"Therefore, the corporation . . . constructed, during 1954, a triple superphosphate addition.... with enough dicalcium phosphate being produced to maintain a market position. Manufacture and sale of triple superphosphate on the basis of current results and indications will greatly reduce or eliminate the losses of this new division."

The research division, he said, has developed an improved method to concentrate wet process phosphoric acid. A new process has been developed to produce glutamine in commercial quantities. This is useful for medical and biological purposes and will be sold at about 20% of its former price.

GOVERNMENT

FDA Tightens Restrictions on Filth in Wheat

Food and Drug Administration announces it will tighten sanitary requirements on wheat beginning next July. Legal action will be taken by FDA against wheat containing 1% or more rodent pellets per pint or 1% or more of insect-damaged kernels.

Present regulations, in effect since last January, call for not more than 2% rodent pellets per pint and 2% insect-damaged kernels. Under these levels, FDA had examined 3754 cars of wheat until July 21, 1955, and found 29 cars to contain excess rodent filth, and three cars containing 2% insect-damaged kernels.

George P. Larrick, FDA commissioner, said that experience shows that regulation should be tightened if it is to be effective. He emphasized that deliberate mixing of clean wheat with filthy wheat and use of continued insanitary storage conditions will be violations per se.

Fees Raised for Registration Under Miller Pesticides

The Food and Drug Administration announces that it has doubled the fee for setting of the tolerance for pesticides on raw agricultural commodities. The fee will now be $1000 and should accompany each request for the establishment of a tolerance, plus an extra $100 for each raw agricultural commodity over nine for which a tolerance is requested.

The fee changes were published in the *Federal Register*, Sept. 16.

FOREIGN

Two Plants to Boost Fertilizer Production in Israel

Plants for the production of phosphoric acid and potassium sulfate have started operations as part of the extensive $15 million Fertilizers & Chemicals, Ltd., installations, at Haifa, Israel, according to *Economic Horizons*, publication of the American-Israel Chamber of Commerce and Industry.

The phosphoric acid plant has an annual capacity of 7500 tons. Provisions have been made for expansion of the plant at a later stage to double its present capacity. The output of this new plant will be used in the production of superphosphate and triple superphosphate. The basic raw material—phosphate—is mined in the Negev, Israel's desert in the south, where abundant quantities of rock phosphate are available.

The other new unit, for the production of potassium sulfate, has an annual capacity of 14,000 tons. A major portion of the output is earmarked for export.

Fertilizers & Chemicals' major production so far comprised sulfuric acid and superphosphate. Additional plants under construction, scheduled for completion before the end of this year, include units for the production of ammonium sulphate and nitric acid.

Puerto Rico to Get 42,000-Ton NH_3 Plant

Construction is to begin shortly on a new anhydrous ammonia, sulfuric acid, and ammonium sulfate plant at Guanica, Puerto Rico for Gonzales Chemical Industries, Inc., San Juan. Forty-two thousand tons of anhydrous ammonia will be produced per year. Part will be sold as such, and the balance will be converted to aqueous ammonia, sulfuric acid, ammonium sulfate, and possibly other materials for use by agriculture and industry.

The installation was designed and will be built by the Lummus Co.

The plant will provide a dependable source of ammonia nitrogen and related products for fertilizer, and for the industry of the island. This is of particular importance in times of international emergency when shortages can seriously handicap industrial chemical developments and growers.

RESEARCH

Fertilizer Important in Pasture Management, says USDA

Results of two research projects conducted by the Department of Agriculture recently emphasize the importance of fertilizer in pasture management.

In one project, USDA scientists at the Beltsville, Md., facility, found that drill seeding and band fertilization yielded more forage that broadcast seeding and fertilization. In one comparison, broadcast seeding of found pounds of tall fescue and one pound of Ladino per acre with broadcast application of 750 pounds of 3-12-6 fertilizer per acre yielded 817 pounds of weed-free dry matter in the initial harvest. When the same mixture of seed was drilled and the same amount of fertilizer was banded an inch below the seed, per acre yield of dry matter averaged 2865 pounds. Similar information is now being sought about serecia lespedeza, orchard grass, and birdsfoot trefoil. In addition, study is being started on the effect of placement of the individual fertilizer elements.

In another project, directed to problems in the Northwest, USDA researchers found that three factors are important in developing good, high-yielding pastures with the right grass-legume balance: proper frequency of irrigation; several applications of fertilizer in the right amounts; and delay of clipping until plants are about 12 inches high.

In the Northwest work, on irrigated pastures seeded to a mixture of Ladino clover and orchard grass, it was found that the right amount of nitrogen does not inhibit clover growth, but helps to produce more clover and more forage. The experiments did confirm, however, that not too much nitrogen must be applied. Applications in excess of 50 pounds per acre accelerate grass growth to the point where clover growth is retarded. The most satisfactory rate, they report, is a total of 100 pounds of nitrogen applied three times during the season. However, since they found a two to four-week lag before fertilizer application shows up in the form of increased yields, nitrogen applications, they suggest, should be staggered in small applications once a month during May, June, July, and August. This will help late summer production, when yields normally fall off.

Heinz to Build $3 Million Research Quality Control Center

Plans for the construction of a research and quality control center, have been announced by H. J. Heinz Co. The new structure, to be built at a cost of $3 million, will be constructed at the company's Pittsburgh headquarters and will serve as the research and development center for the domestic and international operations Heinz.

Construction work on the aluminum, glass, and steel, structure was expected to begin late in September and target date for completion of the seven story building is January 1957.

The building will be erected on the site of the two older structures which