physical volume if results for the feed mill and the Oakland plant were deleted from the 1954 figures.

Glidden's ratio of net profit to dollar sales volume, amounted to 3.9% for fiscal 1955, compared with 3.4% in both 1954 and 1953.

The increase, it was said, reflects Glidden's policy of eliminating low profit margin operations, a concentration of effort on higher profit margin items, increased efficiency of producing units, and improved volume.

The company's gross plant additions during fiscal 1955 amounted to \$8,-155,366. With construction now in progress and planned, capital expenditures in 1956 will exceed \$13 million. This includes the \$6 million grain elevator on the Calumet River in Chicago.

Mr. Joyce declared that the company's current budget for research and development is approximately 20% higher than in the preceding year, with the greatest part of research efforts directed toward new product development, and cost reduction to strengthen positions in present markets and upgrade basic materials.

Michigan Chemical Shows \$203,552 Profit for 9 Months

Michigan Chemical Corp. announces an operating profit after taxes for nine months of \$203,552 against a loss in the similar period in 1954 of \$74,603. This was equal to 38 cents a share on the outstanding 537,077 shares against a 14-cent loss in the 1954 period.

Besides the operating profit, the company also had a nonrecurring gain after taxes of \$77,118, or 14 cents a share realized during the third quarter from the sale of capital assets.

Sales for the quarter ended Sept. 30, were \$1,945,811, as compared with \$1,654,768 in the third quarter of 1954. For the nine months' period, net sales were \$5,257,722 in 1955, compared to \$4,589,710 for the similar period of 1954.

Excluding the nonrecurring capital gains profit, the amount earned in the third quarter from operations was \$65,714, or 12 cents a share compared to \$19,696, or 4 cents a share in the third quarter of 1954.

GOVERNMENT

Tolerance Levels for Residues of Karmex Herbicides

Residue tolerance levels for the active ingredients of Karmex herbicides have been established by the Food and Drug Administration. The commercial form-

ulations affected are Karmex W, based on 3-(p-chlorophenyl)-1,1-dimethylurea; and Karmex DW and Karmex DL, both based on 3-(3,4-dichlorophenyl)-1,1-dimethylurea. Tolerances of 1 part per million for each of the two herbicide chemicals have been established for sugar cane, pineapple, and cottonseed, and in addition the same tolerance has been established for the active ingredient of Karmex W in or on asparagus, spinach, and dry bulb onions.

Du Pont reports that toxicological studies with these chemicals indicate that this tolerance represents a large safety factor. Even for materials of such relatively low toxicity, tolerances are being based on the amount of residue likely to be left when the chemical is used according to good cultural practice. Actual analyses of crops produced in fields where "Karmex" herbicides have been used indicate that normal residues are well within the tolerance which has been established.

Three Coal-Tar Dyes No Longer Approved for Food Use

Food and Drug Administration has removed three orange coal-tar dyes from the list of those approved for food use. The dyes are FD&C Oranges No. 1 and 2 and FD&C Red No. 32. The order goes into effect Feb. 14, 1956, and is the final version of a regulation based on evidence received at a hearing held in December 1953.

Although the colors are not harmful in the amounts usually used in foods, investigation has shown them to be not harmless when fed in large amounts. Under the Food and Drug Act, food colors are required to be harmless.

The three dyes will continue to be approved for external drug and cosmetic use.

USDA Urged to Study Fat Nutrition, Pesticides Residues

More intense study of the role of fat in human nutrition and the availability to the body of nutrients from various foods are recommended to USDA by its Food and Nutrition research advisory committee. Meeting in Washington early last month, the committee generally endorsed USDA's current programs but urged USDA to expand its nutrition research during fiscal 1958.

Other specific areas which the committee recommended that USDA study were:

Insecticide residues on plants and animal products, both from the standpoint of their direct effects on human nutrition and the indirect effects through their possible toxicity to plants and soils.

Plant sources vitamin B_{12} and factors affecting the use of this relatively new vitamin by animals.

The role of mineral elements in animal nutrition and the relation of mineral nutrition of plants to their content of toxic substances.

Control of insects infesting stored grain and development of insect-resistant packaging.

Development of instruments and tests for measuring food-crop quality.

ASSOCIATIONS

Southern Weed Conference in New Orleans, Jan. 16–18

The ninth annual meeting of the Southern Weed Conference will be held early in 1956 at New Orleans, La., Jan. 16 to 18, it is announced by Glenn C. Klingman, president. All sessions will be held at Hotel Jung.

Weed control in pastures, field crops, horticulture and other phases of agriculture will be discussed by leaders in this field from all Southern states. Mark Weed, E. I. du Pont de Nemours & Company, c/o Botany Department, Louisana State University, Baton Rouge, is the program committee chairman. Those interested in the program should contact Dr. Weed.

NPFI Dates June 10-13

National Plant Food Institute has announced its 1956 meeting will be held June 10 to 13. The convention is scheduled for the Greenbrier at White Sulphur Springs, W. Va., as usual.

Instrument Forum Open to Food Processors

A three-day forum on instrumentation in the food industry has been scheduled for March 19, 20, and 21 at The Foxboro Co., Foxboro, Mass., manufacturers of industrial instruments. The second annual program of its kind, the forum provides for exchange of ideas and application information between Foxboro instrument engineers and instrument users in the food industry.

Main theme of discussion periods will be instrument application. Special attention will be given to quality measurements such as viscosity and turbidity. It is planned to devote at least one forum session to the evaluation of graphic-type control panels as a tool for simplifying