

# Rising military needs for nitrogen lead to expectation of ammonia shortage in 1954 . . . New plants in program delayed

THE NATION never completely frees itself, it seems, from nitrogen supply worries. New ammonia installations during and after the last war built up a capacity designed to meet any military and agricultural demand likely to arise in the future.

That future is now here, and if certain official quarters in Washington are correct, we are heading into another nitrogen supply stringency which may assume serious proportions in 1954. This view is not fully shared in the ammonia industry although there are some who believe that we may witness a temporary shortage until a number of new plants go on stream this fall.

Defense Department people responsitle for the Government's military nitrogen requirements evidently have become so apprehensive over the situation that they have brought increased pressure to bear on producers for ammonia and nitric acid. One factor in the industry reports that the Army authorities contemplate measures under which the manufacturers would be obliged to set aside 25% of anhydrous ammonia production for defense purposes.

The Government realizes the essential role of ammonia and its derivative fertilizer compounds to agriculture, and probably would not ask that such a large share of nitrogen be reserved for military purposes unless it were really concerned. It is reported that the 25% set-aside request will be applied either in the third quarter of the present year or in the first quarter of 1954.

Official quarters evidently feel that nitrogen shortages for agriculture, which would be rendered critical by expanded military needs, could be met out of increased imports of such things as European ammonium sulfate, Chilean natural sodium nitrate, and Cal-Nitro. Ammonium sulfate imports recently have been in large volume, in such tonnages as to move the coke-oven industry here to charge dumping against the Europeans.

#### Production Goals Largely Unaffected

Due to the withdrawal of about three proposed new plants from the plan, the nitrogen goal of 2,185,000 tons (in terms of nitrogen) has been modified slightly, but no more than to the extent of about 150,000 tons, as far as the trade can figure. The 2,185,000-ton total was set for the year 1955 by the Defense Production Administration and it represents a figure which is 76% higher than the tonnage consumed during the 1950– 51 season.

The capacity aim in the goals was even greater, and was set at 2,930,000 tons of nitrogen for 1955, or 1,290,000 tons greater than actual capacity in place at the start of 1951. Of the 1,290,000 ton increase, 900,000 tons would be for fertilizer purposes in the form of anhydrous ammonia, ammonium nitrate, sodium nitrate (synthetic), ammonium sulfate, ammonium phosphates, nitrophosphates, and urea.

This earlier planning has undergone some revision. Using NPA figures, the National Fertilizer Association stated last month that the planned rated capacity of ammonia plants now in production plus new plants looks about as follows:

Tons of Nitrogen		
Jan. 1, 1953	1,756,000	
July 1, 1953	2,000,000	
Jan. 1, 1954	2,192,000	
Jan. 1, 1955	2,683,000	
Jan. 1, 1956	3,098,000	

The NPA had previously figured that military requirements for nitrogen would be about 100,000 tons a year. Hotter fighting in Korea, however, forced revisions in this schedule so that military needs today probably range between 130,000 and 140,000 tons on an annual basis.

But this is going to increase even further, and Pentagon officials are understood to have estimated that military requirements for nitrogen in 1954 may rise to between 180,000 and 190,000 tons at the beginning of 1954. This may or may not be met by the anhydrous production from new facilities.

### Ammonia Production At the Present Time

During the first four months of the present year, anhydrous ammonia outputs were 740,556 short tons, which is only about 81,000 tons more than we

made during the same period in 1952. Due to a new plant entering the picture in October, monthly production rose above 190,000 tons at the close of the year, but the industry has not been able to equal that rate so far this year.

Anhydrous ammonia production last year was actually 2,053,786 short tons (Table I). Neither this total nor those above for monthly outputs are in terms of nitrogen.

## Table I. Anhydrous Ammonia

(Proc	duction, short 1952	tons) 1953
Jan. Feb. March April May June July	$158,848 \\ 151,632 \\ 172,099 \\ 177,059 \\ 165,106 \\ 160,034 \\ 167,574$	188,882 173,857 189,644 188,173
Aug. Sept. Oct. Nov. Dec.	173,326 171,721 184,319 178,562 193,506	
Year, Tons	2,053,786	740,556
Bureau of the Census)		

(Bureau of the Census)

## Table II. Ammonium Nitrate

1	Production, top 1952	ns) 1953	
Jan. Feb. March April May June July Aug. Sept. Oct. Nov. Dec.	$129,401 \\119,100 \\132,751 \\129,096 \\109,483 \\105,145 \\107,342 \\114,990 \\119,337 \\128,600 \\131,017 \\142,308 \\$	139,495 120,588 131,698 121,870	
Total	1,468,570	513,651	
(Bureau of the Census)			

Production of ammonium nitrate in recent months shows only a slight gain over 1952. The total for the first four months was 513,651 tons, against 510,348 tons for the same time last year (Table II). As in the case of anhydrous, the peak monthly rate was reached in December at more than 142,000 tons. By April this year the output had fallen to less than 122,000 tons as seasonal requirements tapered off. Notwithstanding, the April total for ammonium nitrate was 7,200 tons less than a year ago.

Synthetic sulfate production during the four-month period this year came to 238,715 tons, which is some 800 tons more than was made in the corresponding months of 1952.