THE PETROLEUM REFINING AND PETROCHEMICAL INDUSTRY
OF THE BASHKIR ASSR – COMMEMORATING THE 50TH
ANNIVERSARY OF THE FOUNDING OF THE UNION OF SOVIET
SOCIALIST REPUBLICS

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The petroleum industry of the Bashkir Autonomous Soviet Socialist Republic observed its 40th anniversary in May of 1972. The Central Committee of the Communist Party of the Soviet Union and the Council of Ministers of the USSR, in their greetings for the anniversary date, took note of the enormous contribution of the petroleum workers of the Bashkir ASSR to the growth of a most important branch of our national economy, to the social and economic progress of this formerly backward district on the outskirts of czarist Russia, and to its transformation into one of the most highly developed industrial regions in our homeland. Now, in the year of the 50th anniversary of the founding of the Soviet Union, the growth and development of petroleum refining and petrochemistry in Bashkoria furnishes a marvelously clear example of the enormous leap taken by socialist industry.

Oil prospecting in Bashkoria was undertaken at the initiative of V. I. Lenin soon after the end of the civil war, under the direction of the noted Soviet geologist, Academician I. M. Gubkin. In May of 1932, on the banks of the Belyi [White] River, near the village of Ishimbaevo, the first Bashkir crude was produced. A year later the first primitive processing was begun in a single-still crude distillation unit constructed in Ishimbaevo to furnish gasoline for automotive transport of the oil workers.

After the discovery of commercial crude oil in Ishimbaevo, the Bashkir regional committee of the VKP(b)* applied to the Central Committee of the Party with a proposal for the construction of a petroleum distillation plant. This proposal was accepted.

In those years no one in the USSR or anywhere else had any experience in processing sour crudes (and indeed the Ishimbaevo crude did prove to be high-sulfur) or in finishing the products from these crudes to the required quality. Hence, in creating the first Soviet pipestills for processing sour crudes in Ishimbaevo (now the city of Ishimbai in the Bashkir ASSR) and in Upper Chusovaya cities (Perm region), questions of the corrosion of equipment and industrial hygiene were not taken into account. The specifics in processing sour crudes were revealed and generalized long ago in the experience of startup and mastering of these units.

Construction of the Ishimbai pipestill with a crude capacity of 500,000 metric tons per year was started in 1935, and by 1936 it was putting out the first products: in that year, it ran about 57,000 metric tons of crude, producing gasoline (18-20%) and ligroin (about 8%). This unit marked the beginning of the Ishimbai refinery and the growth of petroleum refining and petrochemistry in Bashkoria. The Ishimbai refinery became the first school of the Soviet oil-refinery workers for processing sour crude.

On November 23, 1936, escorted by the outstanding production workers of the Bashkir ASSR, the first trainload of automotive gasoline produced from high-sulfur crude arrived in Moscow from Ishimbai. This was a gift from the workers of Bashkiria to the Eighth All-Union Congress of Soviets.

The January 1934 Seventeenth Congress of the VKP(b), in the Directives for the plan for growth of the national economy of the USSR in 1933-1937, specifically pointed out the need for accelerated growth of the petroleum in-

* All-Union Communist Party (of Bolsheviks) – Translator.

Translated from Khimiya i Tekhnologiya Topliv i Masel, No. 12, pp. 1-6, December, 1972.

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Industry in the regions of the western and southern slopes of the Urals, in Bashkoria, and in Emba. One of the outstanding measures in realizing the directives of the Party was the construction of the Ufa petroleum refinery (then called "Ufa Cracking"), begun in April 1935.

Plant construction went forward under very difficult conditions. At that time we did not have any experience in the creation of large petroleum refineries, no qualified workers were available, and there were shortages in many materials and equipment items, as well as in housing. But the entire country helped in the construction— all the republics of the Soviet Union. Moscow and Leningrad, Baku and Groznyi, Malkop and Saratov sent erectors, electric welders, ironworkers, engineers, and technicians to Ufa. On June 20, 1938, the first atmospheric-vacuum pipestill of the plant under construction yielded the first 117 metric tons of Ufa gasoline.

