



## THE DISCOVERY OF URANIUM DEPOSITS IN THE KYZYLKUM REGION IS THE BASIS FOR THE ESTABLISHMENT OF THE NAVOI MINING AND METALLURGICAL COMBINE

***Kholmamat R. RAUPOV***

*Candidate Of Historical Sciences, Associate Professor, Navoi Mining And Metallurgical Combine, Director Of Public Relations, Uzbekistan*

### ABOUT ARTICLE

**Key words:** Kyzylkum, Uchkuduq, geology, uranium, combine, geotechnological mine.

**Received:** 20.08.2023

**Accepted:** 25.08.2023

**Published:** 30.08.2023

**Abstract:** Uranium deposits were found as a result of geological exploration conducted by geologists in the 20-50s of the 20th century. The article describes the history of uranium deposits, processes related to its processing, and production enterprises.

### INTRODUCTION

In the 30s and 50s of the 20th century, there was a competition between the USSR and the USA for the creation of nuclear weapons. At that time, geologists were assigned the task of finding uranium deposits necessary for the nuclear industry. Geological exploration expeditions were carried out by geologists in the territory of Uzbekistan, which was part of the USSR, in order to find uranium deposits.

### LITERATURE ANALYSIS AND METHODOLOGY

There is no separate literature on the history of uranium mines in Uzbekistan. Information about uranium deposits is partially cited in the articles published on geological research expeditions carried out by geologists in the 30s and 50s of the 20th century in the Kyzylkum region of Uzbekistan. For example, in the collections "Mineral wealth of Central Asia"[1] published in Leningrad in 1935 and "Ore deposits of Uzbekistan"[2] published in Tashkent in 2001, there is only information about the discovery of uranium deposits in Central Asia, including Kyzylkum, and their composition and processing prospects is available. During the USSR, uranium mines were subordinated to the Ministry of Mechanical Engineering, which was active in the nuclear industry, and the activities of enterprises in it were closed to researchers. In the following years, the books published by the Rosatom Corporation of the Russian Federation (the successor of the Ministry of Medium Engineering during the Soviet era) contain information and archival materials about the opening of uranium mines in Uzbekistan and the activities of enterprises that produce them [3]. The work carried out on the discovery and processing of uranium deposits in Kyzylkum was published in 2002 "Navoi Mining and Metallurgical Combine. It is also mentioned in the book "History of creation and development"[4]. Information on world uranium production and the financial and economic development of the Navoi mining and metallurgical combine

producing uranium in Uzbekistan in the following years, uranium producing companies, their place in the world market, and uranium reserves, economist It is covered in the monograph "Financial and economic aspects of the functioning of the Navoi MMC at different stages of development" [5] by scientist N. Djulibekov. However, the uranium deposits in Kyzylkum were not mentioned separately. For the first time, archival materials of the Navoi mining and metallurgical combine were put into scientific circulation on this topic.

Historical-comparative analysis, scientific description, classification, generalization of data from historical sources, systematic analysis, comparison of scientific views and concepts on the subject were used in the research.

## RESULTS

In the 30s and 50s of the 20th century, geologists conducted large-scale geological exploration in the Kyzylkum desert. The first information about the presence of uranium in the Kyzylkum region was recorded by geologist Yu.M. Golubkova. In 1928-1929, during the study of the Auminzatov region, he discovered the presence of uranium. In 1931, geologist A. Sosedko noted the presence of uranium in the mines of Tomditov, Bukantov and Altintov. In 1938, T.Myastovsky discovered the presence of uranium in the Altintov region [6].

Since 1940, the Uzbek Geological Department has carried out large-scale research in Kyzylkum, and geological, hydrogeological and geomorphological maps have been compiled [7]. In 1946, O.M. Lifanovkaya inspected this area and proposed to continue geological work. In 1950, V. F. Fomin discovered uranium minerals on the southern side of Altintov. In 1953, it was checked by V.V. Sikorsky and its existence was confirmed. As a result of aeroradiometric research conducted in this area in 1951-1952, Uchkuduq uranium mine was found in Altintov region in 1952. A.N. Petrenko, M.E. Poyarkova, A.I. Pak receive the State Prize of the USSR for the discovery of the uranium mine [8].

The Navoi Mining and Metallurgical Combine was established in the Uchkuduq region for the purpose of mining and processing uranium ore. By the decision of the Soviet government No. 206-99 of February 20, 1958, the Navoi Mining and Metallurgical Combine was established (until January 1, 1967, the enterprise was called Combine No. 2 of the Ministry of Medium Machine-Building).

Zarap Zarapetyan was appointed as the director of the new enterprise by the order of the Ministry of Medium Engineering on August 4, 1957, and Anton Shchepetkov was appointed as the chief engineer of the combine in 1960[9]. Since the combine was engaged in the production of uranium, its activities were classified. According to the order of the Ministry No. 1072 of August 5, 1960, the main project for the construction of housing and cultural and household facilities for the workers of the combine was approved.

