PANORAMA

CASPIAN PIPELINE CONSORTIUM



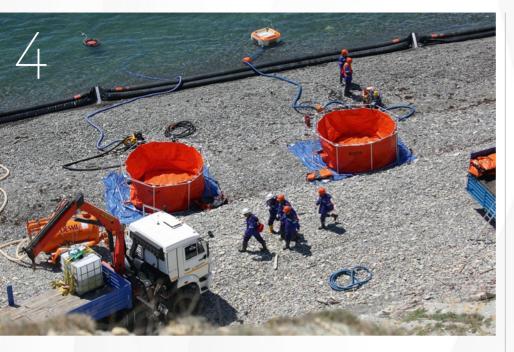
ISSUE'S FOCUS

CPC'S CLOSE-KNIT TEAM'S WORK AMID THE PANDEMIC

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OF THE TIME

LABOUR MANAGEMENT
COMFORT
OF DIGITAL

THE WAY



IN THE FIRST PERSON

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No 3 (30) SEPTEMBER 2020 IN THE FIRST PERSON



ersonnel of the Caspian Pipeline Consortium have been working in new, atypical, unprecedented conditions caused by the global COVID-19 pandemic for several months already. A package of measures we have taken—which includes, but is not limited to, transfer of up to 80 % of employees to remote work, compliance with special safety requirements at offices and production facilities, and assignment of some of them to a special rotational regime—significantly contributed to mitigation of risks of the spread of coronavirus. All measures are being implemented taking into account the unfolding situation in the regions where the Consortium operates. According to orders of local authorities and requirements of medical specialists, the CPC facilities have established appropriate individual isolation and observation rules and imposed restrictions at work places, which apply to employees of contractors as well.

As a strategically important enterprise of the fuel and energy complex, the Caspian Pipeline Consortium never stops its operation, performing tasks on crude oil transmission from Kazakhstani and Russian fields and on subsequent crude oil loading. One of our performance indicators during the pandemic is the freight turnover rating of Russian stevedoring companies, where the Marine Terminal in Yuzhnaya Ozereyevka ranked first upon the results for the period from January through June 2020, with a turnover of 31.2 million tonnes.

The Debottlenecking Programme adopted by the Company last year is generally being implemented according to the project schedule.

In July, we carried out an inspection of the CPC pipeline system's facilities in the Russian territory, which showed that the epidemiological situation did not affect the

production performance: the Consortium's and contractors' employees perform their tasks with precision and comply with all the necessary safety measures; their professionalism and commitment to the final results allow them to work efficiently in nonroutine situations.

It should be noted that amid the pandemic both the personnel and equipment of the Consortium and the technologies in use are being tested for endurance. Contents of this issue reflect work of CPC's operations, HR, transportation, IT, and other structural units, which characterizes the complexity of challenges we have faced and the uniqueness of decisions being made. As an employer, the Company and its shareholders honour their social commitments to personnel, and the latter demonstrate their high consciousness, loyalty, and flexibility amid adaptation to new working conditions. Also, the Consortium never ceases to take care of people within its footprint and keeps implementing charity and environmental projects and supporting medical institutions, which obtain state-of-the-art equipment necessary for infection control.

Today, when the Consortium is returning, step by step, to normal operation, it is crucial to remember that the existing sanitary restrictions and safety requirements must be met. Dear colleagues, I thank you and your nearest and dearest for your understanding and readiness to mobilize the efforts in this tough time. Once again, we have shown our team's cohesion and high potential in overcoming challenges of the time.

N.N. GORBAN, GENERAL DIRECTOR CASPIAN PIPELINE CONSORTIUM 2 DBNP: STEP BY STEP CORPORATE MAGAZINE «CPC PANORAMA» No 3 (30) SEPTEMBER 2020 DBNP: STEP BY STEP

AUTHOR PAVEL KRETOV

DBNP: ALWAYS ON COURSE!

THE PANDEMIC-RELATED SITUATION AND RESTRICTIONS ON THE ACTIVITIES
OF ENTERPRISES FAILED TO DECREASE MOMENTUM GAINED AT THE
START OF THE DEBOTTLENECKING PROGRAMME IMPLEMENTATION. CPC'S
TECHNICAL DIRECTOR AND DBNP MANAGER IGOR LISIN EXPLAINED TO
CPC PANORAMA HOW THE PROGRAMME MANAGERS PULLED IT OFF AND
DISCUSSED THE CURRENT PERFORMANCE

Mr Lisin, what reserves have allowed your Unit to successfully stand by the original plans in this challenging time?

Moral support of the company's management to the employees, our correct prioritizing, and the restructuring of business processes on the fly were of great importance. We quickly adapted to online project

management and actively used the capabilities of video calls, remote presentations, and conferences.

What is the current stage of the DBNP implementation?

A favourable conclusion of the State Out-of-Departmental Examination of the Republic of Kazakhstan was received strictly as scheduled for the project of dismantling the old diesel fuel pumping station at the Atyrau PS. Let me remind you that a new diesel pumping station was built as part of the Expansion Project a few years ago, and now it is planned to install the fifth main oil pump with a gas turbine drive at the site of the old one. Now, when the dismantling project is approved, our colleagues





ICOD LISIN

from the CPC Eastern Region's Construction Headquarters are ready to start these works.

The construction project for a new mainline pump station and associated facilities at the Astrakhanskaya PS is undergoing final approvals from Glavgosexpertiza [the Main Department of State Expertise] of Russia. Once a favourable conclusion is received, a set of documents will be submitted for obtaining a building permit.

Within CPC, the project for construction of new Lease Automatic Custody Transfer (LACT) metering systems at the Marine Terminal Shore Facilities has been approved. The project has already been sent to the online platform of Glavgosexpertiza of Russia to be verified after confirmation of completeness.

CPC has approved retrofitting and upgrading projects for equipping the mainline pump units with variable frequency drives and for dismantling the pressure control units (PCU). Industrial safety expert review for these projects has entered the closing stage.

Are variable frequency drives innovative for operation of CPC's facilities?

Yes, at the moment the Consortium has no experience in operating

the mainline pump units using variable frequency drives (VFD). Therefore, the DBNP's and the Operations Department's specialists decided to make a separate project for the dismantling of pressure control units (PCU). This approach allowed us to adjust the work schedules and set the PCU dismantling and VFD installation apart from start-up and commissioning with an interval of three months. And this, in turn, makes it possible to hedge against any complications in operation of the pumps during the debugging of the technology that is new for CPC.

Together with our colleagues from the Operations Department, Technology Group, Transportation Group, and Commercial Group, we also developed a logic concept for control of the mainline pump units using both VFDs and PCUs for the transition period. This development considered the experience of operating new electrically driven mainline pump stations.

How is your Unit interacting currently with the design institute within the DBNP?

It is worth noting that the DBNP specialists recently performed serious work in cooperation with the design institute to prepare the Project Specific Technical Specifications (PSTS) for the Astrakhanskaya PS and the CPC Marine Terminal Shore Facilities. These PSTS were successfully approved by the Ministry of Construction and Housing and Communal Services

of the Russian Federation. In particular, they allowed us to resolve the issue of the possibility of placing the mainline pump station building next to the existing radio relay communications tower. And for the Shore Facilities, the PSTS made it possible to agree upon the classification and category of process pipelines under design, potential trenchless underground installation of them, etc.

Simultaneously with design, the Strategy and Planning Team and the Construction Team prepared detailed work schedules for all DBNP facilities. Taking into account the specified deadlines, negotiations on all key contracts for future DBNP construction are at their final stage-this includes contracts for the major scopes of construction and installation works, for control systems and communications (CS&C), and for fire and gas detection (F&G) systems. The tendering process is carried out in a remote access format according to the planned deadlines. The impact of COVID-19 on the DBNP implementation progress has been assessed. Currently, the design and preparation of the full-scale Debottlenecking Programme implementation is carried out within the timeframe of the DBNP Schedule approved as the part of the Final Investment Decision (FID) package.

Of course, new challenges await us all, but we are not afraid of difficulties because we are acting as a united



MEETING CHALLENGES OF THE TIME

IN MARCH, THE WORLD HEALTH ORGANIZATION DECLARED THAT AN OUTBREAK OF **CORONAVIRUS INFECTION GREW** INTO A PANDEMIC. MOST OF THE GLOBE TOOK UNIQUE LEGISLATIVE AND ORGANIZATIONAL MEASURES. WHICH AFFECTED LIVES OF A GOOD PART OF THE PLANET'S POPULATION



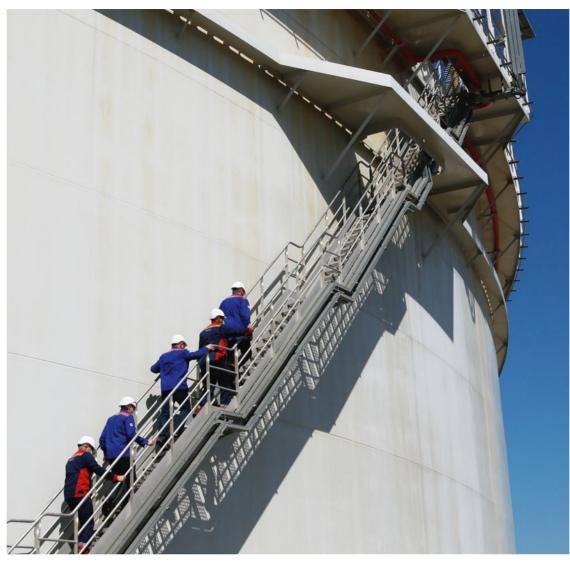
The degree of threat was promptly estimated both in Russia and Kazakhstan where the central and regional administrations have implemented high-efficiency solutions in a timely manner. In accordance with them and utilizing its own technical, managerial, and financial capabilities, CPC spared no effort to protect life and health of its staff and contractors' representatives as well as their family members.

Priority measures included a ban of all interregional and international business trips, transfer of all employees who had returned earlier from abroad to the lockdown, and thermometry of all personnel before the beginning of a workday.

Since March 19. the offices in Moscow. Nur-Sultan, and Atvrau switched to remote work. A Crisis Management Team (CMT) was established as well. It consisted of General Director, Deputy General Directors, and the heads of CPC's key structural units.

The Consortium's IT services performed some serious scope of tasks in order to transfer to remote work the employees whose continuous presence at their work places was not critical for support of CPC's production and business processes. In a matter of hours, they arranged remote access to office workstations and created additional information protection systems.





WITH ALL RESPONSIBILITY

Continuing working remotely, the employees kept connections and interactions of structural units in full. By AT THE CPC MARINE TERMINAL

means of all types of internal corporate communications, the CPC personnel and contractors' representatives were promptly informed about all decisions and orders of state and regional authorities. All employees received a list of telephone numbers of emergency medical services and regional hotlines of the relevant state agencies as well as awareness-raising materials on necessary actions at the onset of disease symptoms.

In his address to the personnel, CPC General Director pointed out that employees readjusted to work in the new conditions with all responsibility and thanked them for competently discharging their professional duties and for being organized and professional.

"At all the structural units of CPC, at all the facilities from Tengiz to Novorossiysk, our multinational team is successfully dealing with the set tasks in the challenging conditions," said Nikolay Gorban. "It's important that we preserve our commitment to the results, without allowing for any compromises in occupational health, production reliability, and industrial safety. Many years of production experience and practice of regular drills as well as prediction and elaboration of various crisis scenarios largely contributed to this."

The Crisis Management Team (CMT) took the lead in ensuring uninterrupted operations of the large international company. The CMT was developing timely solutions for the efficient functioning of all the structural units of the Consortium, both in Russia and Kazakhstan.

A timely response to decisions of local administrations, which depended on the specific epidemiological situation, became an important area of the CMT's activities. Measures developed by the Team made it possible to create an environment where the CPC facilities were operated in such a way that the personnel needed not cross any administrative borders. In exceptional cases that required delivery of employees to another region, this was done in full compliance with all instructions and orders of Rospotrebnadzor [the Federal Service for Surveillance on Consumer Rights Protection and Human Wellbeing] and local authorities.

WE ARE THE ONLY ONES

In the CPC Eastern Region, all pump stations were immediately transferred to the rotation system, with the duration of rotational shifts increased to 28 days. As quarantine introduced in various populated areas of Kazakhstan prevented some employees from arriving at their work places, colleagues substituted for them. In order to





AT THE TENGIZ PS

rotations at the stations. "All our employees proved themselves conscious and understanding that in any situation we must go on with crude transmission and that we are the only ones to do this," told us Ondasyn Shakan, Manager of the Tengiz PS. "Otherwise, both the entire oil pipeline and the oil extraction process would stop. This is why we arranged, as far back as in March, a standby rotational shift and manned it with the necessary number of people. They were quarantined while we were working. Of course, by agreement with the Eastern Region's specialists, some works at the facility had to be cut down. For instance, maintenance that used to be performed on a monthly basis is currently due every two or three months."

All facilities increased the frequency of room cleaning and implemented UV light sterilization and airing. The Region's personnel received disposable and reusable masks, respirators, and individual disinfectors. Gyms and saunas in camps had to be closed.

"Before the COVID-19 pandemic, our PS worked on a shift basis," said Salamat Sarsengaliyev, Manager of the Atyrau PS. "We individually talked to each employee and explained why transfer to the rotation system is

IVAN SHARAY, REGIONAL MANAGER OF THE CPC CENTRAL REGION: AS SOON AS THE HIGH-ALERT SITUA-TION WAS DECLARED IN RUSSIA, SPE-CIALISTS OF THE MOSCOW OFFICE AND OUR OFFICE CONSIDERED ALL OPTIONS OF FOUIPMENT MAINTENANCE AND LEFT ON-LY THE MOST NECESSARY WORKS BY RESCHEDULING ALL OTHER OPERATIONS TO LATER DATES. THE FACT THAT ALL FACILITIES ARE OPERATING NORMALLY AND WITHOUT ANY FAILURES SPEAKS VOLUMES ABOUT QUALITY OF THE REVIEW CARRIED OUT UNFORTUNATELY, AN OUTBREAK OF THE DISEASE COULD NOT BEEN AVOIDED AT THE KOMSOMOLSKAYA PS, BUT IT WAS PROMPTLY CONTAINED DUE TO QUICK RESPONSE AND HARSH DISCIPLINE. THE ENTIRE TEAM OF THE STATION BEHAVED WITH DIGNITY. NO ONE FALTERED. I'D ALSO LIKE TO EXPRESS APPRECIATION TO REPRESENTATIVES OF MAS-TER-SERVIS LLC, OUR CONTRACTOR, WHO HAVE STARTED TO DISINFECT ALL AD-MINISTRATIVE, RESIDENTIAL, AND INDUSTRIAL PREMISES ON A REGULAR BASIS. THEY ARE WORKING VIRTUALLY AROUND THE CLOCK AT CAFETERIAS TO PRO-VIDE THREE MEALS A DAY WHILE MEETING THE SOCIAL DISTANCING STANDARDS OF ONE PERSON AT THE TABLE.

necessary. A hotel was booked, just a 20-minute drive from the station, and it became our "rotational camp" isolated from strangers. In order to protect personnel's health, we divided the pump station territory with metal fences into a quarantine area and a non-quarantine area. Quarantined employees enter the station through a separate checkpoint."

