REFERENCE
regarding the project of acquisition of "Yoshlik I" mine of "Almalyk MMC" JSC

Basis: Resolution No PD-4731 dated may 26, 2020 of the President of the Republic of Uzbekistan "on additional measures to expand the production of non-ferrous and precious metals at "Almalyk MMC" JSC"

Project power: annually **917 thousand ton of** copper concentrate and **2,5 thousand ton of** molybdenum concentrate.

Project amount: 4 620,4 million dollar

Foreign partner: "Gazprombank" (Russia), **"International development projects"** (Russia).

Location: Tashkent region, Almalyk city, "Almalyk MMC" JSC.

Raw material base: Products obtained from copper-molybdenum concentrate (copper cathode, gold, silver) produced by the processing of "Yoshlik-1" mine ores, Kalmakyr.

Number of created workplaces: 5 647 pcs

Electricity consumption volume: annual **568,7 mln KWt/s**

Gas consumption volume: annual **3,3 mln m3**

Commodity product: annual **3 594,5 mlrd so'm**

Export indicators: annual **241,6 mln dollar**

Project implementation deadlines: 2017-2025 years

1. TSOT- construction of a mining facility.

At TSOT- the construction site of the mine **5,47 mln m3** (99,6 percent) soil works, **21,7 thousand ton** (95 percent) reinforcement and **141,7 thousand m3** (94 percent) concrete works have been performed, **1 205 pcs** (91 percent) stav, **19,0 thousand pcs** (88 percent) support rollers and **10,4 thousand m** (59 percent) conveyor belt have been installed, **429 pcs** workers and **34 pcs** special vehicles have been involved in construction works.

TSOT- within the mine construction project 74% of the construction and assembly works have been completed, including:

For grinding-loading device (DPU) No 1 the works have been completed in **67 percent**, herein concrete works – 96 percent, metal constructions **4 percent** and main process equipment installation 72 percent;

For grinding-loading device (DPU) No 2 the works have been completed in **71 percent**, herein concrete works – 97 percent, metal constructions – 40 percent and main process equipment installation – 74 percent;

For grinding-loading device (DPU) No 3 the works have been completed in **98 percent**, herein concrete works – 99 percent, metal constructions – 100 percent and main process equipment installation – 99 percent;

For surface conveyor branded 302100-CV-101 the works have been completed in **92 percent**, herein the concrete works - 99 percent, metal constructions - 89 percent and main process equipment installation - 99 percent;

For surface conveyor branded 302100-CV-201 the works have been completed in **46 percent**, herein the concrete works - 99 percent, metal constructions 30 percent.

1.1. Delivery of basic technological equipment.

The construction site was delivered **3 pcs "Uralmashzavod"** (Russia) KKD 1500x200 primary grinder, **6 sets "AUMUND"** (Germany) plate supplier, main spare parts for **2 sets "THYSSENKRUPP"** (Germany) main and **3 sets** loading conveyors were partly delivered. Also, **6 pcs** bridge cranes and **27 pcs** electrical wires of **"URALKRAN"** (Russia), **3 sets** hydraulic hammer manipulator device of **"Technopark Impuls"**, **3 pcs** console crane of **"PF ASK"** (Russia) **and 3 sets** dust cleaning system of

"ASPEX" (Russia), **3 sets** air compressor system of **CHKZ** (Russia), **5 sets** drainage pump of **"WEIR"** (Turkey), **1** collection 35/10kV substation of "**TEXNOKONT**" (Kazakhstan), **3 sets** accepting bunker dust suppression system of "**EIM injiniring**" (Russia), **3 sets** air circulating system of "**VENKON"** (Russia).

2. Construction of Copper beneficiation plant No 3.

The construction works of Copper beneficiation plant No 3 are being implemented by the consortium of **"Almalyk MMC" JSC** and **"Uralmashzavod" OJSC** as well as **"Enter Engineering"** with the terms and conditions of "Delivery ready for use".

