporarily assigned to a new location under conditions that make it inadvisable to move their families and effects, or assigned to a new location on a permanent basis and who find it inconvenient to move their families immediately, may be paid their individual subsistence expenses at the discretion of the division general manager or staff department director. Such employes are expected to arrange for adequate living conditions less expensive than would be obtained as a transient in a hotel. Occasional trips home at the expense of the company may be allowed on approval of the division general manager or staff department director.

2. Moving Expense

The company pays the cost of moving the employe's household goods and personal effects to the newly assigned location, including storage charges if required.

Details on travel, subsistence and moving expenses are set forth in *Personnel Administration Bulletin IX.*

3. Real Estate Policy

When an employe is transferred at company request from one location to another, it is Monsanto's policy that the individual shall not suffer capital loss by the move. Details are set forth in *Personnel Administration Bulletin IX.*

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SECTION G

SECURITY GUIDE

SECURITY GUIDE

The chemical industry is one in which great emphasis is placed on creativeness. Therefore, Monsanto's success depends in no small degree upon how well security of the company's trade secrets and confidential information is maintained. While the courts recognize and enforce the sanctity of such information, there is no substitute for aggressive effort to prevent disclosures by means of an adequate system of internal security.

Even though there are those who, through lack of integrity, may attempt to obtain by improper means Monsanto's trade secrets and confidential information, the far greater hazard to the company's competitive position occurs as a result of inadvertent disclosures of this information by its employes. Each employe must, therefore, be constantly alert to guard against unauthorized disclosure of sensitive company information. The maintenance of a climate of individual awareness will greatly enhance the company's prospects for continued success.

In recognition of the importance to the company of its trade secrets and confidential information, Monsanto's security program has been broadened in its application and intensified in its enforcement. To some degree, the application of such a program must necessarily restrict the free flow of information within the company. However, this should not hinder the company's progress, if care is used to insure that those employes, but only those employes, who require confidential information in their activities are kept fully informed in their areas of interest.

Following are some principles and guides for company security of its trade secrets and other sensitive corporate information. However, mere observance of these guides will not be sufficient in itself. They must be augmented by constant individual awareness of and attention to this matter.

I. NATURE OF TRADE SECRETS AND CONFIDENTIAL INFORMATION

A. Definition of Trade Secret

A legal definition of a trade secret which deserves protection against unauthorized disclosure is as follows:

> "A trade secret may consist of any formula, pattern, device or compilation of information which is used in one's business and which gives him an opportunity to obtain an advantage over competitors who do not know or use it. It may be a formula for a chemical compound, a process of manufacturing, treating or preserving materials, a pattern for a machine or other device or a list of customers . . . It may relate to the sale of goods or to other operations in the business, such as a code for determining discounts, rebates or other concessions in a price list or catalogue, or a list of specialized customers or a method of bookkeeping or other office management."[1]

B. Trade Secret Examples

While the definition of a trade secret is readily understandable, application of that definition to a particular set of facts may be difficult.

[1]American Law Institute, *Restatement of the Law, Torts,* Vol. 4, page 5.

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For example, any particular process may be composed of certain standard items of equipment such as motors, pumps, vessels and the like. While a particular item of equipment that is used may not in and of itself be a secret, its specifications and use in relationship to the process as a whole may be a trade secret. The combination of parts or equipment and their use at various speeds, temperatures or pressures may be a trade secret and protected under the law even though the process as such cannot be patented. Another area of secrecy involves the use of a standard item of equipment, such as a kiln or centrifugal, upon which Monsanto's engineers and scientists make improvements to increase production or improve quality of product. This improvement upon a standard item of equipment is a trade secret and must be guarded as such.

In order to protect such trade secrets, they must not be disclosed to third parties or, if this cannot be avoided, then only under conditions which impose an obligation on the third party to observe their confidential nature.

C. Confidential Information

Confidential information and trade secrets as described in this *Security Guide* refer not only to formulae, processes, design, engineering and similar matters of a technical nature, but also to such information as data concerning or identity of customers or suppliers, financial and statistical data of all kinds, production and other costs or any other information dealing with the company's operations which it is determined shall remain confidential or may be considered security-sensitive.

A good example of the type of non-technical information which must be protected is Monsanto's production costs, as revelation of this information would be highly detrimental to the company's interests. Additionally, a leak of information about a new product or other business activity being undertaken by Monsanto might jeopardize the prospects for success in the new venture and, therefore, must be kept confidential.

D. Employe's Skill and Experience

There is no intention in the application of Monsanto's security program to restrict its employes in the use of their professional or other skills and experience, but only a desire to safeguard the company's property of accumulated knowledge. Accordingly, in the application of this program, care must be exercised so that the individual rights of the employe are not infringed. In some instances, no precise line of demarcation can be drawn between the company's trade secrets and confidential information and an employe's skill and experience. In those cases where the line is narrow, the only guide may be the individual's own sense of propriety and professional ethics. A safe course for the employe to follow is to secure permission in writing from the company for the use or revelation of information where doubt exists whether it constitutes a trade secret or confidential information.

The company recognizes obligations employes may have not to disclose any inventions, trade secrets or other confidential information which they may have acquired as a result of previous employment elsewhere. Under such circumstances, employes should notify their supervisors of any such prior obligations to avoid embarrassment to the company.

II. EMPLOYE AGREEMENTS—COMPANY POLICY

Monsanto, like most chemical companies, long has had a policy of entering into agreements with technical employes and other personnel in security-sensitive positions. These agreements merely represent a formal recognition of commonly accepted, time-honored ethical and legal obligations not to disclose information obtained in confidence in the course of employment. Such ethical and legal obligations have for centuries been embodied in the Anglo-American system of common law and they are carried forward and embodied in Monsanto's employe agreements. The canons of ethics for engineers, chemical engineers, lawyers and other professional groups also have incorporated these obligations as standards for their professions. (See Footnote for A.S.M.E. Canons of Ethics for Engineers as an example of typical professional standards.)

In recognition of the fact that virtually all salaried employes have contact with company information of a confidential nature, henceforth all salaried employes shall enter into an employe agreement with the company. Salaried employes who have not done so already shall execute the appropriate form of contract and new employes shall do so at the time of their employment.

It is important that the company's purposes in requiring these agreements be fully explained to new employes and present employes executing agreements for the first time. Not only will this serve to eliminate any misunderstandings as to the nature of the agreements but it also will impress upon the employe the importance of his own activities in this field.

The agreement shall be signed by the employe and the general manager of the division or staff department director, who may delegate this authority. A copy of the agreement shall be given to the employe and the other signed copy kept in the employe's personnel file.

All "technical personnel" shall sign the long-form contract. Technical personnel are defined as persons with college degrees who majored in chemistry, physics, mathematics, biology, bacteriology, geology, entomology, related sciences and engineering (chemical, mechanical, civil, electrical, petroleum, etc.) related to the chemical and petroleum industries in whatever capacity utilized. All other persons are considered non-technical. Appended as "Exhibit A" (p. G-14) is a guide to the particular form of agreement, whether long or short, which is suggested for each salaried classification.

Special agreements shall be used for production, exploration and geological personnel of the Lion Oil Company Division.

"Sec. 8. The engineer will act in professional matters for each client or employer as a faithful agent or trustee."

"Sec. 14. He will disclose no information concerning the business affairs or technical processes of clients or employers without their consent."

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Arrangements have been made to determine which salaried employes have not presently signed employe agreements. Each divisional personnel director, or the general manager's designee, and staff department director will be contacted to arrange with these employes to execute the agreement appropriate for his designation.

It is the payroll department's responsibility to determine that a signed employe agreement is on file for every salaried employe. To accomplish this perpetual inventory, the following procedure will be followed:

A. Employment

Coincident with initial employment, a signed employe agreement shall be attached to Salary Payroll Approval Form 21463-A and sent to the payroll department.

In instances where a change of assignment requires the employe to sign the long-form agreement, it must be forwarded by the originating source with Form 359 to the payroll department.

B. Index of Salaried Classifications—Purpose

Attached as "Exhibit A" (p. G-14) is an index of salaried classifications. Each position is coded by a letter to indicate whether the employe in that classification should sign a short- or a long-form agreement. THIS INDEX IS INTENDED ONLY AS A GUIDE. The head of the department originating the Form 21463-A or Form 359 must determine from his analysis of the position whether the employe, if not a technical employe, should sign a long- or a short-form agreement.