COLLECTIVE SUPPORT

Many similar measures were also taken at oil pump stations of the CPC Central Region, the area of responsibility of which is located in Astrakhan Oblast and in the Republic of Kalmykia. Employees of the Consortium and representatives of contractors based at the pump stations were requested to meet the lockdown requirements



with all responsibility and to use passes allowing them to get to work and back for the purpose specified.

"Our station will soon become a rotational one, and the pandemic-related situation confirmed once again that this is the right choice. Construction of a camp will start this year already, and for now, for accommodation of rotation people, we use guard rooms, classrooms, and specially delivered trailer houses," lists Sergey Nosov, Manager of the Astrakhanskaya PS. "Beds and bedding items were delivered from other stations of the region. The team was friendly. Colleagues supported each other. Due to the forced reduction of equipment maintenance

REPORTS—ONLY BY WALKIE-TALKIES

Konstantin Kolyanko, Manager of PS-2, has compared the facility he is in charge of to a submarine, where every compartment is tightly sealed off.

"Until further notice, the station has been closed for representatives of any contractors and third-party organizations, unless the visit is critical for facility operation and life support," he said. "Before taking over duties, the employees spend five days at an observatory and get tested for coronavirus."

In order to meet the social distance, the personnel, for the time being, enter PS-2 through the gate rather than through the checkpoint room. Permits to work in hard copy are handed over without direct contact between employees. Reports on preparation of subfacilities for maintenance, on performed maintenance, and on readiness to re-launch the equipment into operation are delivered only by walkie-talkies. The cafeteria takes special precautions—each person sits at an individual table.

And if the worst comes to the worst, the CMT has developed a plan according to which the Region would be able to operate for a while with two stations only—the Komsomolskaya PS and the Astrakhanskaya PS.

A JUNCTION STATION

In the CPC Western Region, which ensures operation of the Tengiz–Novorossiysk oil pipeline in Krasnodar Krai and Stavropol Krai, the pump stations reduced the number of operational personnel and operation contractors' representatives. Contractors that performed routine repair and overhaul of facilities were demobilized from the sites for the time being.

"IT'S IMPORTANT THAT WE PRESERVE OUR COMMITMENT TO THE RESULTS, WITHOUT ALLOWING FOR ANY COMPROMISES IN OCCUPATIONAL HEALTH, PRODUCTION RELIABILITY, AND INDUSTRIAL SAFETY"

work, we doubled the number of walkdowns. Routes for moving around the PS were developed with the social distancing requirements in mind, and no-contact admission of contractors was implemented."

At the Komsomolskaya PS, where crude oil is received from the producer, oil people monitor sampling and analyses of feedstock's qualitative characteristics in the remote mode: consignors receive a detailed photo report.

"The pandemic, certainly, has brought us out of the comfort zone, but every cloud has a silver lining: now, having overcome all challenges, we know for sure that our team will do to ride the river with," said the Manager of the Komsomolskaya PS, Oleg Dmitriyev. "There are about 100 persons of staff and contractors at the station, and for all of them we've provided the social distancing conditions, using trailer houses, among other things. We replenish all stocks in a timely manner—sanitizers, respirators, masks, and gloves."



SCHEDULED EQUIPMENT INSPECTION AT PS-2

Employees received strong advice not to leave home unless absolutely necessary, to wear masks and gloves, to observe the social distance, and to avoid contacts with people who showed symptoms of respiratory diseases.

The Kropotkinskaya PS was transferred to the rotation system on a temporary basis (until July 1, 2020).

"Our station is one of the most important, junction-type stations on the Russian portion of the oil pipeline, which is why, despite obvious difficulties, the team understood extra safety measures," said the Manager of the Kropotkinskaya PS, Oleg Semikov. "With the assistance of contractors Starstroy and Master-Servis, a camp for 60 places was deployed within the shortest time possible, with troublefree provision of three meals a day. Measures for minimizing any contacts of CPC's shift personnel with contractors' representatives are observed."

"MAGNIFICENT FIVES"

Unprecedented steps for protection against the viral threat were taken at the Consortium's Marine Terminal: 80 % of employees were transferred to remote work. Personnel are delivered to the Marine Terminal by CPC's



vehicles, which are subject to regular disinfection.

All employees are provided with medical masks and respirators. Social distancing markers are applied at checkpoints and entrances to the premises. The oil port's personnel and contractors performing routine repair and overhaul received memos on the work procedure during coronavirus

Activities aimed at safety of CPC dispatchers tell a story in its own right. Access to the Operations Control Centre (OPC) is denied for all other the process whenever necessary.

"Shift handovers involve no contact at all: dispatchers who take over duties

employees. Three dispatchers (one of whom supervises loading of tankers, and two others ensure crude oil transmission via the pipeline system) plus a personal driver and a cleaner assigned to them work all together and never exchange shifts. Overall, four such "fives" plus one standby "five" were formed, consisting of lead dispatchers, who are ready to join in

the Chief Dispatcher's office. From there, they report by phone about all plans, activities, and other current business issues. After that, using different doors, the old shift leaves the premise, and the new shift takes over duties. During the crew change period, the OPC gets thoroughly disinfected and aired," Igor Mishchenko, Head Dispatcher of the

details.

"Our employees can hand over and accept shifts in such a no-contact manner thanks to high cohesion, many years of cooperation, and unique professionalism," explained Aleksandr Nosov, Lead Dispatcher, Pipeline Control.

Operations Control Centre, gave us

enter a classroom equipped with SCADA

monitors, while their colleagues enter

STRENUOUS WORK

Any arriving tankers are loaded according to a special procedure. If a vessel arrives from a country with the unfavourable epidemiological situation within the 14-day incubation period, any operations with the vessel must be preceded by its disinfection to be performed by specialists of a Sanitary

There must be no socializing, unless related to performance of official duties. Specialists interact at a distance, using walkie-talkies, mobile phones, and loudspeakers.



DRILLS AT THE CPC MARINE TERMINAL

DESPITE OBVIOUS DIFFICULTIES, THE TEAM UNDERSTOOD EXTRA SAFETY MEASURES

Quarantine Station (SQS) as well as by thermometry of and interviews with crew members. Only if there are no sick persons, the SQS representatives give permission to proceed with all types of state inspection and with treatment of the tanker.

A line-handling crew, agents, shipping clerks, and ship surveyors must use personal protective equipment all the time they are staying on board as well as antiseptic solutions and ointments.

"CPC's team has efficiently responded to the challenges of the time. Our company stopped none of its production projects and programmes. Strenuous work continues at all facilities in the strictest compliance with all safety and virus-containment measures. As before, we are ready to receive all feedstock volumes from producers from largest Caspian fields," said CPC General Director Nikolay Gorban.

ALEKSEY PELIPENKO. REGIONAL MANAGER OF THE CPC MARINE TERMINAL:

WE DIFFER FROM OTHER REGIONAL UNITS OF CPC IN BEING A LARGE INTER-NATIONAL OIL LOADING PORT. ON THE ONE HAND, WELL-PACED LOADING AT THE TERMINAL IS OF GREAT IMPORTANCE FOR UNINTERRUPTED CRUDE TRANSMISSION THROUGHOUT THE OIL PIPELINE SYSTEM. ON THE OTHER HAND, OP-ERATION OF THE TERMINAL NECESSITATES CONSTANT INTERACTION WITH EXTERNAL AGENTS AND REPRESENTATIVES OF GOVERNMENT BODIES. THEREFORE, IT IS CRUCIAL FOR US TO ABIDE BY ALL SAFETY MEASURES AIMED AT CORONAVIRUS INFECTION CON-

TAINMENT, WE'VE CREATED AN ABSOLUTELY STERILE ENVIRONMENT AT THE OPC, ENSURING FULL ISOLATION OF DIS-PATCHERS FROM OTHER PERSONNEL. BY OPENING A SEPARATE ENTRANCE TO THE MT FOR CONTRACTORS' REPRESENTA-TIVES, WE PREVENTED ALL CONTACTS BETWEEN THEM AND THE CONSORTIUM'S EMPLOYEES.

IN THE HEART OF THE HOT SUMMER

IN THE FIRST TEN DAYS OF JULY, THE MANAGEMENT OF THE CASPIAN PIPELINE CONSORTIUM PERFORMED A BUSINESS TRIP ALONG THE RUSSIAN PART OF THE TENGIZ-NOVOROSSIYSK OIL PIPELINE



During the helicopter flight, the Company's General Director Nikolay Gorban, General Manager, Operation, Vladimir Shmakov, Technical Director Igor Lisin, Procurement Manager Dmitry Ryzhik, and other specialists inspected the Tengiz–Novorossiysk oil pipeline facilities situated in Astrakhan Oblast, the Republic of Kalmykia, Stavropol Krai, and Krasnodar Krai.

The managers checked equipment operation at the production sites and visually examined the administrative premises, warehouses, and rotational camps, paying special attention to the compliance with security and safety measures by the operational personnel and representatives of contractors in the context of the COVID-19 pandemic. The stations saw random unscheduled checks of the personnel's and contractors' readiness for emergency response.



"Our purpose was to make sure that the personnel strictly respects all sanitary measures and, at the same time, continues working as a united team at all facilities of the mainline," said CPC General Director Nikolay Gorban. "Be it noted, we have not seen a single violation

The flight over the facilities in CPC's Central Region started from Pump Station A-PS-4A located near the state border with Kazakhstan. The 520th kilometre of the main oil pipeline saw drills on oil pumping from a simulated damaged area. Representatives of the Astrakhanskaya Emergency Response Centre (ERC) successfully used various types of machinery and equipment: a mobile pump unit, slotting devices, collapsible tanks, etc.

DURING THE VISIT OF THE CPC MANAGERS, THE STATIONS SAW RANDOM UNSCHEDULED CHECKS OF THE PERSONNEL'S AND CONTRACTORS' READINESS FOR EMERGENCY RESPONSE

of the safety measures we have implemented—all personnel wear masks and gloves, meet the requirements of observation and social distancing, and undergo timely testing. Therefore, even at the peak of morbidity in the regions, only a few cases were recorded at CPC."

"We inspected all the stations of the Russian section and checked the readiness of the emergency response centres on the mainline's linear section for emergency response," added General Manager, Operation, Vladimir Shmakov. "I think it's equally important that once again we showed the employees on site the strict compliance with sanitary safety measures through our personal example."

Regional specialists reported to the management that replacement of two fire water storage tanks within an overhaul project at the Astrakhanskaya PS is underway. In addition, having completed the observation regime, the contractors began to carry out planned capital works in CPC's Central Region.

At the Komsomolskaya ERC, the Consortium management checked the personnel's readiness to solve operational tasks on the linear section of the oil pipeline as well as the availability of all necessary equipment, tools, and materials. The event involved 22 specialists and 17 pieces of equipment in total. Despite the severe weather conditions (the temperature reached +62 °C in the



sun), all the objectives were achieved successfully. The participants made a tie-in to a specially prepared pipe section and tested the pumping equipment.

AHEAD OF SCHEDULE

In the Western Region, special attention was paid to the largest station of CPC–Kropotkinskaya PS. At the peak of the pandemic, the station was transferred from the shift-based work to rotation. To do so, a rotational camp for 60 places was deployed, with three meals a day. The shift-based work was resumed since July 1. Regional specialists reported that



OVER

200

the contractors at the Kropotkinskaya PS have completed reconstruction of the booster pump station. Equipment maintenance is carried out in the region in a timely manner, while current repair and overhaul of facilities are even ahead of schedule.

The 1020th kilometre of the route witnessed drills on replacement of an oil pipeline section with simulation of oil pumping from the mainline. They involved manpower and resources of the Ipatovo ERC-one of the four emergency response centres based in CPC's Western Region's area of responsibility. During the drills, the personnel of the contracting organization, Starstroy LLC, demonstrated capabilities of the following available equipment-mobile pump unit PNU-2; pipe cold cutting machines; PMTP dismountable field trunk pipelines; an installation for groundwater extraction from a pit; sets of onshore and offshore oil spill response equipment; collection tanks for temporary storage, including closed flexible tanks. For easy transportation and prompt deployment of equipment, Starstroy's specialists

SPECIALISTS WERE INVOLVED IN THE DRILLS AT THE MARINE TERMINAL

retrofitted their machines with special roll-out devices, and this ingenuity of the contractors was highly appreciated by CPC General Director.

The CPC Marine Terminal also witnessed an unscheduled check of the manpower and equipment readiness for emergency situations. The participants of the drills practised activities for simulated oil spill containment and response at sea and in the coastal area. Overall, the drills engaged over 200 specialists and 21 fleet units and deployed 1200 m of marine booms, 450 m of coastal booms, 15 oil-skimming systems, and temporary oil storage tanks.

DBNP (DEBOTTLENECKING PROGRAMME)

In addition, at the Russian part of the oil pipeline, CPC's managers visited future locations of PS subfacilities being constructed and reconstructed as part of the Debottlenecking Programme (DBNP) and reviewed issues of laying new utilities and connecting them to the existing ones. CPC's Technical Director Igor Lisin reported that the project documentation

was being prepared as scheduled and some of the documents had already been submitted for expert examination. All major deliveries had been contracted, with the first deliveries to be made as early as in November 2020.

The specialists discussed matters of process tie-ins to the existing oil pipelines at the stations and a scheme of future interaction between the DBNP personnel and the Operations employees. At the Astrakhanskaya PS, where they are making preparations for construction of a new mainline pump station, installation of VFDs, indoor switchgear, new mainline mud strainers, a foam generating unit, and racks for laying the cable products, they determined locations of separation fences allowing the construction sites to be isolated from the production areas in operation. This will limit the movement of construction equipment over the territory with the operating process equipment and mitigate potential risks of the DBNP works for the operating activities.

At A-PS-4A and the Komsomolskaya PS, which expect installation of one additional pump unit with a gas turbine drive at each station, additional station access points for the construction contractor and demarcation areas for the existing and planned equipment and utilities were identified.

