

News of the Month . . .

INDUSTRY

Conoco, Cities Service Acquire Interest in Mid-South

Continental Oil and Cities Service have acquired an interest in Mid-South Chemical Corp., large distributor of anhydrous ammonia in Memphis, Tenn. No financial details of the arrangement were announced.

The two oil companies will each have one vice president in the Mid-South organization—A. P. Frame of Cities Service and H. G. Osborne of Continental Oil. In addition, Cit-Con Oil Corp., a joint subsidiary of the two companies which operates the ammonia plant at Lake Charles, La., has supplied Mid-South with a comptroller, B. M. Scofield.

According to the company's announcement, Mid-South plans further expansion of its distributing system in the central U. S. The company now has more than 85 distributing points in Alabama, Mississippi, Arkansas, Louisiana, Missouri, Kentucky, and Tennessee. Its headquarters in Memphis is on President's Island, which terminal permits easy access to river, highway, and rail transportation.

Mid-South will receive its anhydrous supply from the Cit-Con plant at Lake Charles, La.

Shell Chemical to Build Urea Unit at Ventura Plant

Shell Chemical will build a plant for producing urea at its Ventura, Calif., ammonia facilities. Construction is to begin soon; completion is expected next September.

The first urea plant west of the Rockies, it will produce 100 tons a day by a process licensed from Montecatini, an Italian firm. M. W. Kellogg has been selected as the contractor. The ammonia and carbon dioxide raw materials will come from the adjoining ammonia plant.

Mathieson Starts New Irrigation Research Program

Olin Mathieson has announced it will start a program of research on the agronomic and technical aspects of irrigation. Sam L. Nevins, vice president of the company's western fertilizer division, said the program will have three objectives: determining the effect of irrigation in combination with high analysis water-soluble fertilizers; determining which crops and soils can be irrigated most

economically; and developing improved irrigation equipment and methods.

The research will be supervised by the company's irrigation department and under the direction of G. G. Williams, Purdue University agronomist who joined the company on Aug. 1 as manager of irrigation research and planning.

The program is expected to develop data of benefit to farmers and serve as a guide to developing the company's irrigation engineering and marketing programs. Mathieson has been marketing supplemental irrigation equipment since the war.

Heckathorn Formulates Insecticides for Budworm, Grasshopper Battles

Extensive spraying against the spruce budworm is taking place in Montana and New Mexico this summer. Heckathorn & Co. is formulating the insecticide, one pound of DDT in one gallon of fuel oil for each of 450,000 acres in New Mexico and 168,000 acres in Montana. For the New Mexico operation, the company set up a special formulating plant in Albuquerque to supply the insecticide to planes working from four landing strips. Three aerial spraying contractors, all with multiengine planes, are participating in the job.

A special formulating plant was also set up in Missoula, Mont., for the operation in that state.

Heckathorn is also supplying the insecticide formulation for the grasshopper control program over 350,000 acres in Mexico, 41,000 acres in Nevada, 131,000 acres in Utah, and 50,000 acres in Montana. Aldrin is the toxicant in this operation.

Calif. Standard's Ammonia Plant under Construction

Initial construction activities have started on Standard Oil of California's 300-ton-per day ammonia plant at Richmond, Calif. M. W. Kellogg Co. received the contract for construction. The plant will use Kellogg's steam methane reforming process, in which natural gas and refinery gas are used as raw materials.

Insecticide Formulating Plant Dedicated in Costa Rica

An insecticide plant capable of producing 70 to 150 different formulations of insecticides was dedicated in Costa Rica in June. The plant, owned by Quimicas Agricolas Centro Americanos, Ltda., will process 25 to 35 technical concentrates to be sold under its label throughout Central America. Technical materials will be purchased in the U. S., chlordan, DDT, toxaphene, BHC, aldrin, dieldrin, heptachlor and others being included in products already planned.

Channing J. Frederickson, former ex-

Construction Progressing at Ohio Standard's Ammonia Plant

Aerial photograph of construction at nitrogen plant of Standard Oil (Ohio) near Lima, Ohio. The 300-ton-per-day anhydrous unit is expected to be completed late next month. Nitric acid unit will be next to come on stream (Nov. 1). Urea section, last to be finished, is expected to be ready next January. Labs and shop will be finished Sept. 1 and office facilities are scheduled for Nov. 1



port manager of John Powell, will serve as chief operating executive.

American Agricultural Buys Fertilizer Plant in Ohio

American Agricultural Chemical Co. has announced purchase of the Hamm Co., Washington Court House, Ohio, which is to become the 29th fertilizer plant of AACC. The plant is to be renovated in time to produce fertilizer for the fall season. American Agricultural Chemical has 3 plants in Ohio, at Cincinnati, Cleveland, and Cairo.

IM&C Building New Offices near Carlsbad Potash Mine

International Minerals & Chemical will build a \$250,000 office building at its potash mine near Carlsbad, N. M. The building will provide 12,000 sq. feet of floor space, sufficient office facilities for 75 people. Entirely air conditioned, the west wall of the building will be solid, to protect it from the hot afternoon desert sun, and the north wall will be largely glass to take advantage of the desert's strong north light.