"Worley Parsons" foreign company was involved to carry out technical control in the construction.

In the construction site **741,0 thousand m3** (95 percent) concrete works, **104,6 thousand tonn** (99 percent) reinforcement works have been completed, **25,1 thousand tonn** (67 percent) process equipment and **46,8 thousand tonn** (78 percent) metall constructions have been installed.

Within the framework of Copper concentrator plant No 3, the construction and installation works have been fulfilled in - 63 percent, including:

The works for large crushed ore deposit *(CKDR)* have been fulfilled in **94 percent**, herein the concrete works - 100 percent, metal constructions installation – 98 percent and main process equipment installation - 95 percent;

The works for medium crushing building *(KSD)* have been completed in **89 percent**, herein concrete works – 100 percent, metal constructions installation - 92 percent and main process equipment installation - 99 percent;

The works for middle mining building *(KSG)* have been completed in **84 percent**, herein concrete works - 100 percent, metal constructions installation - 94 percent and main process equipment installation 91 percent;

The works for small mining building *(KMD)* have been completed in **83 percent**, herein concrete works – 100 percent, metal constructions installation 92 percent are about to be started and main process equipment installation has been done- 72 percent;

The works for small mining building *(KMG)* have been completed in **82 percent**, herein concrete works – 100 percent, metal constructions installation 84 percent and main process equipment installation 50 percent;

The works for Mine preparation building *(KRP)* have been completed in **66 percent**, herein concrete works – 96 percent, metal constructions installation 90 percent and main process equipment installation 62 percent;

The works for Main flotation building have been completed in - **48 percent**, herein concrete works – 98 percent, metal constructions installation -53 percent and main process equipment installation - 60 percent;

The works for Copper-molybdenum concentrate condensing section have been completed in **67 percent**, herein concrete works – 99 percent, metal constructions installation 54% and main process equipment installation – 93 percent;

The works for Filtration and concentrate loading building have been completed in **68 percent**, herein concrete works – 100 percent, metal constructions installation 73 percent, and main process equipment installation 64%;

The works for 1st main reducing substation *(GPP)* have been completed in **98 percent**, herein concrete works, metal constructions installation and main process equipment installation – 100 percent, laying electric cables – 83 percent, the installation of the fire alarm system is about to begin;

The works for 2nd main reducing substation *(GPP)* have been completed in **80 percent**, herein concrete works, metal constructions installation – 100 percent, main process equipment installation - 92 percent, laying electric cables -19 percent, the installation of the fire alarm system is about to begin;

The works for 3rd main reducing substation *(GPP)* have been completed in **96 percent**, herein

concrete works , metal constructions installation and main process equipment installation – 100 percent, laying electric cables – 71 percent, the installation of the fire alarm system is about to begin;

Administrative and household building *(ABK)* have been completed in **84 percent**, Administrative building (*BK*) have been completed in **86 percent**.

Copper concentrator plant No 3 involved totally **14 121 psc** workers *(excluding support staff and metal construction site workers)* and **820 pcs** special vehicles.

2.1. Delivery of basic technological equipment.

For large crushed ore deposit *(CKDR)* **36 sets** electric wires of **"URALKRAN"**, **2 sets** air suction system of **"ASPEX"** (Russia), **16 sets** tape conveyor of **"AUMUND"**, **2 sets** belt conveyor of **"PTM"** and **8 sets** drainage pump of **"WEIR"** have been delivered.

For middle grinding building *(KSD)* **8 ta** KSD 3000/1500 branded cone grinder of **"Uralmashzavod"**, **2 sets** bridge electric crane of **"URALKRAN"**, **8 set** air suction system of **"ASPEX"** and **6 pcs** drainage pump of **"WEIR"**, **8 sets** belt conveyor of **"PTM"**, **9 sets** electric wires of **"URALKRAN"**, **16 set** belt conveyor of **"AUMUND"** have been delivered.