At A-PS-5A, PS-2, PS-3, PS-4, and PS-5, where installation of VFD units is planned, the specialists discussed issues related to transfer of the existing utilities and equipment from the locations of new subfacilities.

At the Marine Terminal Shore Facilities, CPC's management visited the LACT (Lease Automatic Custody Transfer) site, where the design solutions for arrangement of new crude metering units, solutions for their connection to the existing utilities, and the sequence of installation and dismantling works were reviewed using a 3D model presented.

"Upon the results reported by the representatives of the construction site offices, the CPC management was provided with comprehensive information about the upcoming works and design solutions, which showed the high readiness of the DBNP personnel for the complex, but interesting project," Igor Lisin, CPC's Technical Director, shared his impressions.

STAFF AND TECHNOLOGIES

During the management trip, considerable attention was paid to the Consortium's warehousing facilities. Currently, CPC has 16 operating warehouses, which store over 55 thousand items of goods. The warehouse staff demonstrated to the management such technological innovations as warehouse

tablets, which make it possible to find any required part quickly by its barcode. CPC prides itself on the common use of cost-effective modular storage systems and—in some warehouses—even two-story warehouse complexes with stairs.

"Over the past four years, due to the implementation of modern storage systems, designed with peculiarities of the premises in mind, CPC has managed to increase the capacity of the existing warehouses several times and decrease the unit costs for goods storage manyfold," said Dmitry Ryzhik, Procurement Manager.

Permanent advanced training has turned CPC warehouse workers not just into storekeepers, but into real universal engineers! They draw up warehousing and accounting documents in the accounting application, prepare technical and claim reports, operate forklifts, have firefighting skills, and help employees select personal protective equipment.

"During our trip across the regions, we became certain that the coronavirus pandemic failed to disrupt the work flow, and the actual situation is consistent with the field reports," Nikolay Gorban, General Director of the Consortium, summed up the flight results. "All equipment is in good condition. CPC's employees and representatives of the contractors have responsible attitude to their duties and demonstrate an invariably high professional level."





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RELIABILITY GUARANTEED

THE PERFORMANCE OF THE CPC PIPELINE SYSTEM, JUST AS ANY MAIN OIL PIPELINE, IS AFFECTED BY RELIABILITY OF POWER SUPPLY SYSTEMS. DIAGNOSTICS, ADJUSTMENT, AND UPGRADING OF THE RELEVANT EQUIPMENT IS CARRIED OUT BY THE ELECTRICAL LABORATORY OF STARSTROY LLC

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pring 2020 was a difficult period for the fuel & energy companies to achieve their production objectives in full.

Contractors, including Starstroy LLC, shared the difficulties of epidemiological restrictions with the Caspian Pipeline Consortium, which never stopped pumping and shipping oil even for a day. Diagnostics and upgrade of power supply systems of the Tengiz–Novorossiysk oil pipeline facilities became one of the areas of ongoing cooperation under the pandemic conditions.

The Electrical Laboratory (EL), a subdivision of Starstroy LLC, was established in 2003 to ensure safe operation of electrical installations at industrial facilities of the CPC oil pipeline system. The range of the main tasks of the Electrical Laboratory includes assurance of reliable, trouble-free operation of equipment and networks, metering and measuring systems, protection relays, automation and alarm systems, testing units and apparatus, as well as other electrical equipment. The

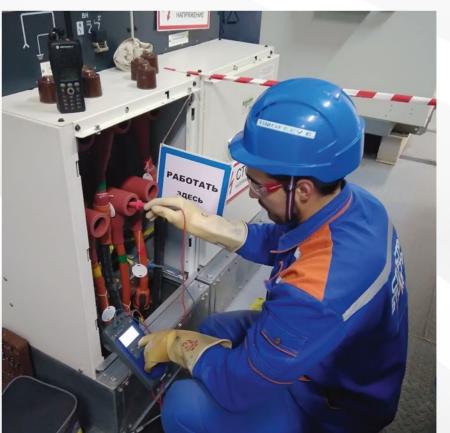
EL performs tests, diagnostics and adjustment of complex electrical equipment and localizes damages to cable lines. In addition, the scope of the laboratory's activities includes arrangement of timely scheduled preventive maintenance (SPM) and preventive tests of equipment, cables, instruments, relay protection and automation devices, metering and measuring systems, and automation and alarm systems.

The technological infrastructure and qualifications of the Starstroy EL employees allow them not only to identify defects during operation of electrical installations and automation and alarm systems,

but also to eliminate them. A wide range of the laboratory's activities is complemented by implementation of new testing electrical equipment, modernization of the existing electrical equipment, and large-scale testing of personal protective equipment used in the existing electrical installations.

During the period of work on the project for maintenance of CPC electrical installations, the laboratory personnel increased in number several times. The EL team was joined by technically competent employees, who attended workshops and trainings on a regular basis, meeting the growing demands of the Consortium's

THE ELECTRICAL LABORATORY IS EQUIPPED WITH THE LATEST TESTING EQUIPMENT



Operations Department with regard to quantitative and qualitative aspects of rendered services.

The high qualification and authority of Starstroy's specialists is confirmed by the fact that the EL personnel is involved in consulting and supervising the contractors of the CPC Expansion Project during the installation, adjustment, and testing of complex microprocessor-based protection relays and controllers from such manufacturers as Schneider Electric, EKRA, ABB, Siemens, Alstom, and others.

The Electrical Laboratory is equipped with the latest testing equipment, which ensures the implementation of the full package of measures to fulfil contractual obligations in accordance with the requirements of regulatory technical documents during operation of the electrical equipment.

The EL's instrument fleet of testing and measuring equipment is updated on a regular basis. In 2018, the technical

outfitting of this subdivision was enriched with three new mobile electrical laboratories, which enable equipment to be tested both at process sites and in the field.

In the course of the laboratories' activities, the entire set of works is clearly recorded, and relevant reports are drawn up after each verification step/stage of works. A technical report includes not only values of electrical installations' parameters and characteristics, but also comprehensive data on conditions and the progress of tests and measurements as well as the findings of engineers on the equipment's compliance with the up-todate regulatory framework (Electrical Installations Code, Regulations for Operation of Consumer Electrical Installations).

The Electrical Laboratory's specialists provide guarantees for all types of works performed. Preventive testing of electrical installations automatically eliminates the possibility of various faults.

Systematic work of the regional subdivisions of the Electrical Laboratory has been streamlined to improve personnel qualifications in terms of the use of modern methods of diagnostics and non-destructive testing of electrical equipment and electrical networks.

The professionals completed special training and certification on the regulations for thermal non-destructive testing (thermal imaging) and, as practice shows, are able to apply the acquired skills. The power equipment at the CPC pipeline system facilities undergoes periodic inspections for hidden local overheating in order to identify defects at an early development stage.

For example, thermal imaging at PS-7 in the Western Region detected excessive heating of the cable line terminals in contact with circuit breakers of ASP-001A/B panels. The defect was promptly eliminated, which prevented its development to the extent of an accident that could have caused shutdown of the oil pumping process and subsequent unplanned



financial expenses for repairs and restorations

It is also worth noting that the staff of the Electrical Laboratory participated in the retrofitting of pump units at the Kropotkinskaya PS, Komsomolskaya PS, and Atyrau PS within the CPC Oil Pipeline System Expansion Project.



EQUIPMENT DIAGNOSTICS HAS ALWAYS BEEN AND REMAINS RELEVANT FOR THE ELECTRICAL POWER INDUSTRY

Moreover, PS-2 in the Central Region witnessed re-installation of 100 % end sleeves on XLPE-insulated 10 kV cable lines feeding the electrical motors of mainline pumps. Testing of the installed terminations with an increased voltage of ultra-low frequency confirmed high quality of the works performed.

At the Komsomolskaya PS, the employees of the Electrical Laboratory were engaged in the commissioning of the electrical equipment at the camp. Adjustment of microprocessor units of Sepam protection relays manufactured by Schneider Electric and integrated tests of KTP-VP 10/0.4 kV power equipment, including circuit breakers and 0.4 kV cable lines to consumers,

were carried out. In connection with the commissioning of high-voltage motor soft starters (HVMSS) at PS-3, high-voltage tests of overvoltage suppressors were conducted.

In the Western Region, the EL personnel repeatedly localized damages to 10 kV cable lines included in the power supply network of block valve stations on the linear section of the main oil pipeline. The analysis allowed the cause of system failures to be identified—it was the dripping of oiltype preservative for paper insulation of cable lines in vertical sections going to disconnector-equipped supports. The operating personnel received a recommendation on the engineering solution to this problem.

At PS-5, the commissioning was preceded by tests of new voltage transformers in 10 kV indoor switchgear cells installed to replace the failed ones. Defective cable sleeves on XLPEinsulated lines were also replaced and then subjected to high-voltage testing using new AIST SNCh-36 and FRIDA equipment.

Specialists of the Marine Terminal's Electrical Laboratory took an active part in the start-up and commissioning of the project of power supply retrofitting and upgrading at the Tank Farm and Shore Facilities with replacement of a diesel power station with a state-of-the-art counterpart. Sepam microprocessorbased protection relays were adjusted at the main substations of the Tank Farm and Shore Facilities according to a new setpoint chart. 10 kV power transformers and newly laid XLPEinsulated cable lines were tested

of the CPC Main Pipeline, Starstroy LLC has mastered a new field of work for the ETL. A new Registration Certificate of the Federal Service for Ecological, Technological and Nuclear Supervision of Russia under No. before commissioning. 1574/27 was obtained and gives the right for electrical energy consumers

requirements of state supervision bodies for operation of consumer electrical installations, the EL personnel undergoes annual certification in electrical safety with the commissions of the Federal Service for Ecological, Technological and Nuclear Supervision of Russia.

Under the guidance of the Chief Power Engineer's Service of Starstroy LLC, the laboratory personnel developed and approved test and measurement procedures taking into account the use of modern instrumentation.

Due to the commissioning of 110 kV

Equipment diagnostics has always been and remains relevant for the electrical power industry. Timely identification of issues is the main challenge for the Electrical Laboratory. All objectives on reliability improvement as well as on identification and elimination of problematic issues are discussed and solved with direct involvement of the CPC Operations Department's Electrical Supervisor Service. The EL's specialists regularly participate in making technically difficult and non-standard decisions related to electrical equipment troubleshooting. electrical installations at the facilities Today, the Electrical Laboratory of Starstroy LLC is an independent and self-sustainable unit that is fully staffed with qualified personnel and fully equipped with state-of-the-art diagnostic, testing, and measurement tools for electrical installations with voltage up to 110 kV.



AUTHOR PAVEL KRETOV

ENERGY EFFICIENCY AUDIT

SINCE LATE 2019 THROUGH EARLY 2020, ALL CPC OIL PUMP STATIONS SAW POWER SUPPLY RELIABILITY ANALYSIS. COMPLETION OF WORKS COINCIDED WITH INTRODUCTION OF QUARANTINE MEASURES RELATED TO THE COVID-19 PANDEMIC, AND THEREFORE SPECIALISTS OF JSC CPC-R AND RTSOFT JSC DISCUSSED RESULTS OF THE JOINT RESEARCH IN THE FORMAT OF A CISCO WEBEX CONFERENCE



"Facilities of the Caspian Pipeline ting-edge power electrical equipment having a high level of automation and integration with modern data acsays Aleksandr Simonov, Chief Project Engineer of RTSoft JSC.

The expert notes that CPC's equip-

Russian leading companies: Siemens, Schneider Electric, Areva MiCom, ABS Elektro, Tavrida Electric, and on microprocessor units with connection via communication links to ed workstation, but also in the au

constructed and 10 new ones were of a project of expansion of CPC

pipeline system's capacities up to 67 million tonnes of oil per annum (Expansion Project) in 2011 to 2017. External high-voltage networks were created for power supply of new facilities. So, in order to provide PS-2, PS-3, and PS-4 with electricity, three substations were put into operation, with a power of 2x25 MW each (two with a voltage of 220 kV; one-110 kV). High-voltage overhead power transmission lines over 585 km long in total were entered in the books. Of these, over 140 km were 110 kV lines, and 445 km were 220 kV lines.

RELIABILITY AS A CRITICAL FACTOR

Reliability of the electrical equipment is a critical factor in ensuring trouble-free operation of the pipeline system, to be specially monitored by specialists at all times. One of relevant areas for improvement of stability indicators of energy systems is elimination of errors in design setpoints of relay protections and controls (RP&C) at stations built within the Expansion Project. These nonconformities result from the fact that design setpoints were based on design parameters of the external power grid at the time of design engineering in 2009, and actual values have changed since then.

An energy consulting project for comprehensive power supply analysis of some pump stations was executed by specialists of RTSoft JSC in two stages. The first stage consisted in collection of initial data with visits to facilities, while second stage included calculations and development of recommendations.

"RTSoft JSC has performed a deep survey of the power supply system and created precise digital models of the internal electrical grid and the adjacent external one for facilities under study, using the PowerFactory software complex," explains Vitaliy Chumachenko, Head of the Electrical Behaviour Simulation and Study Department of RTSoft JSC.



COMPUTER COMPLEX

PowerFactory developed by DIgSI-LENT GmbH, a German company, includes functions for studies, design, calculations, and simulation of energy facilities in all voltage classes. The software complex is used by electricity specialists in 150 countries across the globe for solving the entire range of behaviour planning and control tasks with regard to electrical grids and systems with a voltage of 0.4 kV to 1150 kV. The concept of vertically integrated software allows PowerFactory to be used in various segments: electricity generation, transmission, and distribution; power supply systems of enterprises, design organizations, and others.

The program supports functions calculating symmetrical and asymmetrical steady-state conditions as well as short-circuit currents for 1/2/3-phase grids with arbitrary AC and DC configurations. PowerFactory simulates station master controllers, analyzes voltage behaviours, plans reactive-power reserves using methods of PV and QV curves and VQ sensitivity, simulates and analyzes heavy and emergency conditions, etc.



RP&C MONITORING ALLOW THE OPERATING EXPENSES TO BE DECREASED BY UP TO

But let's get back to comprehensive analysis of external power supply systems at CPC pump stations. Developed digital models were used as a basis for calculations of electrical power modes, short-circuit currents, electromechanical transients, and RP&C setpoints.

Analysis of calculation results made it possible to identify circuit and behaviour situations that require closer attention. The experts are certain that implementation of a RP&C performance monitoring system will potentially decrease the number of



emergency shutdowns at pump stations by 5 to 10 % and reduce the operating expenses by up to 50 % in case of switching to maintenance of microprocessor-based RP&C based on their actual condition.