III. TERMINATING EMPLOYES

All employes who have had access to trade secrets or confidential information, including not only design data, process information and the like, but also accounting, sales, production, cost and similar data, shall be required upon termination to account for and return all manuals, blueprints, specifications, memoranda, diaries, notebooks and other documents pertaining to the company's business which they received or prepared in the course of their employment. *Also, they shall sign the following statement:*

> In terminating my employment with Monsanto Chemical Company, I have returned and accounted for all material, of whatever kind, containing company information, received or prepared by me in connection with my employment, and I have retained no copies, reproductions or excerpts of such material.
>
> __________ ____________________
>
> *Date* *Signature of Employe*

Location managers or their designees are responsible for obtaining such signed statements except at the company's General Offices, where staff department directors, general managers or their designees have such responsibility.

In addition, as a matter of notice, each terminating employe shall be given a copy of the contract he has signed, even though he received one when employed.

IV. SECRECY AGREEMENTS WITH OUTSIDE PERSONS AND COMPANIES

It sometimes is necessary in the course of the company's activities to reveal Monsanto trade secrets or confidential information to third parties or to permit them access to areas or materials from which such secrets or information can be obtained.

Of course, every effort must be made to avoid this where possible; but when it is unavoidable the information revealed should be limited to that which is absolutely necessary. In such cases, the third party shall be put on notice of his obligations to respect the confidential nature of the information and, where appropriate, a written undertaking should be obtained. Contracts shall be entered into with outside parties in the following categories to protect against unauthorized use or disclosure of Monsanto trade secrets or confidential information. Responsibility for securing signed contracts with the following shall rest with Monsanto management representatives arranging for or retaining such services.

A. Consultants

1. Technical

Since the work of outside consultants varies considerably, contract language has to be tailored to fit the particular situation. If Monsanto is buying information from a consultant, it must be determined whether the company can restrict the consultant in his revelation of the same information to anyone else. If his services involve exposure to Monsanto trade secrets to be merged with technical additions by the consultant, it is necessary that he sign an agreement not to reveal or use the Monsanto information or the results of his work.

The consultant agreement should include a provision that the consultant, at the termination of his work, or at any other time Monsanto requests, shall return any written, printed or other material given to him in connection with his work or prepared by him and embodying Monsanto trade secrets. The agreement should specifically provide that he shall not duplicate any such material. Those negotiating such contracts should endeavor to obtain agreement that additions, modifications, information, design and the like which the consultant renders to Monsanto shall become the property of Monsanto, and that the consultant shall not reveal or use this information except with the prior written consent of Monsanto. As indicated, of course, any of the foregoing provisions depend upon the nature of the services to be rendered but all of them must be considered in the drafting of any agreement.

The services of the Patent Department should be obtained in drafting these contracts and, where indicated, those of the Law Department.

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2. Business or Non-Technical

The business consultant shall agree that he will not, directly or indirectly, use for himself or others, or disclose to any third party, any trade secrets or confidential information regarding any business or accounting methods, manufacturing methods, costs or any other information revealed in confidence to him. The agreement shall provide also for the return of all written or printed material, either supplied to him or which he prepares during the course of his services with the stipulation that he retain no copies. The services of the Law Department should be secured in drafting agreements of this kind.

B. Construction Contractors and Subcontractors

If pertinent, secrecy provisions shall be incorporated in construction contracts. These provisions must be extensive enough to protect the company against any revelation by contractors and subcontractors or their employes. The contractor shall agree to keep confidential, and require his employes and, where appropriate, subcontractors, to keep confidential, all process, design, apparatus information and the like, including the type and source of machinery and equipment provided by Monsanto for installation by the contractor. The agreement also shall provide that the contractor and his subcontractors should keep secure and account for each and every blueprint issued and obligate themselves to return, without duplication, any prints, specifications, sketches or other documents supplied. *All blueprints and drawings must be prepared on sheets bearing the confidential legend described in Article VIII as part of the Monsanto title block and such documents, together with specifications, sketches, etc., issued to contractors and subcontractors must be stamped with the confidential stamp described in Article VIII.* Standard A.I.A. forms *are not* sufficient to protect the company in this regard. The services of the Law Department should be secured in drafting construction agreements.

C. Outside Designers

In all cases where outside engineering firms are employed to execute any design work, the agreement for their services shall contain a secrecy provision binding the firm and its employes. Where appropriate, employes of the design firm shall execute secrecy agreements directly with Monsanto. *Design work shall be accomplished on drawing paper showing the Monsanto title block with the confidential legend described in Article VIII imprinted thereon.* This agreement, among other things, shall provide for ownership of the work produced by the outside designer, whether he arrives at it independently or whether he merges some Monsanto design information with that of his own. The particular type of contract, of course, must be tailored to fit the situation. As with other contracts, it shall provide for an accounting of all documents received from Monsanto and their return.

If Monsanto buys a process or a "turnkey" plant, consideration should be given to whether the company should effect agreement with the seller that disclosure of purchase of such a plant or process may not be revealed by the seller in any way, including advertising or other sales promotion, with or without photographs.

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The services of the Law Department should be obtained in drafting these agreements.

D. FABRICATORS

Through divisional purchasing departments, Monsanto blueprints sometimes are submitted to structural steel, machinery and equipment fabricators for bidding. The invitation to bid and the blueprints shall carry notice to the fabricator that he is under a duty to keep the company's design information confidential and *to return the drawings with his bid.* Upon completion of the work, all drawings, including any reprints, must be accounted for and returned. See Article VIII. Where appropriate, the fabricator shall be required to impose on his employes a secrecy requirement.

E. SALESMEN AND/OR SUPPLIERS

Agreements should be executed by suppliers and their salesmen to keep confidential design and other information supplied by Monsanto. Moreover, if salesmen or other suppliers' representatives are called into a plant for inspection or to aid in operating equipment, only information necessary for the accomplishment of their mission shall be given them. They should be accompanied by a plant employe and should not be permitted to go into any area of the plant other than that which their activity requires. Routinely, they shall sign an agreement not to reveal Monsanto confidential information. (See "Visitor or Outside Labor Passes," p. G-8.)

F. INSURANCE MEN, INVESTIGATORS, UNDERWRITERS, ETC.

Insurance investigators, underwriters, insurance photographers and the like shall agree in writing to keep confidential any information supplied to them or observed by them in any plant. If, in the course of litigation it becomes necessary to reveal information of this nature, the Law Department should be consulted to determine the limitations and protective controls which can be established.

V. PLANT AND LABORATORY SECURITY

Monsanto's plants embody the results of millions of dollars spent on engineering, research and design. Through this effort and expenditure of funds, Monsanto has developed and improved many processes which would be of great value to competitors in the chemical industry. Similarly, much of the work being done in the company's laboratories is of a secret nature. The engineering incorporated in the company's plants and the research activities being conducted in its laboratories must be protected.

The first line of protection for such information is to prevent unauthorized personnel, whether employes, visitors or outside labor, from gaining access to areas where it can be obtained by observation. Where it is appropriate or necessary to permit access to non-employes, they must be placed under an obligation to hold the information they receive in confidence. Precautions shall be observed also in company offices to prevent unauthorized persons from gaining access to confidential documents and other material.

Particular application of site security necessarily varies with each loca-

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tion, depending on its operations, size and number of employes. In general, the plant manager or laboratory director should establish the following:

1. Except for those employes assigned to a particular department or unit, supervisors shall not permit in their departments anyone unknown to them, except under proper authority and clearance.

2. Employes from other departments (except those whose work makes it necessary for them to be there) should be barred from visiting or entering those departments which are considered secret or confidential.

3. No photographs of equipment or processes, for any reason whatsoever, shall be taken without the approval of the location manager and, even with such approval, the actual photographs shall be examined by him or his designee before release. If any question exists, such photographs shall be submitted to the Clearance and Review Committees referred to in Article VII.

4. Vending machine service men shall enter only for the specific purpose of servicing such machines and shall not be permitted to enter or roam about any other areas.

5. Signs shall be posted at appropriate areas reading "RESTRICTED—EMPLOYES ONLY." Where a question exists of what is confidential in a particular area or it is difficult to segregate a confidential area from one not so classified, the safest course is to blanket an entire area under security sanction.

A. Visitor or Outside Labor Passes

A register must be kept at the main gate so that no outsiders are admitted without proper authority.

Signed permits are required of all visitors and shall contain, in print on the reverse side, an agreement to maintain secrecy. *The location manager may waive this requirement for special visitors who are accompanied by a Monsanto employe.* The visitor must be identified by a badge with "Visitor" imprinted thereon. The same applies to any outside labor coming into the plant to perform work in the plant.

The following language is suggested for the pass form:

> In consideration of Monsanto Chemical Company granting me permission to enter its (insert plant or laboratory), I hereby covenant and agree that all the knowledge, information or experience which I may acquire thereby, and particularly any knowledge, information or experience which I may acquire with reference to the manufacture of the said plant's products, shall and will be held by me in confidence, and that I will not disclose, divulge or reveal the same or any part thereof, directly or indirectly, to any person or persons, or make any use of the same for myself or others.
>
> ______________________________
> *Signature of Visitor*

B. Contractor's Employes

1. Contractors and subcontractors and their employes normally will be governed by the terms of the particular contract. The terms of the contract shall be brought to the attention of the location's supervisory personnel so that they are aware of the duties and liabilities of such personnel on the site. Notices setting forth security rules applicable to construction personnel must be posted at the job site in prominent places.