For middle mining building *(KSG)* **8 pcs** oscillating gallows of **"Pnevmash"**, **4 sets** air suction system of **"ASPEX"**, **16 sets** belt conveyer of **"PTM"**, **4 sets** trolley unloading conveyor of **"BMX RUS"**, **5 sets** drainage pump of **"WEIR"**, **47 sets** electric wires of "**URALKRAN**", **2 sets** bridge electric crane and **16 sets** belt conveyor of **"AUMUND"** have been delivered.

For small mining building *(KMD)* **2 set** bridge electric crane and **17 set** electric wires of **"URALKRAN"**, **8 sets** belt conveyor of **"PTM"**, **6 sets** belt conveyor of **"BMX RUS"**, **5 pcs** drainage pump of **"WEIR"** and **6 sets** air suction system of **"ASPEX"** and **6 sets** high pressure roller pressing equipment (HPGR) of "**THYSSENKRUPP"** (Germany) have been delivered.

For small mining building *(KMG)* **24 sets** tertiary miner of **"Kwatani"** (SEVER MINERALS, South Africa), **4 sets** bridge electric crane and **37 sets** electric wires of **"URALKRAN"**, **2 sets** belt conveyor of **"PTM"**, **2 sets** belt conveyor and **4 sets** trolley unloading conveyor of **"BMX RUS"** and **6 pcs** drainage pump of **"WEIR"** have been delivered.

For mine preparation building *(KRP)* **12 sets** ball mill *(MSHTS)* of **"UZTM-KARTEKS"** have been delivered and the supply of mill lining continues, **47 sets** gravity shield of **"Kwatani"** (SEVER MINERALS, South Africa), **6 sets** bridge and **72 sets** electric cranes of **"URALKRAN"**, **24 pcs** drainage pump and **12 sets** hydro-cyclone of **"WEIR"**, **32 sets** gravity concentrator for the mills of **"INTERTECH"** (Serbiya) have been delivered.

Moreover, for ball mill **12 sets** hydrostatic bearings of **"CEMTEC"** (Austria), **12 sets** toothed crown of **"CEMTEC"** (Germany), **25 sets** mill engine and **12 sets** chiller of **"ABB Switzerland Ltd"**, cylindrical butara for **12 sets** mill of **"NAIPU"** (China), **12 sets** automatic ball loader of **"DALIAN LEVVIE"** (China) and **2 sets** of shell (lining) replacement machine and **3 sets** bolt removal hammer of **"GEARS MINING"** (Australia) have been delivered.

For Copper-molybdenum concentrate condensing section **6 sets** vertical mill for condensers and all **2 sets** filters (Mo) of **"Metso:Outotec"** (Austria), **5 sets** filters (Su) of **"Metso:Outotec"** (Finland), **6 sets** with 17 meters, **2 sets** with 28 meters and **1 sets** with 5 meters capacities for condensers of **"Metso:Outotec"** (China), main equipment for all condensers of **"Metso:Outotec"** (Europe) have been delivered.

For Main flotation building main equipment for the capacities for **6-** floatation line of **"Metso:Outotec"** (China) and **6-** floatation line of **"Metso:Outotec"** (Europe) and **5 sets** bridge electric crane (Russia) of **"URALKRAN"** have been delivered.

For reducing substations No **1, 2, 3** *(GPP)* **15 sets** of KTP (batch transformer substation) **"TEXNOKONT"** (Kazakhstan) have been delivered.

For main factory part (OZX) **5 sets** air compressor system and 1 set air compressor of "**Airpol**" (Poland), **3 lines** of water cooling tower of "**Seagull"** (China), first batch of Lime milk factory have been delivered, the final **2nd** batch will be delivered by **"Yilmaz Proses Teknolojileri"** (Turkey) by

September of this year. Also, **6 sets** fire fighting pump station of "**WILO**" (India), **1 set** wastewater treatment plant of "**Akvabiom**" (Russia) have been delivered.