In order to prevent risks of disruptions in processes due to disturbances in the external grid, RT-Soft's specialists offered to install dynamic voltage restorers (DVR) or uninterruptible power supplies for critical consumers the shutdown of which may stop the main pump. The experts also advised that additional loading resistors should be installed to ensure operation of voltage transformers located in 10 kV input cells, external connections should be reinforced, static VAR compensators should be installed on 10 kV buses at PS-2, PS-3, and PS-4, or frequency converters should be used for main pump units.

"Well-coordinated interaction of CPC-R's specialists and technologists and RTSoft Group's specialists allowed us to complete execution of the energy consulting project with high quality and within the scheduled time frame. The results of this work will enable us to bring performance reliability of the Consortium's electrical equipment to a new, even higher level in the immediate future," sums up Valeriy Cherginets, CPC Chief Electrician.

AUTHORDMITRY KONSTANTINOV

A CAR UP TO THE ENTRANCE

AMID THE PANDEMIC, CPC'S TRANSPORTATION GROUP ALONG WITH OTHER STRUCTURAL UNITS OF THE COMPANY ENSURED THE IMPLEMENTATION OF PRODUCTION PROGRAMMES AND PLAYED AN IMPORTANT ROLE IN PREVENTING THE HAZARD OF SPREAD OF INFECTION. TRANSPORT WORKERS IN EACH OF THE REGIONS FACED DIFFERENT PECULIARITIES AND NEW CHALLENGES IN THE CONTEXT OF THE SITUATION

tyrau, Astrakhan, Elista, Stavropol, Krasnodar, Novorossiysk, Moscow—the statistics of the pandemic and, thus, restrictions on movement of vehicles, including corporate ones, were different in each city. At the same time, at the end of March, all CPC offices and facilities were united by the order of the Company's General Director on prohibiting the officevisiting employees from using public transport.

"The logic behind the order was obvious," says CPC's Transportation Manager Aleksey Bunaryov. "The risk of contagion in public transport is much higher than in a personal or corporate vehicle. Therefore, our transport services and vehicle fleets in Novorossiysk, Moscow, and other regions within CPC's footprint diversified their work, taking into account both movement restrictions and the emergence of new routes with new time intervals."

ADMISSION AND ACCESS CONTROL

Restrictions on the movement of vehicles in the regions were established by local Administrations and depended on the COVID-19 morbidity statistics. For instance, in the Atyrau Region, just as throughout the Republic of Kazakhstan, a State

of Emergency and a quarantine regime were introduced on March 16.

"Movement of all public, fixed-route, and personal transport, including the fleets of enterprises, was prohibited," recalls Tenelbay Teleubayev, Transport Manager of CPC-K's Eastern Region. "Movement of company vehicles in Atyrau and across the region was



possible only under a special authorization of the Emergency Operations Centre. We have prepared for this situation in advance by concentrating vehicles at the office of the Eastern Region. Additional instructions were given to all driver staff and all contractors. Letters were sent in a timely manner to the Road Patrol Service of the Ministry of Internal Affairs, the Region Administration, and the Atyrau Mayor's Office."

The Transportation Group of the Central Region services the CPC facilities in Astrakhan Oblast and in the Republic of Kalmykia. In March, an access control procedure was imposed for motor vehicles in each of these regions.

"We have received permits to move around Astrakhan Oblast and to enter the Republic of Kalmykia," says Semyon Stolbchenko, Head of the Transportation Service of CPC-R's Central Region. "In Astrakhan and across Astrakhan Oblast, traffic control posts checked passes, and special raids were carried out to check permits. But vehicles with a CPC pass on the windscreen were never stopped. This points to the fact that we are known as a company that always keeps its documents and everything else in order."

In May, quarantine restrictions in Astrakhan Oblast were partially lifted, considering the optimistic statistics. Passes for moving around the region by car have been cancelled. But then the daily contagion rate increased threefold, from 50 to 150 persons.

"As it transpired, new cases were caused by residents of Dagestan arriving in the region," continues Semyon Stolbchenko. "But then the situation stabilized—Kalmykia closed the border with Dagestan, and the contagion statistics decreased to 18 persons per day."

The transport workers of the Western Region are in charge of CPC facilities in Stavropol Krai and Krasnodar Krai. Due to the morbidity statistics, access control in Kuban was stricter.

"At the initial stage of the pass issue in Krasnodar Krai, certain difficulties arose with the issuing authority," says Yury Grigoryev, Head of the Transportation Service of the Western

Region. "As a result, the Ministry of Fuel and Energy of Krasnodar Krai took over the issue of passes. CPC's Government Relation RF Department assisted in this. The chief representative for relations with regional authorities was in constant contact with the regional and local administrations, which informed our department in a timely manner about changes related to the requirements for registration of movements within the region and to neighbouring Stavropol Krai. They had a slightly more comfortable regime there as passes could be issued inside the enterprise."

During the pandemic, access control of Krasnodar Krai was extended to the CPC Marine Terminal in Novorossiysk. This key facility of the Consortium has its own transport service and, according to its head, Svyatoslav Shevchenko, the time for pass issue was hectic:

"At the end of March, the Krasnodar authorities took their time determining



THE REGIONAL HEADS OF TRANSPORT SERVICES HAVE BEEN CHARGED WITH DIFFICULT AND MAINLY INDIVIDUAL TASKS

a pass issue procedure. We, as a company that has no right to stop the production cycle, had to adapt to this situation. We were working almost around the clock: lists of employees, vehicles, routes, and permits were being agreed upon sometimes even until one or two o'clock in the morning. Then, we were drawing up the documents, together with Vladimir Chaykin, Lead Representative, Local Authority Relations, and in coordination with Aleksey Pelipenko, Regional Manager. We were standing in queues, actually lived under the windows of the City Administration, which also worked with the extension of the usual schedule."

Tenelbay Teleubayev also mentions the hard work of his unit, along with the help of colleagues at the stage of obtaining passes:

"Our production facilities are located in the Atyrau Region, while our office is situated within the city. Therefore, we had to apply for passes both to the Mayor's Office and to the Akimat [district administration]. A large scope of tasks (meetings, negotiations, approvals) fell upon our Regional Manager Mukhit Mazhenov. We could not have done anything solely on our own-we cooperated closely with the Nur-Sultan office, CPC Deputy General Director Republic of Kazakhstan Government Relations Kayrgeldy Maksutovich Kabyldin, and CPC-K's Republic of Kazakhstan Government Relations Representative Askar Shmanov. Our transport service rendered serious assistance to contractors, for which the situation with passes for transport





movement turned out to be more difficult than that for CPC, a wellknown international company that is strategically important for the region and the country in general."

"A digital pass regime was in effect in Moscow and the Moscow Region from April to early June and significantly facilitated the work of transport workers as compared to other regions," Aleksey Bunaryov shares his view. "But at the same time, the largest number of CPC office personnel with their own urgent tasks is concentrated in Moscow. Therefore, our dispatchers were working actually around the clock, providing logistics for movements of employees who needed to visit the office out of the schedule under a permission of General Director."

The editorial staff of CPC Panorama faced this situation directly on May 14, when it was required to receive the latest issue of the corporate magazine from the printing house and to distribute the circulation to be sent to the Consortium facilities in the regions. The day before, we corresponded and had telephone conversations with Aleksey Malakhov, an employee of the Transportation Service, until the late

evening, as we were waiting for details about the contractor's car and driver. As a result, Operation Circulation was carried out in a precise fashion and even ahead of schedule.

OFFICE, STATION, TERMINAL

CPC Transportation Manager Aleksey Bunaryov notes that the regional heads of Transport Services have been charged with difficult and mainly individual tasks. Quarantine was enforced at a number of stations, which blocked the local transport. Regional Transport Services faced new challenges in transportation of people and goods, but all issues were promptly resolved.

In March, CPC's transportation structural units switched to remote work. Both dispatchers and drivers had to learn the use of new communication tools.

"We held daily conference calls with the heads of regional services, involving other employees, when it was necessary," says Aleksey Bunaryov. "Thanks to the Technology Group, our dispatchers obtained terminal access in a timely manner and mastered the equipment and necessary applications for remote work. Remote

supervision over the vehicle fleet was effectively carried out using software for control of on-board vehicle monitoring systems."

SERVICE NUANCES

The personnel of CPC's Transport Services successfully met the challenges as they occurred, but what about the behaviour of the equipment? No matter how reliable the corporate fleet vehicles are, anyway it was necessary to check them regularly, refuel, and change oil in the engines at a certain period.

"We carried out technical inspections of vehicles on a daily basis, both for our own vehicles and those of contractors arriving at the facilities," says Tenelbay Teleubayev. "Check parameters included the tire pressure, the technical condition of vehicles and lighting devices, the driver's health condition, and permits. As for the lifting mechanisms—truck cranes, excavators—we have already checked them together with the Health, Safety, and Environment Group. Diesel fuel at the stations was their own, in stock. We were lucky that no equipment required prompt maintenance or repair

and no logistical disruptions." "The vehicle fleet of the Central Region operates Toyota vehicles. The dealer responsible for their maintenance never interrupted its work," notes Semyon Stolbchenko. "The vehicle mileages have decreased, and, accordingly, maintenance became less frequent. The vehicle fleets of quarantined pump stations were temporarily taken off the road, with the vehicles of the Astrakhan Office being the only ones to continue operation. There was a moment at the end of May when the stock of diesel fuel at PS-2 began to run out and had to be replenished at the expense of fuel volumes of the Komsomolskaya PS. Since the vehicle fleets at both PSs were banned from travel, we resolved the issue in another way, taking into account the additional difficulty: drivers were not allowed to spend nights at the quarantined station. Such chess problems occurred once in a while, but we have won these games, too."

SUMMER MAKES ADJUSTMENTS

20 % of CPC's employees who went to work from late March to early June used personal and corporate vehicles. Since June 8, according to the decision of the Crisis Management Team, the number of employees who return to work has increased, and, in the context of the continued ban on the use of public transport, the load on the relevant services of the Consortium has increased as well.

"For employees who did not use private cars when travelling from home to work in Moscow, corporate payment for taxi was arranged," says Aleksey Bunaryov. "Then, a contract was concluded with a separate company

TIMELY MEASURES WERE TAKEN
TO ENSURE SOCIAL DISTANCE
IN MINIBUSES:

distance must be observed: no more than two passengers in a car and no more than 10 persons in 19-seater minibuses."

"In June, additional shifts were organized, and the number of applications was revised," says Svyatoslav Shevchenko. "This increased the workload for both drivers and dispatchers, but we have streamlined this process."

As for all the Consortium's structural units, the activities of the Transportation

NO MORE THAN PEOPLE

providing taxi services, in order to allow the drivers to comply with quarantine rules and sanitize their vehicles in the best possible way. For our vehicles carrying the staff and rotational personnel in each of the regions within the Company's footprint, visual communication tools were centrally developed, produced, and distributed. These were special stickers to be applied on the seats of the salons, warning that the social

Group amid the pandemic required development of solutions from scratch, since such a situation had not been included in the training programme throughout CPC's history.

"The work in a pandemic is a new unique experience gained in practice," believes Aleksey Bunaryov. "We will use the acquired skills to practise and train in order to approach the next similar situation with less effort and expense."



CONTINUING TO WORK WHERE IT IS HARDEST

COVID-19 OUTBREAK DID NOT DISRUPT THE RHYTHM OF THE TENGIZ-NOVOROSSIYSK OIL PIPELINE. TO THE GROSS EXTENT, THIS WAS FACILITATED BY RELIABLE PROTECTION OF THE TRUNK PIPELINE LINEAR SECTION AND FACILITIES. ON THE RUSSIAN TERRITORY, THIS FUNCTION IS PERFORMED BY REPRESENTATIVES OF THE CONTRACTOR COMPANY LLC PSC "NACHIN"

rivate security company "Nachin" has been providing security of the CPC oil pipeline since 2004. At first, the company performed these functions in the Republic of Kalmykia, then expanded the area of responsibility to the Astrakhan region. Since 2019, "Nachin" began to protect the oil pipeline in the Kuban and Stavropol Krai, taking over the supervision of all 11 pump stations belonging to the Russian segment of the pipeline and the CPC Tank Farm within the Sea Terminal near Novorossiysk. As of today, almost 1.4 thousand employees of PSC, who have at their disposal over 200 motor vehicles, are protecting over 1,000 km of pipeline.

AUTHOR

"After the announcement of the pandemic, our employees switched to a rotation work procedure for one month," specifies General Director of PSC "Nachin" Vladimir Badaev. "In accordance with the requirements

of Rospotrebnadzor and to ensure the safety of personnel, the staff, before entering the rotation, followed 15 days of observation under the control of physicians in the settlements of Astrakhan, Elista, Yuzhnaya Ozereyevka, Gulkevichi."

Comfortable sanitary conditions and three- meal-a day regime was provided for the guards while passing

the observation. Maintaining the morale of the team, the employees organized concerts on their own, of course, with respect to the requirements of keeping social distance and with the use of masks and gloves.

While being on shift under difficult epidemiological conditions, the security company staff ensured that all plans and tasks set by the CPC Security Service and the Consortium's regional services were fulfilled, including additional checks on sanitary compliance.

"The issues of provision of security personnel with medical means of prevention were addressed in close collaboration with the CPC regional operational services," states Vladimir Badaev. "The masks and gloves were purchased on time and their necessary stock was created. The CPC employees were also subjected to remote temperature measurement."

Round-the-clock interaction as well as the coordination of actions of security structural divisions with responsible persons of the Department of Operation, CPC contractors, representatives of the state authorities implementing anti-epidemic activities within the limits of maintenance of self-isolation, were arranged at all the facilities.

There have been no disruptions in the implementation of contractual obligations, along with any weakening of the Consortium facilities physical protection.

OPERATIONAL STAFF RESERVE

Regional managers of PSC "Nachin" in cooperation with the PSC Security Service maintained continuous direct collaboration with representatives of the administrations of the Astrakhan Oblast, the Republic of Kalmykia,





Stavropol and Krasnodar Krai, the city of Novorossivsk, with the Chief Sanitary Physicians, with local Heads of Rospotrebnadzor. This allowed for the prompt resolution of issues related to administrative border crossing, timely testing of employees and providing the results for on-time access to the facilities.

In order to ensure sustainable operation of the security divisions, a reserve of staff was created to replace colleagues working at the facilities in case of illness. As further developments have shown, such measures have not been excessive: in April, several guards were to be evacuated from the Komsomolskaya PS due to the high body temperatures and complaints of ill health. And although repeated tests did not reveal COV-ID-19, these employees were placed under observation into the medical facilities. The Minister of Health of the Republic of Kalmykia Yuri Kikenov and the Head of Rospotrebnadzor for the Republic of Kalmykia, Chief Sanitary Physician Dzhangar Sanjiev, as well as other regional specialists in the territories where the CPC operates, participated in the rapid resolution of the issue.