2. In all cases, construction personnel must be confined to the exact area in which they are working under contract. All other areas of the plant are closed to them. The areas to which they will be confined shall be designated by the plant manager and the contractor shall be notified. Wherever possible, construction employes should use a separate gate.

3. All construction personnel must wear identification badges.

4. Construction automobiles should be limited in entry to the plant to those few necessary for construction supervision. Exceptions may be made by the plant manager where tools or equipment are to be transported to a specific plant area or it is otherwise impractical to refuse access.

C. Hourly Employes

Hourly employes at nearly all plants and laboratories are exposed to or receive confidential information as to processes and equipment which would be of value to competitors or others. Requiring hourly employes to sign secrecy agreements not only places some restraint upon any revelation by them but also has the additional benefit, recognized by the courts, of creating evidence of an intent on the part of the employer and employe to maintain secrecy. Execution of such secrecy agreements on the part of hourly employes in plants being operated for the Government is routine.

Therefore, in all plants all hourly employes will be expected to sign secrecy agreements at a time considered appropriate by the plant and division, with the concurrence of the Personnel & Administrative Services Department. The following is an appropriate type of agreement:

CONFIDENTIAL INFORMATION

I hereby agree, in consideration of my employment or continued employment, not to use or divulge, without the company's consent, any confidential information acquired through my connection with the company.

______________________________(Signed)

D. Documentary Security

Blueprints, specifications, operating data, operating manuals and the like shall be carefully catalogued and classified so that the absence of any of these documents and the source of the loss can be traced promptly. Documents of this nature shall be kept in locked files when not in use. In those cases where a room may be securely locked such documents need not be kept in locked files. Superseded prints

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or other outmoded printed documents and data shall be collected carefully and destroyed by burning.

Care must be exercised to prevent exposure on desks of confidential information and it must be kept in locked files after business hours.

VI. PROSPECTIVE OR ACTUAL REVELATION OF MONSANTO SECRETS

Whenever a plant, division or department has reason to believe that a terminated employe is revealing, or *is in a position to reveal,* Monsanto information in violation of his obligations to the company, the Law Department should be notified to determine what action should be taken with respect to the ex-employe, his new employer or both.

VII. CLEARANCE AND REVIEW COMMITTEES

Each division has a Clearance and Review Committee of two or more technical department heads whose duty it is to review and approve for release all material originating in that division of the categories mentioned below. Staff department directors are responsible for the review and clearance of material originating with their departments. Where technical information is involved, the committee or director shall secure the approval of the Patent Department. No material in the following categories may be released without the approval of the divisional committee or director and must have further review and clearance as indicated:

A. Speeches

Speeches and informal talks (technical or non-technical in nature, relating to Monsanto's activities or the chemical industry) must be cleared by the Public Relations Department as well as by the appropriate Clearance and Review Committee.

B. Technical and Professional Papers and Speeches

Such material is to be cleared by the Public Relations and Patent Departments and the division director of research, as well as by the Clearance and Review Committee.

C. Release of General Information about Monsanto

Such material is to be cleared by the Public Relations Department and, where applicable, by the *particular* officer or staff department director responsible for the function involved. Inquiries from the press are handled by the Public Relations Department.

D. Advertising

Copy for all advertising shall be cleared with proper Marketing Services Department personnel, central or divisional, as well as by the appropriate Clearance and Review Committee.

E. Internal Publications and Printed Communications

Divisions and plants are responsible for the security of information published and distributed to their employes. However, when over-all company policy is involved, clearance shall be obtained from the Public Relations Department and from officers or staff department heads involved. Divisions, plants and staff departments also have the responsibility of determining the extent of the distribution of internal material.

F. PHOTOGRAPHY

The Public Relations Department has responsibility for securing proper divisional or plant approval before any photos are made. Additionally, the Public Relations Department has responsibility for obtaining proper divisional and/or plant clearance concerning the ultimate use of such photographic material. All photographic material is distributed to external sources by the Public Relations Department.

VIII. SECURITY CLASSIFICATION OF DOCUMENTS, CORRESPONDENCE, ETC.

All employes who originate documents, correspondence or other material which is security-sensitive, shall mark such material confidential. The originator of such confidential information is primarily responsible for its security classification. Conversely, documents which are not truly of a confidential nature should not be classified as such. An indiscriminate use of classification weakens the security system for this may cause employes to disregard their obligations for properly classified material.

Documents of a sensitive nature must be imprinted or stamped with an appropriate legend to give notice of the security requirements for such documents. To lessen the possibility of a security leak, it often is desirable to send excerpts from such documents where the full information contained in them is not required by the recipient. When the excerpt contains confidential information, it carries the same restrictions imposed on the main document. The following legend is suggested for use but it may be modified to fit particular situations so long as its primary restrictions are not weakened:

CONFIDENTIAL

This document is the property of Monsanto Chemical Company and the recipient is responsible for its safekeeping and disposition. It contains confidential information of Monsanto Chemical Company which must not be reproduced, revealed to unauthorized persons or sent outside the company without proper authorization. The disposition of this document shall be:

☐ Return to originator ☐ Destroy after reading
☐ Retain in secure files ☐ ____________

All company blueprints and drawings relating to manufacturing and research operations shall be prepared on sheets bearing the following legend as part of the Monsanto title block:

CONFIDENTIAL

This drawing is the property of Monsanto Chemical Company and must be accounted for and returned to the company. Information hereon is confidential and must not be reproduced, revealed to unauthorized persons or sent outside the company without proper authorization.

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Where it is necessary to send blueprints or drawings to outside parties such as contractors, fabricators or suppliers, and after authorization is obtained, the documents shall be stamped with the following legend before being released:

NOTICE

This drawing is the property of Monsanto Chemical Company and must be returned, without reproduction or duplication, at any time upon request, but in any event at completion of the work or job. While in the possession of the recipient, it must be properly safeguarded against revelation or disclosure to any one except those employes who require it for the work or job. The recipient must keep confidential and require his (its) employes to keep confidential the information contained hereon.

IX. COMPANY AND PROFESSIONAL MEETINGS

As security can be effectively maintained only through constant vigilance, each location manager should periodically undertake to remind salaried and hourly employes of their security obligations. Company meetings at any level are an appropriate place for reminders of the necessity for security.

Since experience has shown that costly inadvertent disclosures have occurred at meetings of professional societies, technical personnel should be reminded prior to attending such meetings of their security obligations. The department head is responsible for such reminders.

X. NOTICE TO SUBSEQUENT EMPLOYERS

When an employe leaves to go to a new employer it is necessary, in many cases, that Monsanto notify the new employer, whether a competitor or consulting firm, of the existence of his contract with Monsanto and its more important items. The notice also shall state that Monsanto expects the terminating employe to comply with his Monsanto contract. The employe shall receive a copy of this letter.

Monsanto realizes that there are a number of situations in which the company may feel confident that (1) the new employer cannot or will not have use for Monsanto's confidential information, or (2) the employe has no confidential information, or (3) Monsanto's relationship with the new employer assures against use of any confidential information which the individual may take from Monsanto. Careful judgment must be exercised in preparation of the letter and in making a decision *whether it should be mailed at all.* In cases where there is a question whether a letter should be sent, the Law Department should be consulted. Divisional personnel directors and staff department directors shall be responsible for sending such letters.

Following is a form of letter which can be used in writing to employers, competitive or potentially competitive with Monsanto, concerning former Monsanto employes who have joined their organizations:

Mr. ______________________________
______________ (Title) ______________
__________ (Company Name) __________
______ (City) __________, (State) ___
Dear Mr. ________________________:

We understand that Mr. ________________________, a former employe of ours, has accepted employment with your company as a ________________ (chemist) (engineer) working in the field(s) of ________________ (chemistry) (engineering).

Our best wishes for success go with Mr. ______________ in his new endeavor. However, we think you should be aware that, at the time Mr. ____________ entered our employ, he executed an employment contract, certain provisions of which remain in force after his separation from Monsanto. A copy of his agreement is attached for your review.

We wish to call to your attention the provisions which refer to information and materials considered confidential by our company. During the course of Mr. ________'s employment with us, he was given access to confidential information and documents which are Monsanto's trade secrets.

While we do not intend or desire in any way to impair Mr.________'s employment opportunities or performance, we do expect and feel confident that he will honor his employment contract with Monsanto by keeping confidential and not using any of our company's classified information or trade secrets during the course of his new employment.