9 pcs water pump for sealants of **"Wilo pumping systems"** LLC (Tashkent); **40 pcs** hydraulic pumps and **3 pcs** GSW pump of "**Sulzer Pumps"** (Finland), **3 pcs** cooling water pump of "**V-Flo"ning** (China) and for disposal of residuals **3 pcs**, for process water pump stations of **"Zhejang KEER Pump"** (China) **3 pcs** and raw water system **26 pcs**, for reagent system **108 pcs** pumps have been delivered.

3. Construction of the 3rd-Copper beneficiary plant's infrastructure.

In a waste storage facility (*1st map*) for the construction of the foundation of the dam **17,5 mln m3** (31 percent) *(from this **9,2 mln m3** for construction of dam)* soil works have been done and **11,0 thousand m** (38 percent) pipe have been laid. For these works **273 pcs** workers and **327 pcs** special vehicles have been involved.

External water supply facilities are in the construction site **77,4 km** (69 percent) water pipes have been laid, also, **120 pcs** *(*100 percent*)* well drilling works, **1,39 mln m3** (75 percent) soil works, **3,0 thousand ton** (71 percent) reinforcement, **15,5 thousand m3** (57 percent) concrete works have been done. For these works **141 pcs** workers and **49 pcs** special vehicles have been involved.

At the moment, construction of **3rd-Copper concentrator plan and its infrastructure facilities and its infrastructure facilities** in total **14 964 pcs** workers *(excluding support staff and metal construction site workers)* and **1 229 pcs** special vehicles have been involved.

4. Attracting financing.

1,0 billion dollars debt money resources from **"Gazprombank"** have been involved, within the perimeter of project office facilities **678,0 mln dollar** have been used.

A loan agreement for attracting financing was signed with **"International development projects"** company in the amount of **712,0 mln euro**, based on this, **295,2 mln euro** euro have been chosen *(selected) (**319,6 mln dollar ekv.**)*.

Within **YeRS** agreements concluded for the construction of 3rd-Copper concentrator plan, Waste storage facility (*1-map*) and External water supply facilities total **1 782,9 mln dollar** *(**153,0 mln dollar** with VAT)*, including in the section of facilities for 3rd-Copper concentrator plan **1 606,9 mln dollar,** for Waste storage facility (*1-map*) **76,6 mln dollar** and for External water supply **99,4 mln dollar** payments have been done.

5. Works carried out within the perimeter of project office objects:

1. In accordance with the assignment No **26/1-410 dated october 27, 2023** Primer Ministers of the Republic of Uzbekistan, the construction and assembly works by mobilizing all relevant resources (manpower and special equipment) should be completed and by **december 31, 2024** taking measures to start the factory at full capacity.

2. In accordance with the protocol No **200 dated November 9, 2023** (*registered under No **VM-1218*** dated ***09.11.2023***) held at the Chairmanship of the Prime minister of the Republic of Uzbekistan and the protocol **106 november 29, 2023** of the commission of the Government for investment attraction, industrial development and trade regulation issues *(registered under No **04-01-149 dated 30.11.2023**)* **by the end of 2024,** the project of "Yoshlik I" mine should fully been put into operation.

3. Protocol No **107** dated **november 16, 2023** of the meeting of the Commission of the Cabinet of Ministers states that the paragraph **42.2** related to putting 3rd-Copper concentrator plan into operation having recycling power of **60 mln tn** of ore annually as per the decree No **PF-27** dated **february 28, 2023** of the President of the Republic of Uzbekistan should be extended by **december 31, 2024**.

4. In accordance with the **"Road map"** for accelerating the construction of 3rd-Copper concentrator plan and its infrastructure facility *(assignment No **26/1-410** dated **february 10, 2024**)* **2024,** taking actions for putting the factory into operation **by the end of the year**.