It is noteworthy: due to the high workload of emergency medical aid stations at the peak of the pandemic, PSC "Nachin", pursuant to the permission of the relevant medical services and in compliance with security measures, provided its own transport means for the prompt delivery of patients to hospitals.

"Immediate response to the situation and decisive action allowed for rapid containment of the issue. Despite the remoteness of the CPC facilities from the settlements, as much as three security guards were examined three times during the day," notes Vladimir Badaev.

ALWAYS ON THE LINE

An important factor was the fact that LLC PSC "Nachin" always pays great attention to the health of the employees. They regularly undergo medical checkups to detect chronic diseases, have good immunity. While being on duty, the guards monitor the linear part and the perimeter of the oil pumping stations covering at least 5-6 km per day, which also maintains good physical shape. Employees have the opportunity to visit sports sections free of charge, the company cultivates sports activities, regularly holds tournaments and sports days.

LLC PSC "Nachin" performs a stringent selection of candidates when applying for a employment. The advantage at admission is the experience of service in law enforcement agencies such as the Ministry of Internal Affairs, the Federal Securitv Bureau, the Federal Penitentiary Service, etc.

"At least quarterly, we conduct a psycho-physiological study of all our employees using a polygraph. This is done by professional psychologists with appropriate experience and equipment," reports Vladimir Badaev.

Round-the-clock monitoring of all guards, movements of foot patrols and crews of mobile groups of PSC "Nachin" is performed from the duty unit based in Elista, which features a centralized monitoring panel. The duty operator automatic work station is furnished with five screens, while the supervision is performed via GLONASS means.

Thermal imagers are used to protect the trunk line at night. For several years now the company has several quadrotor helicopters in its service.

"All our drones have passed state registration of aircrafts, each of them is able to control 20 km of pipework in the 500 m secured zone," specifies the General Director of PSC "Nachin». "At present day they are used in the most difficult areas: on rough terrain, in mountains and ravines."

Due to the advanced-technology equipment, large vehicle fleet in possession, the special care is required to the issues of staff development, their professional growth. In order to solve this task, a licensed training center "Leader" operates within the structure of "Nachin", intended to improve the training of security guards of all classes, as well as the specialists in transport security. The results of the last year CPC's Safety Day can be cited as an example of the Center's successful work. As a result of the competition in the field of occupational health and safety, the "Nachin" employees' team took the prize-winning place, whereby demonstrating high practical skills and deep theoretical knowledge.



AUTHOR ANNA USTENKO. DEPUTY HR MANAGER, JSC CPC-R

HIGH PROFESSIONALISM IN EXTREME CONDITIONS

THE 2019-NCOV (COVID-19) CORONAVIRUS PANDEMIC AFFECTED ACTUALLY ALL FIELDS OF ACTIVITIES OF THE CASPIAN PIPELINE CONSORTIUM. HEREWITH, THE HR FUNCTION, WHICH IS TRADITIONALLY CONSIDERED AS A "SUPPORTING" ONE, BECAME ONE OF THE KEY FUNCTIONS FOR THE TIME BEING

mong main tasks set before CPC as a whole and the HR in particular in the period of the epidemiological situation, the top-priority one was to meet the requirements of the federal and regional authorities and those of the sanitary bodies' management within the footprint of the Company's structural units. At the same time, protection of the CPC personnel's life and health was considered the most critical objective along with ensuring the continuity of the production process, which included stable operation of the entire process chain of the Company's facilities from Tengiz to the Marine Terminal in Novorossiysk.

Under these conditions, which can be truly called unique and even extreme, the Company could not afford to fail in performance of its obligations to the employees on timely payment of salaries, provision of leave as per the annual leave schedule, payment of sick leaves, and compliance with other requirements of the labour legislation of the Russian Federation and the Republic of Kazakhstan. It remained just as important for the Company's Management to comply with provisions of CPC's local regulations governing the observance of approval

procedures when making various managerial decisions.

A considerable difficulty during implementation of these tasks was that in different regions where CPC operates the situation with the spread of infection was developing in different ways. Therefore, the contents of authorities' administrative decisions in different regions varied significantly.

"All this required seamless cooperation between various units of the Consortium," says Aleksandr Berezhanov, HR Manager of JSC CPC-R. "Let me take this opportunity to express gratitude to all managers and employees of the Technology Group, the Administrative Group, the Transportation Group, the Health, Safety, and Environment Service, the Accounting Group, the Security Service, the Translation Service, and individually to our regional managers, all heads of the pumps stations, and their deputies for assistance and operational efficiency in organization of work in these extreme conditions while solving tasks that were new and unusual for all of us."

REMOTE OPERATION

First of all, a huge load fell on the HR Department in terms of urgent transfer of employees to work with remote access to CPC's information resources, transfer of a portion of the operational personnel from the shift system to the rotation system, an increase of the rotational shift duration at key pump stations, arrangement of observation for rotational personnel, and timely testing for COVID-19 at CPC's facilities and offices. The process of readjustment to remote work and minimization of reallife contacts with people took place under extreme conditions and within the shortest time possible and all that in the midst of the overloaded media space that was far from positive and made anxiety of employees skyrocket. Herewith, the HR Department had to ensure communications with employees, supervise the performance of tasks, and calm down and support people.

Second, a matter of great urgency was to promptly streamline the timely acquisition of information on employees who were working for CPC and for contractors operating at the Consortium's facilities and who were exhibiting signs of contagion as well as on employees who appeared to be unable to arrive at work places because of introduction of interregional and international quarantine measures.

THE FOOTPRINT-STATISTICS AND PECULIARITIES

The below table brought to your notice gives an insight into the qualitative relationship of employees who worked remotely and on the new rotational basis in each of the regions within CPC's footprint.

Region	Number of employees transferred to work with remote access to information resources	Number of employees transferred from shifts to rotation	Number of employees transferred to extended rotation
Moscow	410	0	0
MT	193	0	0
WR	134	41	0
CR	116	48	90
ER	119	35	157
TOTAL	972	124	247

ALEKSANDR AVDOKHIN,

MANAGER, OCCUPATIONAL HEALTH, MOSCOW OFFICE, JSC CPC-R:

Due to the fact that occupational medicine specialists at CPC are a part of the HR, our unit found itself involved in the coronavirus control process earlier than others. For example, we sent the first newsletter for CPC employees on the outbreak of a previously unknown disease with recommendations to refrain from travelling to China and to take extra precautions and personal hygiene measures as early as on January 22.

But, surely, we started pandemic-related work to the full extent after the pandemic was announced by the WHO and when Russia and Kazakhstan began to record new cases of the disease on a regular basis.

According to CPC's standard "Pandemic Contingency Plan" developed by occupational medicine specialists (long ago, during the swine influenza pandemic in 2009), a Crisis Management Team (CMT) headed by General Director was established. The HR streamlined preparation of daily summaries for the CMT members, which included details both on the epidemiological situation in the world, Russia, and Kazakhstan and on the situation at CPC and on actions taken and regulations put into effect by authorities in Russia and Kazakhstan and in the regions within CPC's footprint.

Precautions were reinforced at all facilities of CPC: thermometry was arranged at entry and—at production facilities—when boarding the shift and rotation crew buses and additionally when entering the facility. Medical supervision of CPC's and contractors' employees during their stay at the facilities was also enhanced. As shortage of protections (masks, gloves) occurred almost at once and prompt purchase of those by conventional means (via suppliers of PPE) was impossible, the HR specialists had to undertake functions-previously atypical of them-on arrangement of procurement through contracts with medical contractors.



Moreover, for protection against disease outbreaks immediately at pump stations, some of the stations changed the work format, including durations of rotational shifts. The crew change process now included observation with testing for COVID-19 in order to prevent employees during the virus incubation period from arriving at the facilities. All this also fully affected personnel of our medical contractors—the load on staff of first-aid rooms increased manyfold. Some doctors, first of all at the Komsomolskaya PS and PS-2, had especially tough times because these stations did not manage to completely avoid cases of infection. And as medical personnel all over the globe stand on the first line of contagion risk, a doctor of the Komsomolskaya PS eventually joined the ranks of those who tested positive. Fortunately, he—as most of the diseased employees of CPC and contractors—was asymptomatic. At the present, his sick leave is completed already, and the doctor is ready to return to helping the station's employees to preserve their health.

Occupational medicine specialists took active part in development of all kinds of plans and procedures-for contagion prevention, for an infection response procedure, and for preparation for leaving the work place in the pandemic mode; they cooperated with medical institutions delivering medical treatment to diseased people and with supervisory agencies. They also organized the testing of employees.

YULIYA BORISOVA.

HR SPECIALIST, CENTRAL REGION, JSC CPC-R:

One of the HR's new tasks during work in the pandemic conditions was to arrange remote access to work computers and informational resources of CPC-R. The reason for providing such access was that there was a large volume of information stored at work computers and these resources and that there was no direct communication with employees who needed to read a lot of documents issued from March 30 until today.

Another unique event for our unit was transfer of the Astrakhanskaya PS from the shift system to the rotation system and transfer of the Komsomolskaya PS and PS-2 to the extended rotational shift, 28 business days long. In the shortest possible time, two rotational shifts were formed (Astrakhanskaya PS), and work schedules for all stations were prepared. We worked in close cooperation with the heads of the pump stations. Our unit draw up 138 notices and 48 addenda with the PS employees on transfer to the rotation system and to the extended rotational shift.

The HR Department of the CR [Central Region] was engaged in organization of mandatory 14-day, tel in Astrakhan before the start of a rotational shift for employees of all the pump stations. Work schedules by stations were revised as fast as possible, considering the requirement that no more than two or three rotations should stay quarantined in the hotel simultaneously. For each PS, we made lists for checking into the hotel, prepared a log for twice-aday thermometry of each employee, and arranged for employees to additionally familiarize themselves with the Company's basic internal regulations and procedures during the quarantine period.

and later 5-day, quarantine at a ho-

The labour discipline in the context of remote work became dependent on every employee personally. The CR HR sent an e-mail newsletter on a weekly basis to remind the employees that they should inform the HR on sick leave cases and annual leave and that they needed to file a leave request. Collaborative work with lead specialists of each area, group, or service was conducted continuously, by phone and via

As for the CR HR employees, labour discipline control involved no difficulties as we all were constantly in touch. We didn't leave our home work places. When we received new assignments to be urgently performed, we resolved the matter immediately, in some

cases even outside normal working hours. Routine work was carried out in compliance with the requirements for occupational safety. The labour productivity was high.

During the remote work period, the load on the HR employees increased as new tasks occurred. For instance, in addition to concentration of efforts on transfer of the PS employees to the rotation system with an extended duration, the peak period was that of urgent preparation of lists with expanded information for the bodies of Rospotrebnadzor [the Federal Service for Surveillance on Consumer Rights Protection and Human Wellbeing] in the Republic of Kalmykia.

The CR HR monitors the health status of the employees being on sick leave by phone on a daily basis. Most work in the pandemic period fell upon our employees involved in preparation and correction of work schedules as well as payroll accounting.

From March 30 through June 17, four employees of the Central Region resigned due to retirement. On June 1, 2020, a new employee was hired in one of the vacant positions. In addition, specialists were employed according to two vacancies for the DBNP Project. Interviews took place by phone. Three candidates were considered for each vacancy.







GULZADA KAPAKOVA, LEAD HR SPECIALIST, JSC CPC-K:

As of March 16, 2020, the Republic of Kazakhstan declared a state of emergency, which was in effect until May 11. March 30 saw declaration of quarantine in the city of Atyrau, which lasted until June 1. As a result of these circumstances, the HR Department of the CPC Eastern Region faced new urgent challenges. By agreement with the management, it handled tasks on taking measures aimed at prevention of coronavirus infection among employees in the region. Business trips of employees with going outside the Company's footprint were banned. Remote work was introduced for employees with a five-day workweek.

As over 50 % of rotation workers live outside Atyrau, tasks for their prompt delivery to the pump stations were the first order of business. For personnel of the Tengiz PS, Isatay PS, and Kurmangazy PS, the rotation duration was extended from 14 to 28 days. The objective of the HR was to draw up new work schedules to be approved by the CPC management. The operational personnel and management of the Atyrau PS were transferred to the 28-day rotation system with accommodation at a hotel in order to minimize contacts with possible contagion.

As it was impossible for some ER [Eastern Region] employees living outside Atyrau to arrive at the facility because of the state of emergency and quarantine, we faced a challenge of incomplete number of rotation personnel. For

the same reasons, specialists who started working in mid-March had to remain in rotational camps approximately for three months. Because of changes to work schedules, some cases required adjustment of paid annual leave periods as well as involvement of personnel in work at weekends in order to replace the missing employees. Herewith, all possible measures were taken to prevent the spread of infection among the ER employees. The region's personnel were understanding about all CPC's decisions implemented in the existing situation.

For arrangement of remote

work of the ER employees, the relevant order was issued on transferring a portion of personnel to remote work using information and communication technology and with remote access to CPC's information resources, from March 23, 2020, and until further notice. To do so, all employees were provided with continuous communications. Moreover, the region's management issued a decree on employees' daily provision of a work progress information report to their functional managers and assigned persons responsible for employees' submittal of these reports. The results of these reports are now used to increase the performance of remote work and will also be considered in future in staff performance appraisal at year-end.

Alterations in the work and rest conditions during the pandemic increased the load on the ER HR employees. The HR staff took active part in meetings initiated by the ER management, advised on matters in their area of responsibility, and recommended and suggested solutions for the emerging challenges. Decisions eventually made by the management required correct execution of HR documents in full compliance with the labour legislation of the Republic. The HR employees took all measures for the timely execution and publication of documents that regulate employer-employee relations-relevant orders, schedules, notices, and addenda to employees due to changes to the working conditions. In order to correctly record the actual hours of the PS personnel's work and rest, the HR staff initiated implementation of new employee identification codes and had it approved by the management. It allowed monthly salary payments to be made properly in the conditions of altered work and rest distribution.

Due to an interruption in operation of a medical contractor, we had to suspend the hire of final candidates for a while. At the present, the process has got back to normal, and all six new employees-DBNP Project specialists among them-have had the necessary medical examinations and started to work. All interviews involved colleagues from the Moscow Office and Novorossiysk Office via video conference in the Skype for Business application. There were no resignations in the Eastern Region during the pandemic.

It is necessary to point out that all challenges that faced the ER HR staff were discussed and successfully met by agreement with the management of the region and HR Manager of JSC CPC-R.