Sincerely,
MONSANTO CHEMICAL COMPANY

By________________________________
(Title)

Enclosure

XI. U. S. GOVERNMENT DEFENSE SECURITY

This *Security Guide* relates only to security safeguards for Monsanto trade secrets and confidential information. It does not apply to, or in any way supersede, governmental security regulations relating to U. S. Government defense work being carried on by the company. Violations of governmental security regulations may result in fine, imprisonment or both. Information about U. S. defense security may be obtained from the supervisor of office planning.

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EXHIBIT A

INDEX OF SALARIED CLASSIFICATIONS

NOTE: This is only a guide; decision as to the particular form is to be made by the department head.

NOTE: S—refers to Short-Form Agreement; L—refers to Long-Form Agreement

CODE		CLASSIFICATION
1. ACCOUNTING		
108	S	Section Manager
109	S	Asst. Section Manager
110	S	Chief Accountant
111	S	Asst. Chief Accountant
112	S	Senior Accountant
113	S	Accountant
114	S	Asst. Accountant
115	S	Chief Clerk—Accounting
116	S	Sr. Accounting Clerk
117	S	Accounting Clerk A
118	S	Accounting Clerk B
119	S	Accounting Clerk C
120	S	Accounting Supervisor
121	S	Calculating Clerk A
122	S	Calculating Clerk B
129	S	Chief Paymaster
130	S	Paymaster
131	S	Asst. Paymaster
132	S	Sr. Payroll Clerk
133	S	Payroll Clerk A
134	S	Payroll Clerk B
150	S	Tabulating Supervisor
151	S	Asst. Tabulating Supvr.
155	S	Senior Computer Operator
156	S	Computer Operator
160	S	Tabulating Operator A
161	S	Tabulating Operator B
162	S	Tabulating Operator C
165	S	Sr. Key Punch Operator
166	S	Key Punch Operator A
167	S	Key Punch Operator B
2. CLERICAL		
200	S	Order and / or Billing Mgr.
201	S	Order Supervisor
202	S	Pricer A
203	S	Pricer B
204	S	Billing Clerk A

CODE		CLASSIFICATION
2. CLERICAL (Continued)		
205	S	Billing Clerk B
207	S	Order Clerk A
208	S	Order Clerk B
209	S	Chief Clerk
210	S	Senior Clerk
211	S	Clerk A
212	S	Clerk B
213	S	Clerk C
214	S	Clerk D
215	S	Clerk E
221	S	Correspondent A
222	S	Correspondent B
228	S	Executive Secretary A
229	S	Executive Secretary B
230	S	Secretary A
231	S	Secretary B
232	S	Secretary C
239	S	Stenographic Supervisor
240	S	Stenographer A
241	S	Stenographer B
242	S	Stenographer C
243	S	Stenographer D
250	S	Typist A
251	S	Typist B
252	S	Typist C
260	S	Clerk-Typist A
261	S	Clerk-Typist B
262	S	Clerk-Typist C
263	S	Clerk-Typist D
270	S	Clerk-Stenographer A
271	S	Clerk-Stenographer B
272	S	Clerk-Stenographer C
275	S	Bookkeeping Machine Operator A
276	S	Bookkeeping Machine Operator B
277	S	Bookkeeping Machine Operator C

All "technical employes" must execute the long form agreement.

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CODE		CLASSIFICATION
3. DEVELOPMENT		
301	L	Process Consultant
302	L	Major Project Investigator
303	L	Project Investigator
304	L	European Technical Representative
306	L	Development Manager
307	L	Asst. Development Manager
310	L	Sr. Project Specialist
315	L	Project Specialist
320	L	Asst. Project Specialist
325	L	Technical Trainee (Development)
330	L	Sr. Bacteriologist, Biologist, Entomologist, etc.
340	L	Bacteriologist, Biologist, Entomologist, etc.
350	L	Asst. Bacteriologist, Biologist, Entomologist, etc.
4. ENGINEERING		
		Chemical, Maintenance, Mechanical, Electrical, etc.
405	L	Engineering Manager
406	L	Asst. Engineering Manager
407	L	Sr. Engr. Supervisor
408	L	Engineering Supervisor
420	L	Sr. Technologist
421	L	Technologist
425	L	Engineering Specialist
430	L	Senior Engineer
440	L	Engineer
450	L	Engineer
457	L	Chief Draftsman
458	L	Asst. Chief Draftsman
459	L	Squad Leader
460	L	Sr. Draftsman
461	L	Draftsman
462	L	Draftsman
463	L	Draftsman
464	L	Trainee Draftsman
469	L	Senior Estimator
470	L	Estimator
479	S	Chief Surveyor
480	S	Surveyor
489	L	Sr. Engineering Aide
490	L	Engineering Aide
493	S	Mechanical Inspector
5. EXECUTIVE		
		Corporate
501	L	Chairman of the Board

CODE		CLASSIFICATION
5. EXECUTIVE (Continued)		
502	L	President
503	L	Executive Vice President
504	L	Vice President (Member Executive Committee)
505	L	Regional Vice President
506	L	Vice President
510	L	Assistant to the President
511	L	Assistant to Company Executive
512	L	Corporate Planner
515	L	Director, Civic Affairs
520	L	Secretary
521	L	Assistant Secretary
522	L	Treasurer
523	L	Assistant Treasurer
524	L	Controller
525	L	Assistant Controller
		Staff Department
530	L	Director of Staff Department
531	L	Associate Director of Staff Department
532	L	Assistant Director of Staff Department
535	S	Assistant to Staff Executive
		Divisions
540	L	Vice President and General Manager
541	L	General Manager
542	L	Assistant General Manager
543	L	Executive Administrator
550	L	Director of Divisional Department
551	L	Associate Director of Divisional Department
552	L	Assistant Director of Divisional Department
555	L	Section Manager
556	L	Asst. Section Manager
560	S	Divisional Controller
562	S	Asst. Divisional Controller
565	S	Director Personnel Relations
567	S	Asst. Director Personnel Relations
570	S	Director Business Research
572	S	Assistant Director Business Research
575	L	Product Administrator
580	S	Assistant to Division Executive

All "technical employes" must execute the long form agreement.

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CODE CLASSIFICATION

7. PERSONNEL RELATIONS

Personnel

710 S Section Manager
711 S Asst. Section Manager
712 S Job Analyst
715 S Tech. Personnel Recruiter
730 S Personnel Director
731 S Asst. Personnel Director
732 S Personnel Manager
733 S Personnel Supervisor
734 S Asst. Personnel Supervisor
735 S Personnel Assistant
738 S Sr. Personnel Clerk
739 S Personnel Clerk A
740 S Personnel Clerk B
741 S Sr. Employment Interviewer
742 S Employment Interviewer

Safety

743 S Safety Supervisor
744 S Asst. Safety Supervisor
745 S Safety Engineer
746 S Asst. Safety Engineer
747 S Safety Inspector A
748 S Safety Inspector B

Training

750 S Training Manager/Supervisor
751 S Asst. Training Manager/ Supervisor

8. LEGAL, MEDICAL, PATENT

Legal

805 S Attorney
810 S Legal Clerk
815 S Title Clerk

Medical

820 S Physician (Full Time)
821 S Physician (Part Time)
825 S Dentist (Part Time)
830 S Industrial Hygienist
840 S Chief Nurse
841 S Nurse
845 S Medical Technician
850 S First Aid Attendant

Patent

860 L Patent Specialist
861 L Sr. Patent Attorney

CODE CLASSIFICATION

8. LEGAL, MEDICAL, PATENT (Cont'd)

862 L Patent Attorney
870 L Sr. Patent Solicitor A
871 L Sr. Patent Solicitor B
872 L Patent Solicitor
880 L Patent Searcher A

9. OTHER PROFESSIONAL

Market Research, Marketing Research, Business Research

910 S Manager
911 S Asst. Manager
915 S Specialist
916 S Sr. Analyst
917 S Analyst
918 S Asst. Analyst

Pilots

920 S Chief Pilot
921 S Captain
922 S Alternate Captain
923 S Co-Pilot

Methods & Procedures, Industrial Engr.

930 S Manager
931 S Asst. Manager
935 S Sr. Analyst, Engineer
936 S Analyst, Engineer
937 S Asst. Analyst or Engr.
938 S Trainee

Mathematic & Electronic Data Processing

945 L Manager/Supervisor
946 L Asst. Manager/Supervisor
950 L Electronic Data Processing Analyst (Accounting)
960 L Senior Mathematician
961 L Mathematician
962 L Assistant Mathematician
963 L Tech. Trainee (Math.)

10 and 11. PRODUCTION

1000 L Plant Manager
1001 L Asst. Plant Manager
1002 L Asst. to the Plant Manager

Operating

1010 L General Operating Supt.

All "technical employes" must execute the long form agreement.