5. According to the **decree No PF-37** dated **february 21, 2024** of the President of the Republic of Uzbekistan and minute of the meeting No **26 dated March 16, 2024** commission of the Cabinet of Ministers, on **october 2024** the factory should be put into operation.

6. Main problems:

For TSOT-ore:

1. By october 20, 2024 for TSOT-ore conveyer system, **"FLSmidth"** company shall deliver the remained **equipment** (RIO shelves, **5 pcs** recoil drums).

2. By october 20, 2024 completing CV-101 main conveyor works to electrical rooms, **the power should be provided from** KTP-403207 substation**.**

3. By october 30, 2024 remained **308 tn** (No 3 unloading conveyor, No. 1 main conveyor, for guide boards for 5.5 tn lining) **metall constructions should be prepared.**

For 3rd-copper beneficiary plant:

1. By october of this year materials (*cable, control and measuring devices (CMD), lining, pipes, pumps, shut-off and control valves (ZRA), etc.*) **should be delivered**.

2. More than **4 thousand** workers, including **3 thousand** workers should be involved on october.

According to the waste storage facility (Map 1):

1. It is necessary to **deliver** lined pipes and rods, shut-off valves, compensators and other materials**;**

2. Today, the volume of earthworks required for the construction of the dam is **28** million m3, in order to complete the works, it is necessary to carry out earthworks in the volume of **2.6** million m3 per month starting from october of this year, for this purpose, the mobilization of additional **490** special equipment and fuel and consumables should be provided.

For external water supply:

1. Equipment and materials *(110/10 kW, 35/6 kW substation, shut-off and control valves (ZRA), control-measuring devices and automation (CMD), electricity)* shall be delivered by **"Enter Engineering" by September of this year**;

2. Provision of at least **600 additional** workers and **90** special equipment at the construction site.

7. Construction of a quarry and construction of its production infrastructure at the "Yoshlik I" mine.

From the start of the quarry construction project:

201,9 mln m^3 (from the beginning of the year **28,0 mln** m^3) works on opening the surface of the mine have been performed (*works have been organized in **2 shift**, **1 800 pcs** workers and **400 pcs** vehicles are working)* and **41,63 km** railways have been laid;

602 pcs (*466,0 mln dollar*) mine vehicles *(54 pcs 130 tonn, 29 pcs 220 tonn BelAZ and 5 pcs NMT-240 TEREX-KRANTAS 220 tonn dump truck, 33 pcs excavator, 23 pcs drilling equipment, 12 pcs mixing and charing machines)* **254** pcs railway vehicles *(1 pcs electric locomotive, 5 pcs locomotive, 212 pcs dumpcar, 7 pcs road construction vehicles) as well as **192** pcs auxiliary equipment)* have been purchased.

Cyclic flow technology ("TSPT - 2 herd")

More than **5.9** million m3 (80.8 percent compared to the plan) of earthworks were carried out for the construction of Cyclic Flow Technology ("TSPT-poroda"), which transports more than **20** million m3 of loose rock bodies per year;

"TMX Consulting Ltd" was declared the winner of the tender as a result of the TTT review from the participants and on the basis of the procurement commission's report No. 357007 dated July 12, 2024.

Today, negotiations are underway with the winning company.

Mining industrial site:

- The project documents for the construction of industrial sites "Yoshlik I" and "Kalmaqir" mine TK-1 and TK-2 were presented by the chief designer.

- The ground work of the "Yoshlik I" industrial site has been completed. The perimeter barrier wall is 100 percent completed.

The foundation part of the buildings is **85** percent completed.

- 1.2 km leading to "Kalmakyr" industrial site. the road is completely completed. At present, "Yoshlik I" pit and trench excavation work is **80** percent completed.

The perimeter fence of the "Kalmakyr" industrial site has been completed **100** percent.

- The project documents for the construction of GSHO industrial site were presented by the chief designer.