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A CHRONICLE OF EVENTS

You can see from the chronicle provided below what guiding decisions CPC made in response to development of the epidemiological situation. So, on March 6, 2020, CPC General Director signed an order on maximum cutdown of business trips associated with employees' leaving the regions of stay, either within the territory of the Russian Federation or abroad. On March 16, business trips outside the region were cancelled. and a temporary ban was imposed on attending CPC's offices and facilities for persons who were not employees of the Company or contractors.

March 19 saw transfer of most of personnel with the Moscow Office and the additional office of JSC CPC-R in Moscow to remote work with access to information resources of the Consortium, upon the condition that no more than 20 % of the payroll shall be present at work places. On the same day, the duration of rotational shifts at the Tengiz, Isatay, and Kurmangazy Pump Stations in the Republic of Kazakhstan was extended to one month. On March 23. a portion of personnel with offices of JSC CPC-K in cities of Nur-Sultan and Atyrau were transferred to remote work upon the condition that no more than 20 % of the payroll shall be present at work places.

The week from March 30 through April 3, 2020, pursuant to the Decree of the President of the Russian Federation. was declared by JSC CPC-R a week off with pay for all employees, except for personnel working on a shift and rotation basis.

April 1 witnessed introduction of rotational work at the Atyrau PS in the CPC Eastern Region. On April 3, all employees of JSC CPC-R, except for personnel working on a shift and rotation basis, were transferred to remote work. In late April, the duration of rotational shifts at two stations of the CPC Central Region and Western Region was extended to one month the Komsomolskaya PS (from April 24) and PS-2 (from April 30). In the same regions, two pump stations were transferred from the shift system to onemonth rotation: the Astrakhanskaya PS



(from April 25) and the Kropotkinskaya PS (from April 27). On April 29, on-duty operational personnel of the Marine Terminal switched to isolated work.

As coronavirus spread, the matters of employee health preservation and contagion risk mitigation for personnel became even more relevant.

loading, mobilization of capabilities, and concentration of efforts when loyalty of employees is of especially great value. We hope that the Consortium's HR policy, the situational decisions made, and the actions performed were optimal for increasing the personnel loyalty level. For us, the efforts invested

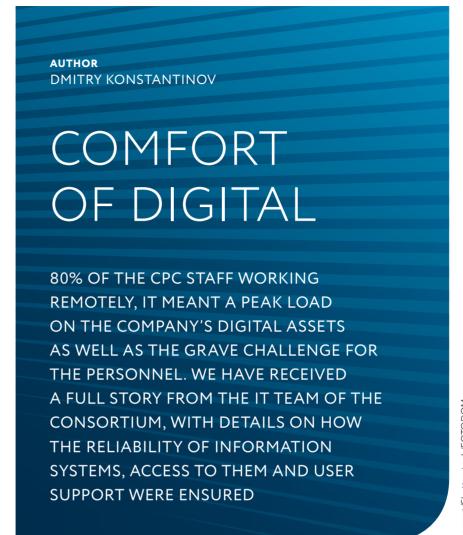
IN NEW REALITIES, ALL STRUCTURAL UNITS AND REGIONS OF THE CONSORTIUM HAD TO QUICKLY ADAPT AND LEARN TO BUILD **BUSINESS PROCESSES PROPERLY**

In new realities, all structural units and regions of the Consortium had to quickly adapt and learn to build business processes properly. In terms of personnel management, the highest load peak was observed in the CPC Central Region and Eastern Region.

Regardless of the virus, remote work, and forced self-isolation, it is always important to remember that the Company's personnel are people made of flesh and blood, with their cares, wishes, and social needs. It is in such unique periods of maximum

in human resource management today are the main groundwork laid for future.

Summing up the first results, it can be said that the CPC HR Department has, in general, successfully handled tasks arisen during work amid the 2019-nCoV (COVID-19) coronavirus pandemic. Its personnel showed their high professionalism, responsibility, and ability to act effectively in the new extreme conditions as well as endurance and excellent self-discipline in facing the challenges related to control of this threat.





he Caspian Pipeline Consortium is part of a group of critical entities operating in the fuel and energy sector, whose activities during the pandemic could not be stopped. All facilities of the oil pipeline were in operation, the Marine Terminal in Novorossiysk provided round-the-clock oil transshipment. The Company's financial, tax and social activities were not put on hold as well.

Whereas 80% of the CPC staff switched to remote working, it was digital technology that has helped to ensure the stability and continuity of the Company's industrial processes. One of them, namely the system of terminal access from home to the workplace in the office, gave the opportunity to use all the assets and services of the Company's shared information space for

the full-fledged functioning of all services and functional units.

"In advance of quarantine, we started testing a software product providing secure remote access to internal corporate assets," states IT Manager, Engineering and Projects Ilya Starkov. "There are many similar solutions, but we were guided in our choice by three factors: security, user-friendliness and the ability to maintain the usual mode of operation in conjunction with access to all assets."

Thanks to the terminal access, which was provided on agreement with the Heads of the CPC Departments, the employee received full functionality of his/her workplace in the office on the home computer. The main user-friendliness feature was that the connection did not require prior training, contingent

"The remote connection scheme we used retained a sufficient level of information security," goes on Ilya Starkov with his story. "In this regard, we avoided the problems faced by other entities that have switched to remote access. At the same time, we provided users with a familiar and fairly comfortable working environment, in which they, except for some delays for objective reasons, were able to be fully engaged in the industrial processes. We have strengthened safeguards concerning the remote work for a number of specialists, this mainly affected bank payments and tax information operations."

HUMAN ASPECT

The objective reasons for the complicated character of the terminal

access installation and configuration include several factors: the quality of home gadgets, stability and security of Internet channels, the level of user training. If corporate mail realized on Outlook base along with SharePoint-based information and reference portal, as well as FTP file storage for remote access of the CPC employees were configured long before the pandemic and functioned perfectly, terminal access required installation virtually from nothing.

"During the first weeks of March-April, the organization and setting up of terminal access for the Company's employees were actually performed in an emergency mode," recalls Alexander Savich, Lead Analyst, Network Monitoring and Security. "From seven in the morning (taking into account the time difference with

Kazakhstan) to 11 in the evening. I had to be in touch, consult, solve problems. Someone was facing IP address change, someone lacked the Internet speed, someone failed to run the program: in this initial period, we felt like a firefighter crew who rushed to "put out the fire» either in Moscow, or in Atyrau, or in Astrakhan. The pressure grew to particularly heavy one in the first weeks when the remote working was initiated: back then, we were seeing 30-40 connection requests put on hold daily. Given that processing of a single request takes 10-15 minutes, one can imagine the amount of work. In order to increase the rate of processing requests and solving problems, we were continuously making changes in the form filled by users for connection and in the instructions for terminal access

connection, along with ones for solving problems with connection. Pavel Nagaev, Lead Administrator, E-Mail System, helped us a lot here. He has become quite an expert in the issue regarding drawing up the excellent and particularly clear instructions."

These so-called "rescue operations" were performed remotely by the IT Team based in Novorossiysk. The user who signaled about the problem was consulted by phone and e-mail, if necessary, was provided with a remote connection to his/ her home computers. Regional IT and communications engineers were also under a lot of pressure.

"This time has demonstrated the actual level of users regarding the computer technology knowledge," states Konstantin Lemzikov, Senior Analyst, Network Monitoring and Security. "There were cases when people, having taken home an office computer upon agreement with the management, could not understand why terminal access does not work. But that computer simply could not work as anticipated: it was moved from the office working environment to the person's home. There were many cases when, instead of switching to the log off mode, employees turned off their office computers being at work and could no longer connect. Under quarantine conditions we were able to solve such issues with the help of the Security Service: the computers located in offices were turned on by the security guards according to our guidelines. We even had to disable the option to shut down the computer in Windows system settings, so widespread was this problem. But back then there were positive elements as well that showed both a good level of staff training and their loyalty to the Company. Having found themselves in the conditions of limited possibilities due to the home gadgets capabilities or being forced to share their time with other family members, people simply bought new laptops, monitors, multi-function printing devices, headsets for Skype."

When installing terminal access, it was mandatory to have a fixed Internet access and a static IP address. What was it done for and how was the question resolved in the absence of «wired» Internet at users' disposal?

of cyber security breach attempts, including phishing attacks. Attackers could not but take advantage of the growing number of Internet users and new attention-grabbing events.

"Since March, the amount of phishing mailings and attacks on corporate remote access systems has increased in hundreds of times," claims Mikhail Shcherbakov, Senior Coordinator, Risk Management. "First, the security systems were organized in companies in a very short time, and secondly, new ones were added to the previously existing phishing "lotteries" and other methods of data hacking. Phishing mailing, aimed at obtaining corporate and personal data, has been evolved to offer the opportunity to know the number

"SOMEONE WAS FACING IP ADDRESS CHANGE. SOMEONE LACKED THE INTERNET SPEED: IN THIS INITIAL PERIOD, WE FELT LIKE A FIREFIGHTER CREW WHO RUSHED TO "PUT OUT THE FIRE" EITHER IN MOSCOW, OR IN ATYRAU, OR IN ASTRAKHAN"

"The allocation of a dedicated static IP-address was a mandatory requirement for the user in terms of information security," indicates Alexander Savich. "Here, too, it was not without complications. It turned out that in Kazakhstan, in the Eastern operation region of the CPC, the providers do not render home users with the service of connecting a dedicated static IP-address. In this situation, our colleagues who work in the Communications Team were here to help. They negotiated with mobile operators to allocate static IP addresses to corporate SIM cards issued to users. And instead of «wired» one, the mobile Internet was used, but with the same level of security."

HOW THREATS HAVE CHANGED

The mass transition to remote access in the context of the pandemic predictably increased the number of infected in the immediate environment or to receive government funding to support the population. Attackers have created fake sites on this topic and mastered new phishing technologies."

Personal information about company employees for hackers is no less valuable than confidential corporate information. Whereas the latter can be profitably sold to competitors or stock exchange brokers, used as a blackmail item, or encrypted up to the level inappropriate for internal use (as it was done in 2017 by the authors of notPetya virus), in case of personal data, those in unscrupulous hands can be employed to steal a "digital identity" to open a loan, use a car sharing service or make a transaction on the "State Services" website. But even if the phishing response is correct, users are not protected from such kind of hacking.

"A recent internal audit of information security showed that the passwords of dozens of employees remain vulnerable," specifies Konstantin Lemzikov. "That's why we have, first of all, planned a series of training events to create passwords that are both persistent and easy to remember. Secondly, as for now, we are performing modifications within the information systems that address the passwords monitoring and their, to say so, suitability."

A modern man uses quite a large number of passwords and PIN codes per day. All this is difficult to keep in mind, and there is a temptation to use a universal password, making it as individual and complex as possible.

"At present moment we are analyzing a database of stolen passwords, one and a half billion of them being collected from all over the world. We met quite complex and persistent instances in there." Konstantin Lemzikov continues. "But if a person puts such a password on all his/ her accounts and mailboxes, we can assume that he/she did not protect anything, because somewhere it will

the Radisson hotel chain had its data stolen related to the members of the Radisson Rewards program. If your passwords on the corporate resource coincide with those on these accounts, it means they are already known to someone from outside, no matter how complicated they may

Now, if the CPC user password matches the one in the stolen passwords database (which means that it is already known to the hackers), it shall be changed to a different, unique password.

ALL SYSTEMS ONLINE

The terminal access organization was by far not only one field covered by the IT Team which one can refer to as rocket science. Thus, a serious problem was the equipment load and the bandwidth of communication channels during video conferences, which became more frequent and with a large number of participants - up to 100 people.

"With the transition to remote working, the load on this service has increased quite exponentially," explains Konstantin Lemzikov. "«Bot-

THE TERMINAL ACCESS ORGANIZATION WAS BY FAR NOT ONLY ONE FIELD COVERED BY THE IT TEAM WHICH ONE CAN REFER TO AS ROCKET SCIENCE. THUS, A SERIOUS PROBLEM WAS THE EQUIPMENT LOAD AND THE BANDWIDTH OF COMMUNICATION CHANNELS

definitely be «cracked». For example, about five years ago, the entire password database was stolen from LiveJournal, and in 2019 the Face-Book network "shared" personal data of users with a third-party company. In 2020, the Marriott hotel chain «missed» the data of more than 5 million guests, in 2019 the hotel chain MGM Resorts «lost» the data of 10.6 million guests, and in 2018

tlenecks» in this direction, which we have seen before, required prompt elimination. The example is the bandwidth of the channel that connects the Moscow Office and the pipeline entire facilities. We have been saying for a long time that this channel should be expanded, and the relevant documentation was sent to the Bidding Committee by our colleagues from the Telecommunications Team.

The process was accelerated due to force majeure, and now there is nothing wrong with video conferences in Skype for Business. However, in order to debug this in scope of all the Consortium facilities, we had to address such absolute puzzles, which probably only Microsoft engineers know about."

The force majeure situation in the first days of remote working probably occurred in all the Consortium's services and functional units. But, at the same time, there were no failures and crashes noticeable for users in databases, document management system, mail service, website and other components functioning within the CPC shared information space.

"There were critical situations. but if users did not feel it, it means that we worked efficiently," states Ilya Starkov. "We have rapidly solved the problem, and it did not affect anvone."

The IT Team worked in collaboration with related functional units to ensure the stability of the information space: the Telecommunications Team, the Application Software Team, the SCADA Team, and others. The experience gained in solving new unique tasks will undoubtedly be useful in the future.

"We have managed to efficiently mobilize the team, while granting the remote access users all the services required by them," summarizes Ilya Starkov. "All our systems and the equipment proved themselves at their best in terms of performance. We were able to scale up what needed to be enhanced, added some memory where needed, transferred capacities to another server in one location, and increased channel bandwidth in the other. And our infrastructure has demonstrated that it can in principle withstand the loads of total self-isolation regime in the long term. In the future, we will work on its upgrading in order to be able to connect up the unlimited number of new popular services without the threat of collapse, as well as to improve the users' digital competencies."

AUTHOR MARINA SHKAD, SPECIALIST, DOCUMENT CONTROL, JSC CPC-R

ALL IS GOOD WITH THE DOCUMENTS

WHEN EMPLOYEES OF DIFFERENT CPC UNITS TELL US ABOUT THEIR WORK DURING THE PANDEMIC. THE CONSENSUS OF OPINION IS THAT THE ELECTRONIC DOCUMENT MANAGEMENT SYSTEM CONTRIBUTED TO SIGNIFICANTLY SPEEDING UP AND IMPROVING THE EFFICIENCY OF EXECUTION OF PRODUCTION TASKS UNDER NEW CONDITIONS

n 2016, the Caspian Pipeline Consortium, as a company keeping in step with the time, made a decision to create a centralized document management system. This is how the Document and Data Management Service (DDMS) was established.