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10 and 11. PRODUCTION (Cont'd)

CODE	CLASSIFICATION
1011 L	Manufacturing Supt.
1012 L	Gen. Operating Supv.
1013 L	Operating Supv.
1014 L	Asst. Operating Supv.
1015 L	Tech. Operating Asst.
1016 L	Tech. Trainee (Operator)
1019 L	Gen. Operating Foreman
1020 L	Operating Foreman
1021 L	Asst. Oper. Foreman
1025 S	Chemical Operator A
1026 S	Chemical Operator B
1030 L	Night Superintendent
1031 L	Asst. Night Supt.

Production Control

CODE	CLASSIFICATION
1038 L	Production Planning & Control Manager
1039 L	Div. Prod. Coordinator
1040 L	Production Coordinator
1041 L	Asst. Prod. Coordinator
1042 S	Material Coordinator
1043 S	Senior Expediter
1044 S	Expediter A
1045 S	Expediter B
1048 L	Sr. Process Statistician
1049 L	Process Statistician
1050 L	Asst. Process Statistician

Material Handling (Warehousing, Shipping, Receiving, Material Transfer)

CODE	CLASSIFICATION
1060 L	Superintendent
1062 L	General Supervisor
1063 L	Supervisor
1064 S	Asst. Supervisor
1070 S	General Foreman
1071 S	Foreman
1072 S	Asst. Foreman
1075 S	Transportation & Materials Dispatcher
1080 S	Chief Clerk
1081 S	Senior Clerk
1082 S	Clerk A
1083 S	Clerk B
1084 S	Clerk C
1090 S	Warehouseman

Analytical Laboratories

CODE	CLASSIFICATION
1100 L	Chief Chemist

CODE CLASSIFICATION

10 and 11. PRODUCTION (Cont'd)

CODE	CLASSIFICATION
1101 L	Asst. Chief Chemist
1102 L	Quality Control Supervisor
1103 L	Anal. Lab. Supv.
1104 L	Anal. Section Leader
1105 L	Shift Leader
1106 L	Sr. Anal. Chemist
1107 L	Anal. Chemist
1108 L	Asst. Anal. Chemist
1109 L	Tech. Trainee (Anal.)
1110 L	Anal. Lab. Tech.
1112 S	Anal. Lab Asst.
1113 S	Standards Supv.
1114 S	Anal. Lab. Helper

Plant Engineering

CODE	CLASSIFICATION
1115 L	Plant Engineer
1116 L	Engineering Supt.
1117 L	Asst. Engr. Supt.
1118 L	Asst. To Engr. Supt.

Maintenance & Construction

CODE	CLASSIFICATION
1120 L	Electrical Supervisor
1121 L	Maintenance Supervisor
1122 L	Asst. Maint. Supvr.
1125 L	Gen. Maint. Foreman
1126 L	Maint. Foreman
1127 L	Asst. Maint. Foreman
1128 S	Maint. Inspector
1129 S	Material Planner
1130 S	Maint. Man, Leader
1131 S	Maint. Man A
1132 S	Maint. Man B
1133 S	Maintenance Helper
1135 S	Sr. Instr. Technician
1136 L	Elec./Instr. Tech. A
1137 L	Elec./Instr. Tech. B

Storeroom

CODE	CLASSIFICATION
1140 S	Stores Supervisor
1141 S	Chief Storekeeper
1142 S	Storekeeper
1143 S	Asst. Storekeeper
1145 S	Sr. Stock Clerk
1146 S	Stock Clerk A
1147 S	Stock Clerk B

Utilities

CODE	CLASSIFICATION
1160 L	Utilities Supt.

All "technical employes" must execute the long form agreement.

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CODE	CLASSIFICATION
10 and 11. PRODUCTION (Cont'd)	
1161 L	Asst. Utilities Supt. / or Gen. Utilities Supv.
1162 L	Utilities Supv.
1163 L	Asst. Utilities Supv.
1164 S	Gen. Utilities Foreman
1165 S	Utilities Foreman
1166 S	Utilities Operator
	Yard
1180 S	Yard Supervisor
1185 S	Yard or Labor Foreman
1186 S	Asst. Yard or Labor Foreman
1190 S	Railroad Foreman
12. PURCHASING	
1200 S	Section Manager
1201 S	Asst. Section Manager
1202 S	Purchasing Agent
1203 S	Senior Buyer
1204 S	Buyer
1205 S	Trainee (Purchasing)
1210 S	Senior Purchasing Expediter
1211 S	Purchasing Expediter A
1212 S	Purchasing Expediter B
1220 S	Purchasing Agent (Plant)
1240 S	Manager of Packaging Development
1241 S	Asst. Manager of Packaging Development
1242 S	Packaging Assistant
1243 S	Labeling Assistant
13. RESEARCH	
1310 L	Research Section Leader
1311 L	Senior Research Group Leader
1312 L	Research Group Leader
1314 L	Senior Scientist
1315 L	Scientist
1316 L	Research Specialist
1317 L	Sr. Res. Chem., Physicist, Chem. Engr., etc.
1318 L	Research Chem., Physicist, Chem. Engr., etc.
1319 L	Chemical Engr.
1320 L	Sr. Res. Technician
1321 L	Res. Technician
1322 L	Res. Technician
1323 L	Res. Assistant

CODE	CLASSIFICATION
13. RESEARCH (Continued)	
1325 L	Res. Helper
1326 L	Engine Lab. Asst.
1327 L	Agricultural Asst.
	Library
1330 L	Research Librarian
1331 S	Research Bibliographer
1332 S	Asst. Research Librarian
1333 S	Tech. Trainee (Library)
	Others
1335 L	Technical Editor
1340 S	Glassblower
14. SALES	
1400 S	Director of Sales
1401 S	Assistant Director of Sales
1404 S	Regional Sales Manager
1405 S	District Sales Manager
1406 S	Assoc. Dist. Sales Mgr.
1407 S	Asst. Dist. Sales Mgr.
1410 S	Product Manager
1411 S	Associate Product Manager
1412 S	Assistant Product Manager
1415 S	Sales Development Manager
1416 S	Asst. Sales Development Manager
1420 L	Technical Sales Manager
1421 L	Asst. Technical Sales Manager
1425 L	Senior Sales Specialist
1426 L	Sales Specialist / Technical Sales Specialist
1427 L	Senior Sales Representative / Senior Sales Engineer
1428 S	Sales Representative / Sales Engineer
1429 S	Asst. Sales Repr. / Asst. Sales Engineer
1430 S	Trainee (Sales)
1435 S	Administrative Services Manager
1436 S	Asst. Adm. Serv. Mgr.
1439 S	Sales Correspondent Supv.
1440 S	Sr. Sales Correspondent
1441 S	Sales Correspondent A
1442 S	Sales Correspondent B

All "technical employes" must execute the long form agreement.

CODE	CLASSIFICATION
14. SALES (Continued)	
1443 S	Sales Correspondent C
1444 S	Sales Correspondent D
1445 S	Sales Correspondent E
1450 S	Resident Sales Mgr.
1451 S	Area Sales Supvr.
1455 S	Chief Export Clerk
1456 S	Export Clerk A
1457 S	Export Clerk B
1458 S	Translator
	Station Sales
1460 S	District Manager
1461 S	Assistant District Manager
1465 S	Manager, TBA (Tires, Batteries, and Accessories)
1466 S	Assistant Manager, TBA
1471 S	Station Sales Supervisor A
1472 S	Station Sales Supervisor B
1473 S	Station Sales Trainee
1475 S	Bulk Agent A
1476 S	Bulk Agent B
1478 S	Tank Wagon Salesman
1480 S	Service Station Mgr.
1481 S	Asst. Serv. Sta. Mgr.
1483 S	Serv. Sta. Attendant
1484 S	Serv. Sta. Helper
15. SERVICE	
	Administrative
1500 S	Office Manager
1501 S	Asst. Office Manager
1502 S	Service Mgr. / or Supervisor
1503 S	Asst. Service Mgr. / or Supervisor
1504 S	Building Manager / Lodge Mgr.
1505 S	Store Manager
	Miscellaneous
1510 S	Chief of Plant Guards
1511 S	Chief Guard
1512 S	Guard
1513 S	Chaffeur A
1514 S	Chauffer B
1515 S	Porter A
1516 S	Building Attendant
1517 S	Maid
1518 S	Chief Crew Leader (Porters)
1519 S	Crew Leader (Porters)

CODE	CLASSIFICATION
15. SERVICE (Continued)	
1520 S	Chief Telephone Operator
1521 S	Asst. Chief Telephone Operator
1522 S	Telephone Operator A
1523 S	Telephone Operator B
1525 S	Chief Telecommunications Operator
1526 S	Asst. Chief Telecommunications Operator
1527 S	Telecommunications Operator A
1528 S	Telecommunications Operator B
1530 S	Receptionist A
1531 S	Receptionist B
1535 S	Cafeteria Supervisor
1536 S	Asst. Cafeteria Supvr.
1537 S	Chief Cook
1538 S	Cook
1539 S	Baker
1540 S	Salad Maker
1541 S	Cafeteria Attendant
1542 S	Part-Time Cafeteria Attendant
1545 S	Chief Mail Clerk
1547 S	Mail Clerk A
1548 S	Mail Clerk B
1550 S	Chief Addressograph Operator
1551 S	Asst. Chief Addressograph Operator
1552 S	Addressograph Operator A
1553 S	Addressograph Operator B
1560 S	Printing Supervisor
1561 S	Asst. Printing Supervisor
1562 S	Head Artist
1563 S	Artist
1565 S	Sr. Duplicating Machine Operator
1566 S	Duplicating Machine Operator A
1567 S	Duplicating Machine Operator B
1568 S	Duplicating Machine Operator C
1570 S	Chief File Clerk
1571 S	Senior File Clerk
1572 S	File Clerk A

All "technical employes" must execute the long form agreement.