Construction Department No. 621 under the Ministry of Medium Engineering will start work as the main contractor for the construction of the combined facilities. Its head Serafim Golovko and chief engineer Vladimir Bulat will be given the right to manage all work. In 1960, 3,207 workers worked at the combine, of which 417 were technical engineers, 124 were military personnel, 711 were construction workers, of which 150 were technical engineers, 75 were military personnel, and 392 were permanent builders[10].

In order to provide the newly established combine with qualified personnel, experienced specialists of the field were recruited from the uranium mines "Taboshar" (Tajikistan) and "Moylisoy" (Kyrgyzstan). It was necessary to create bases of the construction industry for the future cities in the Kyzylkum desert,

to build a heating station to supply them with electricity, to lay a railway and electric transmission line, to lay water pipes, to build housing and cultural and household facilities.

In order to develop the Triguduk deposits, the construction of highways was required first. In 1956, the project institute "Soyuzdorproekt" began designing a 288-kilometer road, that is, the road to Uchkuduk. The plan of construction works for 1958-1964 is approved by the order of the Ministry of Mechanical Engineering No. 0149 of March 11, 1958. Representatives of the Ministry's General Directorate come to Karmana. Soon, the development of Uchkuduq uranium mine in Central Kyzylkum was started. In order to speed up uranium mining, many specialists from other republics were sent here.

Construction of housing and other social facilities for those coming to develop the uranium mine was carried out rapidly. In 1956-1958, barracks, hospital, kindergarten, shop, kitchen and school were built here. Cottages for residents were built and commissioned in 1959. 110 km from Aytim village in 1960 to Uchkuduq in length, drinking water and technical water were brought from Beshbulok in 1961 and Mingbulok in 1962.

According to the order of the Council of Ministers of the USSR No. 1652 of June 16, 1959 and the order of the Ministry of Medium Engineering No. 0329 of July 7, 1959, the ministry was instructed to build a chemical plant, a cement plant, and a 650,000 kilowatt hydroelectric power station (HPS) in the city of Navoi. The Navoi-Uchkuduq railway was built, in 1963 a 320-kilometer power line was brought [11].

Open pit and mine methods were widely used by miners to extract ore. As a result, 11 quarries and 14 mines were put into operation. In 1962, the Uchkuduq geotechnological mine was established.

In 1958, the construction of underground mines 1, 2, 7 was started for the extraction of uranium by underground method. Later, other mines were also started. Until 1989, uranium was mined from the Uzkugud mine. Open-pit mining of uranium also began in 1958[12]. In 1964, the industrial production of uranium oxide began at the 1st hydrometallurgical plant established in the city of Navoi.

Conclusion: In short, as a result of the discovery of uranium deposits in the Kyzylkum desert in the 1950s and 1980s, the development of the territory and the rapid extraction of uranium raw materials, which are very necessary for the country's nuclear industry, began. - a metallurgical plant was established.

## REFERENCES

1. Mineral wealth of Central Asia: collection / [editor: N. I. Bukharin, N. P. Gorbunov (chief editor), I. M. Gubkin and others]. - Leningrad, 1935, 606 p.
2. Ore deposits of Uzbekistan. -Tashkent: HYDROINGO, 2001
3. Atomic era. Chronicle and photographs / ed.-comp. A.A. Kuznetsov. – Moscow: Kuchkovo Field Muzeon. – 2020 .-528 s; History of uranium mining. 75 years of the nuclear industry. Author and compiler: N. Petrukhin. - Moscow. –2020. -437 pp.
4. Navoi Mining and Metallurgical Combine. History of creation and development. Executive editor S. Rizaev, – Tashkent: "Sharq", 2002.-479 p.
5. Dzhulibekov N. Financial and economic aspects of the functioning of the Navoi MMC at different stages of development. – Tashkent: "Sahhof", 2020. –p. 248.
6. Navoi KMK Central Archive. Fund 1, list 78, case 430, sheet 7.
7. Navoi Mining and Metallurgical Combine. History of creation and development. – Tashkent: IPAK "Shark", 2002, – P. 11.
8. Navoi KMK Central Archive. Fund 1, list 78, case 430, sheet 10-11.

- 9.** Navoi KMK Central Archive. Fund 1, list 1-2, case 240, sheets 135.
- 10.** Central Archive of Navoi KMK. Fund 1, list 1-5, case 1435, sheet 5.
- 11.** Central Archive of Navoi KMK. Fund 1, list 1s-2, case 240, sheet 1
- 12.** Istoriya uranodobychi. Composer: N. Petrukhin. - Moscow. -2020,- 183-184 p