RESEARCH

Proteins Seen as Key to Improving Nutrition

There is general agreement among scientists working in the fields of public health, human nutrition, and agriculture that improvement in the quality and quantity of protein foods presents one of the most acute and difficult problems that must be solved as a means of improving living standards for a large part of the world's population—especially in the underdeveloped and tropical and subtropical areas where population densities are already high. Death rates are kept high among infants and small children, as a direct and indirect result of protein malnutrition, and additional penalties are being imposed by stunted growth, greater susceptibility to infections, premature aging, disturbances in glandular functions and structures, and relatively low levels of health in many respects.

These problems were the subject of a conference of biochemists and physicians from many parts of the world, at Princeton, N. J., June 19 to 24, under the sponsorship of the Food and Agricultural Organization of the United Nations, the World Health Organization, and the Josiah Macy, Jr. Foundation. The United Nations Children's Fund was also represented.

Among constructive results from the conference were plans for voluntary integration of research efforts, better agreements on acceptable standards for

protein requirements, and acceptance of technical precautions that should be taken in the development or introduction of new or modified foods.

Increased production and consumption of animal protein foods represent desirable and practical goals, but these objectives are not going to be reached quickly or adequately, for a long time in areas where the need is greatest, according to C. G. King, Nutrition Foundation and Columbia University, who was chairman of the conference. Meanwhile, there are many practical measures that offer promise of parallel and effective development, in the direction of improving and using more widely, protein foods directly from plant sources. By judicious use of new information about the amino acid content of foods and the specific human requirements for each of these protein fragments, prospects are favorable for new and varied developments, with greater economic, cultural, and health advantages.

Plans have been made for publishing the proceedings of the conference by the Josiah Macy, Jr. Foundation. Proceedings from an earlier conference held in Jamaica were published by Cambridge University Press.

BUSINESS AND FINANCE

Continental Can Sets New 6-Month Record

Continental Can's net sales and earnings for the six months ended June 30, again established new records for the period. Sales were up to \$306,047,599 from \$285,536,539 in 1954, and earnings increasing to \$10,289,395 from \$9,131,932.

Earnings were equivalent to \$2.74 per share compared with \$2.48 earned per share in the 1954 period.

For the June quarter net earnings were \$7,090,011 on sales of \$171,555,064, compared with \$6,131,615 earned on \$157,555,782 for the quarter last year.

Monsanto Sales Up 22%

Sales of Monsanto Chemical Co. and its consolidated companies for the first six months of 1955 amounted to \$207,514,258, an increase of 22% over the sales of \$169,714,534 for the first six months of last year.

Net income for the first half of 1955 amounted to \$16,409,680, as compared to net income of \$11,597,710 for the first half of 1954. After provision for preference dividends, this was equivalent to \$3.05 per share on the \$5.00 par value common stock, or \$1.02 per share on the new \$2.00 par value common stock after the three-for-one split approved by the stockholders on July 1, 1955. For the first six months of 1954,

the adjusted earnings on the \$5.00 par value common stock were \$2.15 per share.

Hercules Sales Up \$20 Million

Hercules Powder reported for the six months ended June 30 net income equal, after payment of preferred dividends, to \$3.38 a share of common stock.

Net income in the first six months of 1954 was equal to \$2.58 a share of common stock.

For the second quarter of 1955, net income was equal after payment of preferred dividends to \$1.84 a share on common stock. This compares with net income in the second quarter of 1954 equal to \$1.37 a share.

Net sales and operating revenues for the six months' period were \$112,562,077 compared with \$92,149,029 for the corresponding 1954 period.

ASSOCIATIONS

Research and Economics, Theme of NAC Meeting Next Month

Effects of research and economics on the future of the pesticide industry is the theme of the 22nd annual meeting of the National Agricultural Chemicals Association. The meeting opens Sept. 7 at Spring Lake, N. J., and continues through Sept. 9.

Speakers include: Warren Moyer, president of Chipman Chemical; H. E. Luedicke, editor of the Journal of Commerce; A. W. Mohr, president of Cal-Spray; John T. Thurston, director of Stamford Research Laboratories, American Cyanamid; G. E. Lehker, Purdue professor of entomology; S. W. Simmons, Public Health Service; and James D. Hopkins, president of Hopkins Agricultural Chemical Co.

Also on the meeting agenda is a panel discussion on the latest developments relating to the Miller Amendment, which regulates use of pesticides on food crops.

Programs Set by Ag & Food, Fertilizer Div. for ACS Meeting

A full schedule of general papers and symposia are scheduled by the Division of Agricultural and Food Chemistry for the 128th meeting of the AMERICAN CHEMICAL SOCIETY. The meeting opens in Minneapolis, Minn., on Sept. 11 and continues through Sept. 16. The division of Fertilizer and Soil Chemistry will have two full days of technical sessions. Programs of the two divisions are given on the following page.

In addition to the symposia listed below, the Ag and Food division will sponsor, jointly with the Division of Carbohydrate Chemistry, a symposium