CODE	CLASSIFICATION
15. SERVICE (Continued)	
1573 S	File Clerk B
1575 S	Micro-film Operator A
1576 S	Micro-film Operator B
16. PRODUCTION & EXPLORATION	
	Administrative
1600 *	Regional Exploration Mgr.
1601 *	Asst. Regional Exploration Manager
	Geological
1610 *	Chief Geologist (Staff)
1612 *	Regional Geologist
1614 *	District Geologist
1621 *	Senior Geologist
1622 *	Geologist
1623 *	Asst. Geologist
1624 *	Tech. Trainee (Geological)
1626 *	Sr. Map Draftsman
1627 *	Map Draftsman A
1628 *	Map Draftsman B
1629 *	Map Draftsman (Trainee)
	Land
1630 *	Land Manager (Staff)
1632 *	Regional Land Man
1634 *	District Land Man
1635 *	Special Representative (Staff)
1636 *	Land Man
1637 *	Assistant Land Man
1638 *	Trainee (Land)
1640 *	Chief Scout (Staff)
1642 *	Regional Scout
1644 *	Scout
1645 *	Trainee (Scout)
1646 *	Supervisor—Land Records & Rental Payments (Staff)
1647 *	Asst. Supervisor—Land Records & Rental Payments
	Oil Production
1650 *	General Supt.—Oil Production (Staff)
1652 *	Chief Prod. Engineer (Staff)
1654 *	Regional Prod. Supt.
1656 *	District Prod. Supt.

CODE	CLASSIFICATION
16. PRODUCTION & EXPLORATION (Continued)	
1658 *	Drilling Supervisor
1659 *	Production Foreman
	Petroleum Engineering
1660 *	Chief Petroleum Engineer (Staff)
1662 *	Regional Petroleum Engr.
1664 *	District Petroleum Engineer
	Natural Gas and Gasoline Production
1670 *	Superintendent—Natural Gas Production
1672 *	Plant Superintendent
	Pipeline
1680 *	Pipeline Superintendent
1681 *	Asst. Pipeline Supt.
1684 *	District Gauger
1686 *	Field Gauger
17. TRAFFIC	
1700 S	General Traffic Manager
1701 S	Asst. General Traffic Mgr.
1705 S	Freight Traffic Manager
1706 S	Passenger Traffic Mgr.
1710 S	Traffic Manager (Division)
1711 S	Asst. Traffic Manager
1715 S	Distribution Manager
1716 S	Traffic Manager (Tank Cars & Special Equipment)
1717 S	Traffic Manager (Water Transportation)
1718 S	Asst. Supv. (Water Trans.)
1719 S	Traffic Manager (Warehousing)
1720 S	Freight Rate Analyst
1725 S	Senior Traffic Rate Clerk
1726 S	Traffic Rate Clerk A
1727 S	Traffic Rate Clerk B
1730 S	Claim Agent
1735 S	Sr. Traffic Clerk
1736 S	Traffic Clerk A
1737 S	Traffic Clerk B
1738 S	Traffic Clerk C
1750 S	Traffic Supervisor
1751 S	Asst. Traffic Supervisor

Forms of agreement not available; to be added as an amendment.
All "technical employes" must execute the long form agreement.

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CODE CLASSIFICATION

17. TRAFFIC (Continued)

1755 S Chief Traffic Clerk
1760 S Dispatcher
1765 S Yard Clerk

18. TREASURY

1805 S Section Manager
1806 S Asst. Section Manager
1810 S Cashier
1811 S Asst. Cashier
1815 S Teller A
1816 S Teller B
1817 S Teller C
1825 S General Credit Manager
1827 S Credit Manager
1828 S Asst. Credit Manager
1831 S Credit Man
1832 S Asst. Credit Man
1835 S Credit Clerk A
1836 S Credit Clerk B
1845 S Appraiser

19. ADVERTISING & SALES PROMOTION AND PUBLIC RELATIONS

Advertising & Sales Promotion

1900 S Advertising & Sales Promotion Manager
1901 S Asst. Advertising & Sales Promotion Manager
1902 S Section Manager
1903 S Assistant Section Manager
1905 S Product Promotion Manager

CODE CLASSIFICATION

19. ADVERTISING & SALES PROMOTION AND PUBLIC RELATIONS (Continued)

1909 S Creative Services Manager
1910 S Art & Design Supervisor
1915 S Advertising Production Supervisor
1920 S Senior Copywriter
1921 S Copywriter
1922 S Advertising Assistant

Public Relations

1950 S Public Relations Operations Manager
1955 S Section Manager
1956 S Assistant Section Manager
1960 S Public Relations Representative A
1961 S Public Relations Representative B
1962 S Public Relations Assistant
1970 S Chief Photographer
1971 S Senior Photographer
1972 S Photographer
1975 S Photographic Technician

20. TEMPORARY POSITIONS

2000 S All Temporary Employes
2001 S Co-op Students
2002 S Part-time Employes
2003 S Temporarily Unclassified

All "technical employes" must execute the long form agreement.

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TABLE OF CONTENTS

SECTION H

COMPANY BY-LAWS

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MONSANTO CHEMICAL COMPANY

BY-LAWS

Offices

1. The principal office shall be in the City of Wilmington, County of New Castle, State of Delaware, and the name of the resident agent in charge thereof is The Corporation Trust Company.

2. The corporation may also have an office in the County of St. Louis, State of Missouri, and also offices at such other places as the board of directors may from time to time appoint or the business of the corporation may require.

Seal

3. The corporate seal shall have inscribed thereon the name of the corporation and the words "Seal, Delaware." Said seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

Stockholders' Meetings

4. All meetings of the stockholders for the election of directors shall be held at the office of the corporation in the County of St. Louis, State of Missouri. Special meetings of stockholders for any other purpose shall also be held at the office of the corporation in the County of St. Louis.

5. An annual meeting of stockholders shall be held on the fourth Thursday of March in each year if not a legal holiday, and if a legal holiday, then on the next secular day following, at 10 o'clock A.M., when they shall elect by a plurality vote, by ballot, a board of directors, and transact such other business as may properly be brought before the meeting.

6. The holders of a majority of the stock issued and outstanding, and entitled to vote thereat, present in person, or represented by proxy, shall be requisite and shall constitute a quorum at all meetings of the stockholders for the transaction of business except as otherwise provided by law, by the certificate of incorporation or by these by-laws. If, however, such a majority shall not be present or represented at any meeting of the stockholders, the stockholders entitled to vote thereat, present in person, or by proxy, shall have power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until the requisite amount of voting stock shall be present. At such adjourned meeting at which the requisite amount of voting stock shall be represented any business may be transacted which might have been transacted at the meeting as originally notified.

7. At any meeting of the stockholders every stockholder having the right to vote shall be entitled to vote in person, or by proxy appointed by an instrument in writing subscribed by such stockholder or his duly authorized agent and bearing a date not more than three years prior to said meeting, unless said instrument provides for a longer period. Each stockholder shall have one vote for each share of stock having voting power, registered in his name on the books of the corporation, and except where the transfer books of the corporation shall have been closed or a date shall have been fixed as a record date for the determination of its stockholders entitled to vote, no share of stock shall be voted at any election for directors which shall have been transferred on the books of the corpora-

tion within twenty days next preceding such election of directors. Prior to a meeting of the stockholders, the president shall appoint two inspectors, who shall receive and canvass the votes cast at such meeting and certify the results to the president or chairman of the meeting. Such inspectors need not be stockholders. Before entering upon the performance of their duties the inspectors shall make oath that they will faithfully, honestly and impartially perform their duties as such inspectors.