Construction of buildings and facilities is **90** percent completed.

Currently, the equipment and facilities of the buildings are being brought.

The project documents were completed by the joint venture "**Oz'elektroapparat-Electroshield**", the contractor for the TP-8 and TP-9 substations, which provide electricity to the cyclic flow technology equipment that transports the mine and loose rock bodies. Construction works will be completed and commissioned by the contracting organization in 2024.

The preparation of the vertical area for the construction of **"TN-8"** has been completed and the documents have been submitted.

- **2** pcs **80** MVA transformers are installed.

100 percent of the construction and assembly works have been completed.

It was launched on august **30** of this year.

- The preparation of the vertical area for the construction of **"TN-9"** has been completed and the documents have been submitted.

- **2** pcs **63** MWA transformers have been installed.

100 percent of the construction and assembly works have been completed.

It is expected to be launched in october this year.

8. Construction of an external power supply facility with a capacity of 650 megawatts

The construction of 10 km of 500 kV power line by the joint venture **"Oz'elektroapparat-Electroshield"** for the construction of power supply facilities was completed **100** percent.

Also, 100 percent of the construction and installation works and delivery of the main equipment at the **500** kV digital substation were completed. The facility will be completed in december 2023, and is currently being networked and configured.

9. Reconstruction of the explosive factory and explosive materials warehouse:

Main production technological devices: **13** capacities installed **100** percent, technological modules completed **100** percent and compressors and steam generators installed, construction of buildings and facilities continues.

Purchase and installation of auxiliary equipment and devices (external power supply, transformers, external and internal water supply, technological waste water treatment facility, additional railway crossings, road infrastructure, storage of auxiliary materials - distribution warehouses and water heating system) works are being carried out.

It will be launched in december this year.

10. Temporary cars and railways

The construction of external communications and temporary railway traces is underway.

Total 45.6 km as per technical and economic basis. It is planned to build railways 01.07.2024y. As of now, the total cost of construction works is 132.65 billion. 41.48 km of railways were fully built and electrified.

MPTS (microprocessor centralization of signals and arrows) and ESSO (electronic system of axle counting) of "Kalmakyr and Kolsevaya stations and the peregon between them", "Svinsovaya station", "Otvalnaya station" and "Fabrichnaya station" will be launched this year.

5. In accordance with the minute of the meeting **106 dated november 29, 2023** *(registered under **04-01-149 dated 30.11.2023**)* commission of the government for issues for involving the investments,

developing the industry and regulating trade and No **200** dated **November 9, 2023** held on the chairman of the Primer minister of the Republic of Uzbekistan *(registered under No **VM-1218 dated 09.11.2023**)*:

- On may 2024 complete the construction and installation works of the line 1 of the 3rd copper beneficiary plant;

- by the end of 2024 launch of the Yoshlik I mine development project (Phase I, Phase 1) at full capacity.

II. Works to be implemented.

Together with the Ministries of Mining and geology and investments, Industry and trade **"Development of Yoshlik I mine"** until the end of the year on the strategic investment project **1179,0 mln dollar** including **"according to the Yoshlik I mine development project 244,0 mln dollar** additional measures were determined in order to ensure the appropriation of funds and the start-up of facilities within the specified periods.

Construction of a quarry and construction of its production infrastructure at the "Yoshlik I" mine.

1) Another **32.0** million m3 of mining will be completed by the end of this year.

2) By the end of this year, the following objects of the mining complex and infrastructure will be commissioned:

"Yoshlik I" quarry, Explosive materials factory, ASU GTK, "TN-8", "TN-9", 8,2 km internal highways, **4,12** km internal quarry railways will be built and electrified, **4** railway station microprocessor center and electronic axle counting system, sample cutting and analysis laboratory.

3) Construction works will be carried out by the end of the year on the Cyclic flow technology ("TSPT-poroda") carrying loose rock bodies.