Initially, the main aspect of DDMS activities was automation of classic records management, but in time the Company's management began to set more ambitious and challenging tasks before the Service. The team today orients its projects to work not only with correspondence and internal regulatory documentation (IRD), but also with other business processes of the Company, the list of which is ever-growing.

At the present, the Company's performance largely depends on the speed of information distribution among structural units within the organi-

> sational structure and counterparties as well as on reliability of the entire information component in general.

> One of primary benefits of the central Electronic Document

DOCUMENT AND DATA MANAGEMENT SERVICE'S TEAM



Another important benefit of the EDMS is improvement of performance discipline. In the lockdown conditions, it is more difficult to track assignments, quality, and the performance function of employees. The EDMS enables managers to control performance quality, work flows, and the work speed and outcome.

Finally, the third key benefit of the EDMS is information confidentiality. The electronic system contains settings of access rights and those of document management as per the CPC Information Security Policy. These settings correspond to authorities and capabilities of employees.

And another essential benefit is, without a doubt, the growth of CPC employees' corporate culture level. The EDMS creates a unified information space and makes it possible to involve virtually any employee in corporate processes, to share accumulated knowledge, to train new personnel more efficiently, and to use templates of the existing processes.

The Caspian Pipeline Consortium is an international company with the footprint in two countries and five regions, but more than anything else, CPC is people—links of a single chain. When making radical changes (and

the EDMS can be rightfully considered as such a large-scale alteration), it is not always possible to exclude and prevent cases of discontent among employees who have worked for many years according to well-known standards and rules, got used to manual labour, and have incomplete knowledge of electronic document management.

The EDMS has passed all implementation stages in the Company: denial, anger, depression (DDMS personnel stoutly bore the brunt of all this, worrying and caring about the common cause with all their heart and soul), and finally acceptance! I would like to note that once a certain period of operation had passed, our service started receiving gratitude and positive feedback from CPC employees. And this was probably a piece of convincing evidence that our work was not in vain.

IMPROVEMENT OF COMPETENCIES

DDMS specialists annually upgrade their qualification within the approved annual personnel training schedule. This allows us to keep an ear to the ground, to keep track of changes to the legislation, and to use flexible planning methods for project implementation. Thanks to received knowledge on project implementation and development (Agile), the Document and Data Management Service has been successfully applying these functionalities to its daily operations since 2019, which significantly improves its efficiency.

The DDMS is oriented to development of modern services that automate the Company's document management and the handling of various data. So far, eight services have been put into commercial operation, and all of them are being supported by our specialists, developed according to requests and wishes of users, and operated 24/7. The existing systems based on the SharePoint platform are implemented according to the requirements of the Technology Department and provide a unified standard interface for work with resources all employees of the Company are accustomed to. Our Service is the middle link and the point of interaction with all CPC Departments.

Who could have thought before that a myth about permanence of the hard-copy document workflow would be dispelled in time? But life makes its own adjustments. The circumstances in which our Company and the entire world are living now demonstrate that we chose the right way, having implemented an electronic document management system in 2016 and developing it at the present. It is hard to imagine how employees would work remotely in the pandemic conditions without resources of electronic document management.

All DDMS resources are currently available on the Internet for work. A lot of work has been done for transition to electronic approval of business processes that used to be executed in hard copy. Since the very first days of employees' transfer to remote work in March 2020, our Service has

optimized and brought some processes into the electronic form—for example, approval of a draft contract and an amendment thereto; approval of tender forms to be reviewed by the Tender Board; work order approval; specification approval; approval of receipt of money to be accounted for; and approval of tender forms for small purchases for the General Business Department.

Crisis allowed us to take a fresh look at the capabilities of electronic document management. At the present, analysis of business processes that can be optimized and transferred to the electronic form on a permanent basis is in progress.

REBOOT 2020

The current global situation was unexpected for everyone. Whereas all document management systems were adapted predominantly for office-based work, the crisis made us reorient to work from all kinds of devices, browsers, and access points as promptly as possible.

The analysis showed that the memorandum growth dynamics significantly increased as compared to previous periods. In April 2020 alone, CPC recorded approximately 1050 memos (in March, there were 680 of those), while the quantity of incoming and outgoing letters dramatically decreased due to the lack of activity throughout the country. This load on the memorandum system can be easily explained by the fact that electronic approval tools allow a lot of internal tasks to be resolved without recourse to face-to-face meetings.

In the long run, for 2021 through 2023, we are giving consideration to global automation of CPC business processes with deployment on a more high-tech platform and with a possibility of a full document management cycle. The Administrative Group's management wholeheartedly agrees with this initiative and gives this area its strong support. We believe that the fundamental purpose of the Service's operations is to systematize and unify the basic business processes



LIDIYA ISMAGILOVA,
SERVICE LEADER,
ELECTRONIC DOCUMENT
MANAGEMENT SYSTEM

in the Company, which is intended to speed up and facilitate the operation of services and departments. Many users have already come to appreciate all the benefits of automation and address the DDMS with a request to develop a process of interest.

We are currently working on several major projects—for instance, "Business Gifts and Event Invitations Registration Process Automation" according to the CPC Management Practice for Entertainment Expenses, Gifts, and Events. For now, the HR Department keeps a logbook on receiving or refusing business gifts or visiting events at CPC's internal portal. Applications are completed by employees manually and approved by gathering the signatures, which considerably drags the process out.

The "Paper Correspondence Receipt and Transmission Automation" project is also in progress. Our objective is to move beyond paper logbooks with hard-to-identify hand signatures of employees when transmitting the correspondence, with keeping hard-copy registration logs and duplicating these records in a MS Excel log. The goal of the DDMS is to implement a "Smart Postman" system, which could reduce the paper correspondence processing and registration cycle, achieve unambiguous user identification, and eliminate duplication.

The "Archive" project is currently being elaborated, its purpose being to decrease expenses, to maintain the Company's image, and to update documentation stored in hard copy. In 2019, representatives of the Company shareholders expressed serious concern in this respect. Within the project, our Service needs to analyze all types of documents being stored both in external archives and at places where they are used, examine their value, and determine the storage and optimization time frames. The long-term result will be a unified database of document lists with all data for convenient search in the Company's archives.

Needless to say, the team amid the pandemic had to mobilize all its resources: time, moral, and material ones. It was not easy to work at home, with limited technical capabilities, supporting the operability of all systems 24/7 and helping our colleagues to adapt to the new conditions. The Service arranged a telephone hotline for CPC employees, and the DDMS team answered calls and resolved technical difficulties virtually around the clock.

We are happy to say that we have gone though that critical period without losses, and lessons learned have been put into practice. The epidemiological situation with its new conditions allowed us to see how much more flexible and productive the Company's operations can be made in the scale of records management.

E-MAIL CORRESPONDENCE GROWTH DYNAMICS IN CPC IN Q1 AND Q2 2020



AUTHOR PAVEL KRETOV WHEN PRIORITIES ARE PROPER AT EACH RUSSIAN PUMP STATION OF CPC, THE EMPLOYEES OF MASTER-SERVIS LLC ARE ALWAYS IN THE FOREGROUND. THE CORONAVIRUS PANDEMIC HAS SHOWN THAT THE EMPLOYEES OF THIS COMPANY CAN HANDLE ANY DIFFICULTIES

WITH NO PAUSE FOR ADAPTATION

The employees of Master-Servis LLC arrange corporate meals, clean up the premises, ensure operation of rotational camps, and perform improvement and landscaping of the surroundings.

"We continuously improve our business activities and update or upgrade our assets," says Vladimir Lisichkin, Director of Master-Servis LLC. "Since the Company was established in 2007, we have come a long way and reached high efficiency of production processes. But most importantly, the sky is the limit for us."

Even before restrictive measures were declared in Russia, the enterprise had made necessary preparations. In February 2020, the organization put a high-alert order into effect and analyzed possible

scenarios during the pandemic. Master-Servis LLC promptly increased the production stock, both in the territory of pump stations and at its own storage facilities. From the time of introduction of the high-alert period and before declaration of restrictive measures, the specialists

of the Consortium and Master-Servis LLC developed and implemented daily monitoring of personnel health on rotational duty and on rotational leave, use of personal protective equipment and disinfectants, and observance of the social distancing and self-isolation. Rotational crew changes at pump stations and transfer of inventory items were carried out on a no-contact basis; employees were delivered from a place of self-isolation to a station.

"Transition to work under new conditions was made with no pause for adaptation, and therefore it is safe to say that our employees proved themselves to be responsible professionals able to respond promptly and adequately to new challenges," says Vladimir Lisichkin.

While fulfilling their contractual obligations during the pandemic, the personnel closely interacted with state services, such as sanitary-epidemiologic services, the veterinary service, and Rospotrebnadzor [the Federal Service for Surveillance on Consumer Rights Protection and Human Wellbeing]. Proper priorities set by the Supply Service of Master-Servis LLC in terms of locations of large strategic suppliers made it possible to avoid breakdowns in supplies to the stations in conditions of closed administrative borders. By now, the specialists have worked out all procedures and approvals for necessary movements



of personnel and vehicles across the administrative borders.

One of successfully met challenges was transition of the Astrakhanskaya and Kropotkinskaya Pump Stations to rotation. Keeping an eye on the global situation as early as in January 2020, Master-Servis LLC prepared for mobilization of extra manpower and formation of reserve teams, which allowed the lack of employees to be avoided when arranging additional rotational shifts at changeover stations.

FOR WORK, EVERYDAY LIFE, AND REST

The number of personnel living at the Astrakhanskaya PS and the Kropotkinskaya PS during the rotational shift was 53 persons. As comfortable and safe conditions as possible were created for them to work. to live, and to rest. The available equipment and the high training level of the specialists allowed Master-Servis LLC to provide cleaning, catering, and disinfection services at the above facilities by themselves, without engaging any third-party organizations. Only switching from one meal a day to three meals a day and regular disinfections every two hours increased the scope of works to be performed by Master-Servis LLC at the Astrakhanskaya PS and the Kropotkinskaya PS 2.5 times.

Master-Servis LLC started regular disinfection of CPC-R's facilities aimed at containment of coronavirus infection on March 30.

"Without reducing the scope of our contractual obligations, we assumed additional commitments on regular disinfection of rooms and territories at pump stations, on maintenance of preliminary parking places for vehicles entering the stations, and on disinfection treatment of these vehicles," lists Vladimir Lisichkin.

ON A REGULAR BASIS

Representatives of Master-Servis LLC prepare for periods associated with seasonal outbreaks of viral



diseases every year, on a regular basis. Arrangement of a catering facility and provision of cleaning services are based on compliance with all legislative instruments, the most fundamental of which are Sanitary Codes and Regulations (SanPiN). Therefore, as far back as in the autumn of the last year, the specialists of the Company equipped public places of the pump stations with hand-sanitizer/antiseptic dispensers.

"For a long time, the question of the necessity to license the disinfection activity was not clearly specified in regulatory documents," recalls Vladimir Lisichkin. "Preventing all potential risks during disinfection-related operations, we had our employees educated for the profession of disinfector at the Institute of PEST Management."

Last year, arguments on the subject of licensing were finally stopped. The Supreme Court of the

MASTER-SERVIS LLC PROMPTLY INCREASED THE PRODUCTION STOCK, BOTH IN THE TERRITORY OF PUMP STATIONS AND AT ITS OWN STORAGE FACILITIES

By the start of quarantine, the enterprise had been fully provided with necessary chemicals and equipment. Then, because of the increasing consumption, the amount of available antiseptics was replenished in a timely manner. Moreover, additional equipment was purchased to enable the treated surface areas to be increased by using a more efficient method of fine atomizing.

Russian Federation issued a decree according to which the disinfection activity outside the health care services does not require a medical license. The Office of the Prosecutor General of the Russian Federation supported this position. So did Rospotrebnadzor for Astrakhan Oblast, for the period of disinfection activities within quarantine.

AUTHOR PAVEL KRETOV

DEFEAT A DISEASE AT THE EARLY STAGE

STATE-OF-THE-ART EQUIPMENT TRANSFERRED BY THE CONSORTIUM AT THE BEGINNING OF 2020 HELPED TO SIGNIFICANTLY INCREASE THE CAPABILITIES OF HEALTHCARE INSTITUTIONS IN THE STAVROPOL KRAI

alf an hour to prepare and warm up the diagnostic device, ten minutes to examine the patient, and now the endocrinologist of the Stavropol Regional Endocrinological Dispensary Olga Khokhlova is studying the results on a computer monitor. The smart machine marked in red the areas where the bone mineral density does not correspond to the normal range. These data allow the specialist to make a forecast about the possibility of a fracture for the next 10 years and after prescribing therapy, monitor its results through repeated examinations.

In the same office, Olga Khokhlova showed journalists two samples of spondyles on a mock-up.

улучшение структуры остной ткани



«The first one is with the pathology of osteoporosis: holey, transparent, and it will simply fold

> in the slightest accidental trauma. The second one is after treatment, saturated with bone tissue,» she says.

and social assistance and dispensary supervision are provided to the patients on a first-priority basis.

«The presented dual-energy x-ray bone densitometer Stratos is a highend device that allows for detecting the disease at the earliest stages, long before clinical manifestations,» comments the chief endocrinologist of the Stavropol Krai, Chief Doctor of the Regional Endocrinological Dispensary Yelena Slavitskaya.

The device with the «Whole Body» program is built on the basis of DEXA technology with a narrow fan beam and can examine patients of all ages. This technique is recognized as the «gold standard» in diagnostics, combining a number of advantages such as the ability to study the axial skeleton, the high precision and low radiation dose, and the promptness of examination. X-ray machines of the previous generation that used beams of a single energy, could only study peripheral bones surrounded by a minimum amount of soft tissue. CPC allocated 8.5 million rubles to purchase Stratos bone densitometer.



The Caspian Pipeline Consortium also presented two necessary medical complexes to the Regional Children's Clinical Hospital at a time. An acute dialysis machine with a citrate anticoagulation module and an ultrasonic diagnostic device HM70A-RUS with a total cost of 7.2 million rubles were delivered here.

The first complex is an extracorporeal multifiltrate that purifies the blood. The machine allows for treating diseases such as multiple organ failure syndrome, which causes edema and does not allow for conservative removal of fluid

> from the body. It draws the fluid upon itself, removes toxins and restores the balance of electrolytes.