The written proxies shall be filed with the inspectors who shall pass upon the sufficiency thereof before permitting any attorney or agent to vote thereon. Prior to any stockholders' meeting the board may recommend to stockholders (if they do not intend to attend the meeting in person) that they send in their proxies to the secretary, running to such representative or representatives as the board may designate.

8. Written notice of the annual meeting shall be mailed to each stockholder entitled to vote thereat at such address as appears on the stock ledger of the corporation, at least ten days prior to the meeting.

9. A complete list of the stockholders entitled to vote at the ensuing election, arranged in alphabetical order, with the residence of each, and the number of voting shares held by each, shall be prepared by the secretary and filed in the office where the election is to be held, at least ten days before every election, and shall at all times, during the usual hours for business, and during the whole time of said election, be open to the examination of any stockholder.

10. Special meetings of the stockholders, for any purpose, or purposes, unless otherwise prescribed by statute, may be called by the president, or pursuant to resolution of the board, and shall be called by the president or secretary at the request in writing of a majority of the board of directors, or at the request in writing of stockholders owning a majority in amount of the entire capital stock of the corporation issued and outstanding, and entitled to vote. Such request shall state the purpose or the purposes of the proposed meeting.

11. Business transacted at all special meetings shall be confined to the object stated in the call.

12. Written notice of a special meeting of stockholders, stating the time and place and object thereof, shall be mailed, postage prepaid, at least ten days before such meeting, to each stockholder entitled to vote thereat at such address as appears on the books of the corporaion.

Directors

13. The property and business of this corporation shall be managed by its board of directors, eleven in number. Directors need not be stockholders. They shall be elected at the annual meeting of the stockholders, and each director shall be elected to serve until his successor shall be elected and shall qualify.

14. The directors may hold their meetings and have one or more offices, and keep the books of the corporation, except the original or duplicate stock ledger, outside of Delaware in the County of St. Louis, Missouri, or at such other places as they may from time to time determine.

15. Vacancies in the office of any director or directors and newly created directorships resulting from any increase in the authorized number

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of directors, may be filled by a majority of the directors then in office, though less than a quorum, and the directors so chosen shall hold office until the next annual election and until a successor or successors have been duly elected, unless sooner displaced.

16. In addition to the powers and authorities by these by-laws expressly conferred upon it, the board of directors may exercise all such powers of the corporation and do all such lawful acts and things as are not by statute or by the certificate of incorporation or by these by-laws directed or required to be exercised or done by the stockholders.

Committees of Directors

17. The board of directors may, by resolution or resolutions passed by a majority of the whole board, designate one or more committees, each committee to consist of two or more of the directors of the corporation, which, to the extent provided in said resolution or resolutions, shall have and may exercise the powers of the board of directors in the management of the business and affairs of the corporation, and may have power to authorize the seal of the corporation to be affixed to all papers which may require it. Such committee or committees shall have such name or names as may be determined from time to time by resolution adopted by the board of directors.

18. The committees shall keep regular minutes of their proceedings and report the same to the board when required; but failure to keep such minutes shall not affect the validity of any acts of the committe or committees, if such acts were authorized by a majority of the members thereof.

Compensation of Directors

19. Directors, as such, shall not receive any stated salary for their services, but by resolution of the board, a fixed sum and expenses of attendance, if any, may be allowed for attendance at each regular or special meeting of the board; PROVIDED, that nothing herein contained shall be construed to preclude any director from serving the corporation in any other capacity and receiving compensation therefor.

20. Members of special or standing committees may also be allowed compensation and expenses of attendance for attending committee meetings.

Meetings of the Board

21. Each newly elected board may meet at such place and time either within or without the State of Delaware as shall be fixed by the vote of the stockholders at the annual meeting, and no notice of such meeting shall be necessary to the newly elected directors in order legally to constitute the meeting, PROVIDED a majority of the whole board shall be present; or they may meet at such place and time as shall be fixed by the consent in writing of all the directors.

22. Regular meetings of the board may be held without notice at such time and place either within or without the State of Delaware as shall from time to time be determined by the board.

23. Special meetings of the board may be called by the president on two days' notice to each director, either personally or by mail or by telegram; special meetings shall be called by the president or secretary in like manner and on like notice on the written request of two directors.

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24. All meetings of the board, whether regular or special, shall be held at the office of the company in the County of St. Louis unless some other place is specified in the notice for such meeting.

25. At all meetings of the board four directors shall be necessary and sufficient to constitute a quorum for the transaction of business, and the act of a majority of the directors present at any meeting at which there is a quorum shall be the act of the board of directors, except as may be otherwise specifically provided by statute or by the certificate of incorporation or by these by-laws.

Officers

26. The officers of the corporation shall be chosen by the directors and shall be a chairman of the board, president, one or more vice-presidents, secretary, treasurer and controller. The board of directors may also appoint assistant secretaries, assistant treasurers and assistant controllers and such other officers as it shall deem necessary. One person may hold more than one office. The chairman of the board and the president shall be chosen from among the directors.

27. The officers shall be chosen by the board of directors at its first meeting after each annual meeting of the stockholders of the company and shall hold their offices for such terms and shall exercise such powers and perform such duties as shall be determined from time to time by the board of directors.

28. The officers of the corporation shall hold office until their successors are chosen and qualify in their stead. Any officer elected or appointed by the board of directors may be removed at any time by the affirmative vote of a majority of the whole board of directors. If any office becomes vacant for any reason, the vacancy shall be filled by the board of directors.

29. The salaries of all officers of the corporation shall be fixed by the board of directors. Salaries of all employes (including bonus provisions, if any) shall be fixed by the president or by persons by him authorized to do so.

30. In addition to their fixed salaries, the board may authorize the payment of additional compensation or bonus, to such officers as come within such bonus plan or plans as the board may deem wise and establish, as an incentive to greater efficiency. The fact that members of the board, who are active officers of the company, may be benefited by such bonus plan, shall not disqualify them from voting in favor of the adoption of such plan. Any bonus plan adopted by the board must, however, provide only reasonable additional compensation, based on results to be accomplished, and taking into consideration the investment of the company in property and plant account and working capital, and other matters reasonably necessary to make such plan fair and equitable to all concerned.

Chairman of the Board

31. The chairman of the board shall preside at all meetings of the board of directors and of the stockholders, except such as under the law must be presided over by the president or a specially appointed chairman. He shall be an ex-officio member of all committees. He shall act in an advisory capacity with respect to matters of policy and other matters of

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importance pertaining to the affairs of the company. He shall prepare, sign and send out reports and other messages which are to be sent to stockholders from time to time. He shall also perform such other duties as may be assigned to him by the board.

President

32. In the absence of the chairman of the board, the president shall preside at all meetings of the stockholders and of the board of directors. He shall be the chief executive officer of the corporation and shall have general and active management of the business of the corporation and see that all orders and resolutions of the board of directors are carried into effect. He shall also execute bonds, mortgages and other contracts under the seal of the corporation.

33. He shall be ex-officio a member of all standing committees and shall have the general powers and duties of supervision and management usually vested in the office of president of a corporation.

Vice-Presidents

34. The vice-presidents shall assume and perform the duties and exercise the powers of the president in the absence or disability of the president and shall perform such other duties as may be prescribed by the board of directors or by the president.

Secretary and Assistant Secretaries

35. The secretary shall attend all sessions of the board and all meetings of the stockholders and record all votes and the minutes of all proceedings in a book to be kept for that purpose; and shall perform like duties for the standing committees when required. He shall give, or cause to be given, notice of all meetings of the stockholders and special meetings of the board of directors, and shall perform such other duties as may be prescribed by the board of directors or president, under whose supervision he shall be. He shall keep in safe custody the seal of the corporation, and when authorized by the board, or proper committee or president or vice-president, affix the same to any instrument requiring it, and when so affixed, it shall be attested by his signature or by the signature of an assistant secretary.

36. The assistant secretaries shall, in the absence or disability of the secretary, perform the duties and exercise the powers of the secretary and shall perform such other duties as the board of directors or the president or secretary shall prescribe.

Treasurer and Assistant Treasurers

37. The treasurer shall have the custody of the funds and securities of the corporation and shall deposit all moneys and other valuable effects in the name and to the credit of the corporation in such depositories as

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may be designated by the board of directors. He shall disburse the funds of the corporation when properly authorized by vouchers prepared and approved by the controller, and shall invest funds of the corporation when approved by the board of directors or the finance committee. He shall render to the president and board of directors, whenever they may require it, an account of all his transactions as treasurer. If required by the board of directors, he shall give the corporation a bond, in such sum and with such surety or sureties as shall be satisfactory to the board, for the faithful performance of the duties of his office, and for the restoration to the corporation, in case of his death, resignation, retirement or removal from office, of all books, papers, vouchers, money and other property of whatever kind in his possession or under his control belonging to the corporation.