The construction of the Ufa refinery proceeded at a particularly fast tempo in 1939, after the Eighteenth Congress of VKP(b), at which an historic decision was made—to create between the Volga and the Urals a new petroleum base for the country—the "Second Baku." By 1941 the refinery was designed to be the first major complex in the USSR processing eastern sour crudes on a large scale.

In the years of the Great Patriotic War the collectives of the Ufa and Ishimbai refineries displayed magnificent examples of selfless labor. In 1942-1943 their importance to the military capability of our homeland increased very markedly since transport of petroleum products from the Caucasus had become extremely difficult. Daily at the front tens of thousands of combat and transport vehicles—aircraft, tanks, and trucks—were serviced with fuel supplied from Bashkoria. In the refineries, especially at Ufa, many problems were solved on a crash basis that were new for that time—problems related to supplying the front and rear ranks with petroleum products. In August of 1941 two highly important new units went on stream in the Ufa refinery, for the production of isooctane and hydrogen. In the first two months, these units exceeded their design capacity, and the front received high-quality aviation gasoline.

Along with this, the Ufa refinery became the original furnace in which workers and engineers specializing in the processing of sour crudes were tried and tempered. Workers and engineers from this refinery were sent to new installations in Bashkoria and other regions of the country, where they assumed responsible roles in the startup and shakedown of process units. Many of the engineers of the Ufa refinery later became great specialists, scientific workers, and directors of the petroleum-refining industry. These include V. R. Ryabchikov, K. P. Lavrovskii, I. S. Polyakov, I. R. Osadchenko, L. I. Osipenko, V. A. Kasatkin, V. I. Chebotarevskii, T. A. Kiselev, D. F. Varfolomeev, and many others.

In the difficult wartime years and in the first years after the war, the oil production and refining industry of Bashkoria grew and expanded steadily. One after another new oil field was discovered and put into production (Tulmazy, Shkapovo, Seraffimovskii, Arlan, etc.); electric power stations were built; refineries were expanded; an efficient construction organization was created; and transport was improved. The favorable geographic location of the Bashkir ASSR, the rich natural resources, the well-established power and construction bases, the convenient transport links (railroad and the Belaya, Kama, and Volga rivers) with western and eastern countries, the plentiful availability of industrial water, and the presence of qualified workers and engineer-technician groups—all of this predestined the continuing growth of petroleum refining and then petrochemistry in the republic, and has led to creating in Bashkoria a powerful complex of petroleum refining and petrochemical installations.

In 1947 construction of the Novo-Ufa refinery was begun. It went on stream in 1951 and furnished products from the first process units. This refinery differed very markedly from the first two Bashkir refineries in capacity, technology, and type. In 1952 the collective of the Novo-Ufa refinery went into production of high-quality lubricants, electrical oils, and waxes from crudes of the Ural-Volga fields. Before 1952 almost all lubricating oils were produced exclusively in the southernmost portion of the country (in Baku) and from there were shipped north, east, and west. Clearly, the organization of lube-oil production on the banks of the Volga and Belaya was of enormous significance to the national economy.

Also widely developed in the Novo-Ufa refinery were catalytic processes for fuel production and for the manufacture of asphalt, petroleum coke, and hydrocarbon feedstocks for petrochemical production. Currently, the refinery processes Bashkir and West-Siberian crudes, obtaining about 60 different products. By 1972 its crude processing capacity and lube oil production capacity had been increased to double the design values. Over the last 10 years the Novo-Ufa refinery has increased its output of hydrocarbon gases for petrochemical plants by a factor of almost three. The refinery's directors and engineers have made a great creative contribution to the growth of the plant—men such as B. P. Maforov, G. F. Ivanovskii, M. I. Cherek, M. E. Chernysh, D. I. Kondakov, V. V. Fryazinov, T. Z. Khuramshin, I. A. Gerstein, A. Ya. Zavorotnyi, I. K. Mironenko, Yu. I. Sych, and others.