

sole supply in the emergency. During this past heating season, July 1, 1966 to June 30, 1967, approximately 75 per cent of all residual fuel oil consumed in the Washington Metropolitan Area was delivered through the Anacostia River inland terminal. Peak daily delivery was in excess of 1,500,000 gallons.

The balance, or approximately 25 percent, of the residual fuel oil consumed in the Washington Metropolitan Area during the 1966-1967 heating season was delivered by truck from storage facilities located in Baltimore, including to the aforementioned 410,000 gallon storage located in the Washington Metropolitan Area.

The total residual fuel oil consumed in the Washington Metropolitan Area is approximately 250,000,000 gallons per year. This includes 71,400,000 gallons per year for Federal and D. C. Government installations which were terminalled through the Anacostia River inland barge terminal.

How is 1 percent sulphur content residual fuel oil made? As stated before, 1 percent sulphur content residual fuel oil reduced from 3 percent or 2 percent, or even 1.5 percent, cannot be obtained by merely turning on a faucet or by any simple process. Excluding the Soviet Bloc, of the approximately 75,000,000 barrels per day residual fuel oil produced in the entire world, only 1,000,000 barrels daily is naturally-occurring 1 percent maximum sulphur content, and this is produced in Africa and Argentina. The East Coast of the United States alone consumes 1,170,000 barrels daily of residual fuel oil. Thus, the East Coast alone could consume the entire production of naturally-occurring 1 percent sulphur content residual fuel oil, which would leave none available for the rest of the United States, or the rest of the entire world. New York City alone requires approximately 300,000 barrels of residual fuel oil daily.

The balance of the low sulphur content residual fuel oil is currently obtained through a refining and blending process.

The bulk of residual fuel oil consumed on the East Coast of the United States comes from Venezuela refineries and the sulphur content of this residual fuel oil runs about 3 percent. Currently, because of special handling techniques, 2 percent sulphur content residual fuel oil has been made available to the Washington Metropolitan Area for the heating year July 1, 1967 to June 30, 1968. This reduction is accomplished by a special refining process and by blending low sulphur residual from Africa or Argentina with the Venezuelan produced residual at the refineries located in the Caribbean area.

Another means of reducing the sulphur content of residual fuel oil is through vacuum distillation and hydrosulfrization. The only facility of this kind now in operation in Cities Service located at Lake Charles, Louisiana, capable of producing only 2,500 barrels daily, except this facility is not used primarily for desulfurization, but to upgrade residual fuel oil into synthetic crude oil. The desulfurization accomplished in the process is merely a by-product.

Shell Oil, in anticipation of the air pollution problems in the major East Coast cities and the possible restrictions to be involved in using lower sulphur content residual fuel oil, commenced more than three years ago to plan and construct in Venezuela a desulfurization plant at a cost of approximately \$25,000,000, which will not be in operation until October, 1967 and will have an ability to manufacture approxi-