of politics, world economy, labor problems, international affairs, etc., but there is no difficulty in recognizing that

there is a cyclical response.

There are indications that the low soybean oil prices of the 1967-68 season resulted in a significant switch from other fats and oils to soybean oil. It also appears that the price recovery in the early months of the 1968-69 season have not caused the high usage rate to abate, and will probably continue for some time to come until eventually soybean oil price gets out of line with its competitors.

This leads us to the conclusion that domestic use of soybean oil during this season will be 5,200 million pounds,

vs. 5,086 million pounds last season.

As for exports, this can be estimated at 1,000 million lb., virtually unchanged from last season. This, of course, is subject to PL 480 and other government assistance exports, and to the outcome of the proposed EEC tax referred to in number 5 above. The dock strike should not impair oil exports since they can be accomplished without handling by longshoremen. An extended dock strike would, nonetheless, affect oil prices in two ways. First, it would raise world prices for foreign-produced soybean oil because we could not export soybeans to foreign crushers. Second, it could raise domestic oil prices since U.S. crushers would reduce crush due to the absence of an export market for meal.

Soybeans-Now that we have considered the demand for the end-products, it is easy to calculate the size of soybean crush. And in so doing one might expect to reach the conclusion that we will crush beans primarily for meal or primarily for oil. It just so happens that entirely by coincidence the above projections of meal and oil demand both point to a crush of 580 million bushels, using average yields of 10.7 lb. oil and 47.4 lb. meal per bushel of beans. So at this point it can only be said that everything is in equilibrium, subject to change in demand for one or the other product or difference in yield of one or the other. As for bean exports, this is largely dependent on the results of the dock strike and the EEC tax structure. If the strike lasts no more than seven weeks and the EEC does not effectively reduce imports of soybeans, then the export figure should reach 280 million bushels.

With crush of 580 and exports of 280 plus seed use of 50 million bushels, total disappearance would be 910 million bushels. This would leave a season carryout of 337 million bushels, mostly in government hands or tied up in the loan program. Since there were 314 million bushels not available to the free supply at the end of November due to encumbrance under these programs, and since farmers still appear to be holding for better prices, it can be expected that additional quantities will be reported in the loan program through January after which there is normally a movement out of loan into free supply. This will largely be accomplished by price improvement. But this improvement cannot be too great or too many beans will come into free supply. Most of the improvement will be in the cash price in the country rather than in the futures market.

As for the 1969 loan support price, if this is reduced there will be a tendency greater than normal for the industry to have only the minimum essential carryover supply of beans, oil and meal, with one exception. If plantings are curtailed as a result of price support reduction, then prices in the 1969-70 season could be even higher than in the current season as free market supply and demand resumes the leadership it once enjoyed in place of the current surplus-into-loan situation.

All of these influences will be closely watched in the following months by those whose responsibility it is to unlock the soybean market mysteries.

> DAVID M. BARTHOLOMEW, Commodity Analyst Merrill Lynch, Pierce, Fenner and Smith Incorporated

## • Industry Items

PENNSALT CHEMICALS CORPORATION, Equipment Division, has announced the formation of a special department to deal with problems encountered in the field of waste treatment.

In announcing the move, Mr. Hugh C. Land, Vice President-Equipment Operations, stated that responsibility for waste treatment operations is being placed under the direct control of one department to deal more effectively with customers' problems in this area, and to help establish Pennsalt as a reliable source of waste treatment technology

J. R. Townsend has been named Manager of Waste Treatment Engineering, and has been assigned responsibility for the new department, to be headquartered at the company's Warminster Pennsylvania manufacturing plant. Mr. Townsend joined The Sharples Corporation as a process engineer in 1957, prior to its acquisition by Pennsalt. Since that time, he has been active in the development of centrifuges for both industrial and municipal applications.

For further information on the new Waste Treatment Department or Sharples capabilities in the field of water and waste treatment, write Equipment Division, Pennsalt Chemicals Corporation, P.O. Box 100, Warminster, Pa. 18974.

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The DE LAVAL SEPARATOR COMPANY has acquired the centrifugal machinery business of the American Tool and Machine Company of Hyde Park, Mass. A.T.M. manufactures basket-type centrifugals for separation, extraction and clarification of large quantities of liquids with high solids content. New designs have recently broadened the use of these machines for such unusual separations as stearine from vegetable oil, metal oxides from electrolytes in electro-chemical milling, and salt crystals from mother liquor. Largest potential for the basket centrifugals is in the chemical process and food industries, W. A. Neumann, Jr., President of DeLaval said, and the A.T.M. equipment will be sold through DeLaval's Industrial and Food Equipment Divisions.

American Tool and Machine Company was founded in 1843 and has been a major supplier to American manufacturers for 125 years. DeLaval has marketed A.T.M. equipment for over 20 years.

DeLaval manufactures centrifugal separators, filters, heat exchangers, homogenizers and spray driers for the milk, food, chemical process and other process industries. It also manufactures milking equipment and accessory dairy farm equipment.

PHARMACIA FINE CHEMICALS announces the availability of the Sephamatic System, the first completely automated chromatographic process for industrial applications with Sephadex gel filtration. The Sephamatic System consists of a Sephamatic gel filter and a control unit. The Sephamatic gel filter is a specially constructed stainess at the chromatographic ways. steel chromatographic vessel. It employs gel filters covering a range of 70-2,500 liters bed volume with a capacity of up to 1,500 liters of charge solution per hour. In some cases, process costs are as low as one cent or less per liter of treated material. (Pharmacia Fine Chemicals, Inc., 800 Centennial Avenue, Piscataway, New Jersey 08854.)