38. The assistant treasurers shall, in the absence or disability of the treasurer, perform the duties and exercise the powers of the treasurer and shall perform such other duties as the board of directors or the president or treasurer shall prescribe.

Controller and Assistant Controllers

39. The controller shall be the principal officer in charge of the accounts of the company and shall keep full and accurate accounts of receipts and disbursements in books belonging to the corporation. He shall render to the president and board of directors, whenever they may require it, an account of all of his transactions as controller and of the financial condition of the corporation, and shall perform such other duties as shall from time to time be assigned to him by the board of directors or the president. If required by the board of directors, he shall give the corporation a bond, in such sum and with such surety or sureties as shall be satisfactory to the board, for the faithful performance of the duties of his office.

40. The assistant controllers shall, in the absence or disability of the controller, perform the duties and exercise the powers of the controller and shall perform such other duties as the board of directors or the president or controller shall prescribe.

Duties of Officers May Be Delegated

41. In case of the absence of any officer of the corporation, or for any other reason that the board may deem sufficient, the board may delegate, for the time being, the powers or duties, or any of them, of such officer to any other officer or to any employe.

42. Each director and each officer (and his heirs, executors and administrators) shall be indemnified by the corporation against any costs and expenses reasonably incurred by him in connection with any action, suit or proceeding to which he may be made a party by reason of his being or having been a director or officer of the corporation or of any other company which he serves or has served as director or officer at the request of the corporation, and against any amounts paid by him in settlement of or in satisfaction of a judgment in any such action, suit or proceeding (other than amounts paid or payable to the corporation); provided that no director or officer shall be indemnified against any costs, expenses or payments in relation to any matter as to which he shall be finally adjudged liable under the Securities Act of 1933, as amended, or

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derelict in the performance of his duties as such director or officer, or in relation to any matter as to which there has been no adjudication with respect to his performance of his duty unless the corporation shall receive an opinion from independent counsel that the director or officer is not liable under the Securities Act of 1933, as amended, and has not so been derelict; and provided that the foregoing right of indemnification shall not be exclusive of other rights to which he may be entitled as a matter of law.

Certificates of Stock

43. The certificates of stock of the corporation shall be numbered and shall be entered in the books of the corporation as they are issued. They shall exhibit the holder's name and number of shares and shall be signed by the president or a vice-president and attested by the secretary or assistant secretary and the corporate seal shall be attached, and all stock certificates shall be transferred by a transfer agent or transfer agents and registered by a registrar or registrars to be appointed by the company. Such corporate seal may be a facsimile, engraved or printed. Where any such stock certificate is signed by a transfer agent and by a registrar the signatures of any such president, vice-president, secretary or assistant secretary upon such certificates may be facsimiles, engraved or printed. In case any such officer who has signed or whose facsimile, engraved or printed, signature has been placed upon such certificate, shall have ceased to be such officer before such certificate is issued, such certificate may nevertheless be issued with the same effect as if such officer had not ceased to be such officer at the date of its issuance.

Transfers of Stock

44. Transfers of stock shall be made on the books of the corporation only upon surrender of the certificate therefor endorsed by the person named in the certificate or by attorney, lawfully constituted in writing.

Closing of Transfer Books

45. The board of directors shall have power to close the stock transfer books of the corporation for a period not exceeding fifty days preceding the date of any meeting of stockholders or the date for payment of any dividend or the date for the allotment of rights or the date when any change or conversion or exchange of capital stock shall go into effect or for a period of not exceeding fifty days in connection with obtaining the consent of stockholders for any purpose; provided, however, that in lieu of closing the stock transfer books as aforesaid the board of directors may fix in advance a date, not exceeding fifty days preceding the date of any meeting of stockholders or the date for the payment of any dividend, or the date for the allotment of rights, or the date when any change or conversion or exchange of capital stock shall go into effect, or a date in connection with obtaining such consent, as a record date for the determination of the stockholders entitled to notice of, and to vote at, any such meeting and any adjournment thereof, or entitled to receive payment of any such dividend, or to any such allotment of rights, or to exercise the rights in respect of any such change, conversion or exchange of capital stock, or to give such consent, and in such case such stockholders, and only such stockholders as shall be stockholders of record on the date so fixed, shall be entitled to such notice of, and to vote at, such meeting and any adjournment thereof, or to receive payment of such dividend, or to receive such allotment of rights, or to exercise such rights or to give such

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consent, as the case may be, notwithstanding any transfer of any stock on the books of the corporation after any such record date fixed as aforesaid.

Registered Stockholders

46. The corporation shall be entitled to treat the holder of record of any share or shares of stock as the holder in fact thereof and, accordingly, shall not be bound to recognize any equitable or other claim to or interest in such share on the part of any other person, whether or not it shall have express or other notice thereof, save as expressly provided by the laws of Delaware.

Lost Certificate

47. Any person claiming a certificate of stock to be lost or destroyed shall make an affidavit or affirmation of that fact and advertise the same in such manner as the board of directors may require, and the board of directors may, in its discretion, require the owner of the lost or destroyed certificate, or his legal representative, to give the corporation a bond, sufficient to indemnify the corporation against any claim that may be made against it on account of the alleged loss of any such certificate or the issuance of a new certificate in lieu thereof and payment of dividends to the holder of such new certificate. A new certificate of the same tenor and for the same number of shares as the one alleged to be lost or destroyed may be issued without requiring any bond when, in the judgment of the directors, it is proper so to do.

Checks, Notes, Etc.

48. Checks against funds in banks shall be signed by such officer or employe as the board may direct. The board may also require countersignatures to checks. The board shall also designate the officer or officers to be authorized to sign notes, drafts, acceptances, etc., in behalf of the company and to pledge securities of the company for the payment of the same. The board shall also designate the officers or employes who shall be authorized to endorse notes, drafts, acceptances, etc., for the company. The board shall also designate the proper officers to sign other documents in behalf of the company.

Fiscal Year

49. The fiscal year shall begin the first day of January in each year.

Auditors

50. The books of the company shall be audited annually or oftener by certified public accountants, to be selected by the board.

Voting Stocks of Other Corporations

51. Unless otherwise ordered by the board of directors the president shall have full power and authority in behalf of the company to attend and to act and to vote at any meeting of stockholders of any corporation in which this company may hold stock and at any such meeting shall possess and may exercise any and all of the rights and powers incident to the ownership of such stock. The board of directors by resolution from time to time may confer like powers upon any other person or persons. If the board has failed to authorize the execution of a proxy for such purpose, then the president, notwithstanding such failure, may, in the name of the

corporation, execute such proxy in favor of such person or persons as he may select to represent this company at such meeting or meetings.

Dividends

52. Dividends upon the capital stock of the corporation, subject to the provisions of the certificate of incorporation, if any, may be declared by the board of directors at any regular or special meeting, pursuant to law. Dividends may be paid in cash, in property, or in shares of the capital stock.

53. Before payment of any dividend there may be set aside out of any funds of the corporation available for dividends such sum or sums as the directors from time to time, in their absolute discretion, think proper as a reserve fund to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the corporation, or for such other purpose as the directors shall think conducive to the interest of the corporation, and the directors may abolish any such reserve in the manner in which it was created.

Directors' Annual Statement

54. The board of directors, through the president, shall present at each annual meeting, and when called for by vote of the stockholders at any special meeting of the stockholders, a full and clear statement of the business and condition of the corporation.

Notices

55. Whenever under the provisions of these by-laws notice is required to be given to any director or stockholder, it shall not be construed to mean personal notice, but such notice may be given in writing, by mail, by depositing the same in the post office or letter box, in a post-paid sealed wrapper, addressed to such stockholder or director at such address as appears on the books of the corporation, or, in default of other address, to such director or stockholder at the General Post Office in the City of Wilmington, Delaware, and such notice shall be deemed to be given at the time when the same shall be thus mailed.

56. Any stockholder or director may waive any notice required to be given under these by-laws; and meetings of the stockholders or of the board of directors may be held pursuant to waivers.

Amendments

57. These by-laws may be altered or amended or repealed by the affirmative vote of a majority of the stock issued and outstanding and entitled to vote thereat, at any regular meeting of the stockholders or at any special meeting of the stockholders if notice of the proposed alteration or amendment or repeal be contained in the notice of such special meeting, or by the affirmative vote of a majority of the board of directors at any regular meeting of the board or at any special meeting of the board if notice of the proposed alteration, amendment or repeal be contained in the notice of such special meeting; provided, however, that no change of the time or place for the election of directors shall be made within sixty days next before the day on which such election is to be held, and that in case of any change of such time or place, notice thereof shall be given to each stockholder in person or by letter mailed to his last known post office address at least twenty days before the election is held.

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RESTRICTED POLICIES AND PROCEDURES

This section is provided so that you may save any other important company documents applicable to company or local policy.

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