> > «Multifiltrate acute therapy machine is specially designed for highly effective detoxification and intensive treatment procedures

> > > with the possibility of renal replacement therapy for patients with a body weight of 2 kg or more. Previously, premature infants had to be delivered by air medical service to the

neighboring regions of the Russian Federation, first of all, to Rostov,» said the Minister of Health of the Stavropol Krai Viktor Mazharov.

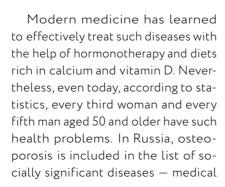
The second ultrasound diagnostic device is also portable and this is its most important advantage. In their practice, doctors often face a situation when a patient cannot be moved even 10 m without a risk

«And we took this risk, warning parents of such manipulations for the purpose of diagnostics. Now we can perform neurosonography, ultrasonography of the brain, heart, kidneys, abdominal cavity directly at the patient's bed,» said the Head of the Anaesthesiology and Resuscitation Department of the Regional Children's Clinical Hospital Alyona Ishchenko.

When handing over the equipment, Mikhail Grishankov, CPC Deputy General Director, RF Government Relations, said that it was a great honor for him to take part in this project.

«Last year, the Consortium allocated almost 50 million rubles to support the health sector of the Stavropol Krai. This is an important trend for us, and we plan to develop it further,» he said.





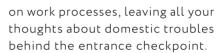


A GIFT FOR TIMOSHA

IN EVERY ISSUE WE PUBLISH ARTICLES ABOUT CHARITABLE ACTIVITIES OF THE CONSORTIUM, FOR DECADES OF RENDERING SYSTEMATIC HELP ALL APPROACHES, POLICIES, AND PROCEDURES OF CPC HAVE BEEN WORKED OUT, HAVE SHOWN THEIR EFFICIENCY, AND HAVE BEEN STRICTLY OBSERVED. BUT EVEN THE BEST PROCEDURES CANNOT TAKE ALL REAL-LIFE SITUATIONS INTO ACCOUNT...



oman Shatov has been working in the oil transportation industry for almost fifteen years, five of which-for CPC. At the Consortium, he works as a tank farm operator at the Kropotkinskaya PS. This is a difficult and responsible job that requires involvement in process control and continuous supervision of equipment and contractors' actions. It also requires regular visual inspections of tanks. seams, foundations, and dikes as well as observation of the fire-fighting system and the storm sewer system. A tank farm operator keeps documents, completes maintenance logs, and records the running hours of block valves. It is impossible to perform this scope of tasks without maximum concentration



This is why, with both the production and-of course, most importantly-humanitarian aspects in mind, the CPC management gave a request for help with purchase of a specialized wheelchair for a child with special needs most serious consideration at the highest level. And when it was found that due to the procedures applicable in CPC it was impossible to make this purchase quickly at the expense of the Company's charity funds, the Chairman of the Charity Projects Selection Committee, General Director of the Consortium Nikolay Gorban bought the wheelchair with his own money and personally delivered it to the employee at the Kropotkinskaya PS during the working visit.

An impromptu ceremony of presenting the child's vehicle was attended by all colleagues who were off duty at the time. There were no grand speeches in the area in front of the pump station's administrative and amenity building-only applause and sincere wishes of health and success in rehabilitation of the child.

"My family's life story is not an easy one, but I think that the hardest times are already behind us," told us Roman Shatov. "Indeed, it was psychologically difficult nine years ago when we, young parents, learned for the first time that

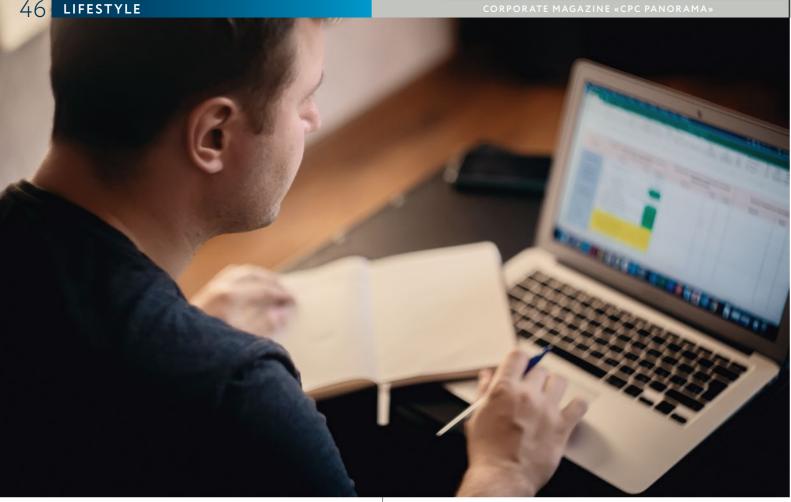
our firstborn son Timofey had got a birth injury, which resulted in CP [cerebral palsy]."

The parents make serious efforts for the rehabilitation, nurturing, and home education of their son. A psychologist and a teacher come to him from Gymnasium School No. 8 of the town of Tikhoretsk. Timofey enjoys watching educational videos and carries out his modelling and drawing assignments with concentration and hard work.

From an early age, the boy loves outdoor walks in parks and at playgrounds filled with children's laughter and joy. When his parents tell him, "Timosha, are we going for a walk?" the child instantly breaks into a smile. And, as the saying goes, a stroller for him is not a luxury, but a means of getting around. Timofey has recently outgrown his old stroller, and a new wheelchaircomfortable, folding into a compact size, manoeuvrable, with sufficient comfort for seating—is so expensive that its purchase would eat up a large portion of the family's annual income.

"My whole family is very glad that my colleagues and particularly CPC General Director answered our request!" said Roman Shatov. "On behalf of my family, I want to thank you, Nikolay Nikolaevich, and all the managers who have helped my child in this situation and wish you all good health, success, and wellbeing!"





AUTHOR PAVEL KRETOV

THE WAY IT WAS...

HAVING BEEN TRANSFERRED TO REMOTE WORK, THE CONSORTIUM'S EMPLOYEES CONTINUED RESPONSIBLY PERFORMING THEIR JOB DUTIES FROM HOME. FLATS OF STAY-AT-HOME EMPLOYEES TURNED INTO CPC'S "BRANCHES" AND "OFFICES" FOR SEVERAL MONTHS. OUR COLLEAGUES IN RUSSIA AND KAZAKHSTAN SHARED THEIR STORIES ABOUT THIS UNUSUAL PERIOD WITH CPC PANORAMA STAFF

AS IF WE FORESAW

Roman Kharitonov, Projects and Planning Group Leader (Moscow), believes that by the time the pandemic was announced the Consortium had been ready for quick transition to a

new work format, both in technical and organizational terms.

"For several years, many business processes have been transferred to the Electronic Document Management System. Approvals of electronic memos, invoices, and forms of the change management system as well as checks of project documentation have been functioning in a steady manner," reminds Mr Kharitonov.

An extremely user-friendly CPC intranet website, to which all basic business processes are brought out, facilitated work considerably. This is why, many people needed remote access mainly to obtain various data from the history and archives only.

ORDERLY RETREAT

Only the very beginning of the stayat-home period caused some minor complications, when employees were still preparing their remote work places, upgrading their computers, installing necessary software, setting static addresses up, and obtaining permits for remote access.

"We were leaving for home working gradually: some people earlier, others later. You can say that colleagues who went on working from the office were our rearguard. They covered our retreat to homes, dealing with matters of remote access and digital signatures along with the IT services," recalls Svetlana Bovt, Lead Specialist for Financial Reporting and Analysis (Moscow).

"I was quickly provided with remote access. There were no issues with work in network folders, and fast approval of electronic documents was a pleasant surprise," tells us Maria Bobrovskaya, Specialist of the Protocol Service (Moscow).

"Verifications and approvals of contracts became even faster than before the pandemic," Ayna Zhetpisbayeva, Senior Specialist, Public and Mass Media Relations (Nur-Sultan), benevolence when creating her remote work place.



Having transitioned from the office space into the virtual one, CPC employees set to work with as much dedication as ever. Morning and evening briefings were carried out to discuss daily assignments and their progress status at the end of the day-all via video conference.

"Sometimes it seemed that we worked even harder from home. Working in the Skype for Business application was comfortable. There were no failures, even when a larger number of participants were connected. We spent no time at all going from one meeting room to another one," shares Roman Kharitonov.

As practice showed, many partners of CPC also turned out to be prepared for remote work, especially design institutes, which constantly handle large volumes of electronic documentation and possess high computing capacities.

"All we used to do at the office we continued doing from home, not loosing a single process. Judge for yourself: in spite of the fact that the President and the Government of the Russian Federation made allowances for companies for the quarantine period with regard to submitting the reporting documentation, we have never delayed our reports to controlling authorities even for a single day," Svetlana Bovt gives an example.



SVETLANA BOVT

COMMUNICATIONS ENDURED

We all know how unstable the residential Internet connection can be during peak loads—for instance, during New-Year holidays. And how was it during the stay-at-home period? How difficult was it to keep in touch with colleagues when the World Wide Web was accessed by remote employees, school and college/university students on distance learning, and bored housewives—all at once?

"CPC became one of the first companies to transfer its office personnel in Moscow to remote work, this is why there were no problems whatsoever during the first two weeks. Then, the Internet began to sag indeed; however, the connection was never lost completely. All right, something sometimes happened to run slow, and you had to reconnect, but work went on," answers Roman Kharitonov.

"In my house, the Internet connection was stable from the early morning and till two in the afternoon, then it became very slow, but revived again after ten in the evening. I readjusted, though I had to quit corporate online English classes. It's very likely that these connection loads were actually related to students: as soon as

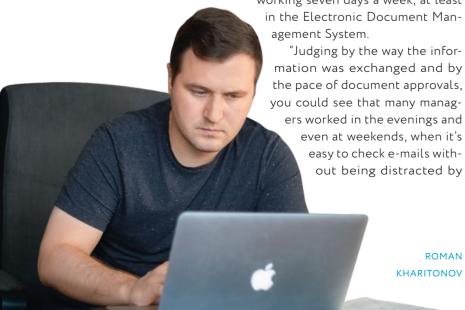


THE ART OF COMPROMISE

It is hardly surprising that remote employees had absolutely homey dress code, no one got their suits with ties from the wardrobe, and everyone decided for themselves whether a television or music player in the background disturbed them. What is interesting is another thing: how successful were our colleagues, while performing their official duties to the Company, in demarcating the working and personal time and space and in reaching compromises with their household?

"My work on the computer started before nine in the morning, because after that the computers and the Internet were taken by my schoolboy sons. I got back to work after four in the afternoon and then again after the dinner. All other time. I was always available by phone," answers Ayna Zhetpisbayeva.

"At first, it was really difficult with the family. I have a young daughter, and it took some time before she realized what was the difference between mum is home and mum is working at home. With patient explanations, I eventually managed to make it a custom for my family members that they wouldn't enter my workroom and would resolve their issues by themselves," shares Svetlana Bovt.



HAVING TRANSITIONED FROM THE OFFICE SPACE INTO THE VIRTUAL ONE, CPC EMPLOYEES SET TO WORK WITH AS MUCH **DEDICATION AS EVER**

"I have three children aged four, six, and eight, respectively, and, of course, they were interested in the way I work at home and handle production tasks on the phone with my colleagues. But I believe that it still was easier for me than for others—we have a separate house with our own self-isolated land plot, and I could always send my children to take a walk there," Nurgul Tulesheva, Lead Accountant (Atyrau), continues the

"As for all employees, it was important for me to keep the necessary balance between the family and the job, arranging my work place in various home rooms. As it turned out, you can work efficiently even in the kitchen," agrees Roman Kharitonov.

INNER INSPECTOR

Mondays, Tuesdays, Wednesdays, Thursdays, and Fridays declared days off because of the stay-at-home regime alternated with Saturdays and Sundays that were essentially the same stay-at-home days off. Many of our colleagues made no distinctions between them and continued working seven days a week, at least

"Judging by the way the information was exchanged and by the pace of document approvals, you could see that many managers worked in the evenings and even at weekends, when it's easy to check e-mails without being distracted by phone calls and video conferences," believes Maria Bobrovskaya.

"Whether at weekends or on holiday, our colleagues always stayed in touch, answered e-mails, and joined video conferences. No one stopped working. Probably, this is what team spirit is," emphasizes Roman Kharitonov.

According to our colleagues, their inner inspector constantly reminded many of them about unresolved issues, both on weekdays and at weekends. How could it be otherwise? Normally, leaving the office, a specialist would put aside all business matters and forget about them until the beginning of the next working day. And when at home, all you need to do to continue working is to make a few steps, turn on your computer, and press some buttons..

"It was hard: the voice within either didn't let me leave the table or kept calling me back," laughs Svetlana Bovt.

IN LIEU OF AN EPILOGUE

What have our colleagues profited by experience in this unusual situation? We will give you the answer of Roman Kharitonov:

"I'm sure that we all are going to use video conferencing applications more. New reporting systems performed well. I think we'll keep them, too. And, to be sure, everything that has not been transferred into the electronic document management system yet must be brought there. Just a short while ago, we reviewed a scheme of change control during construction and looked into the possibility of its transfer into the EDMS. So, taking the gained experience into account, if we ever have to switch to remote work once again, this process will take hours rather than days."

AUTHOR PAVEL KRETOV

THAT HAPPENED IN THE HINDUKUSH MOUNTAINS

40 YEARS AGO, THE SOVIET MILITARY PIPELAYERS STARTED THEIR SERVICE IN AFGHANISTAN. THIS PERIOD HAS BEEN DEEPLY CHALLENGING FOR A PERSONAL BRAVERY AND PROFICIENCY OF FIGHTERS. WHO HAVE MANAGED TO LAY AND TO OPERATE AS HIGH AS 1,200 KM OF PIPEWORK ON MILITARY ACTIONS SCENE



50 THROUGH THE PRISM OF HISTORY



"MAD RIVER" CROSSING

The Limited Contingent of Soviet troops (OKSVA) was deployed in the Democratic Republic of Afghanistan in December 1979 and immediately began to intensely perform combat tasks. In the first months, petrol, oil and lubricants were supplied to the troops by means of trailers. A pontoon bridge across the Amu Darya River has become the bottleneck in this chain of supply. The movement of troops and vehicles columns in opposition to each other's was leading to constant congestion.

At the beginning of January 1980, an operational group of the Central Fuel Supply Directorate of the USSR Ministry of Defense was sent to the border. Having investigated the situation on the spot, the experts

the «mad river». The width up to 1.5 km, depth down to 4 m, flow speed up to 4.5 m/s, all that emerged as an obstacle. Notwithstanding all that, even before the end of January, the first tons of fuel arrived in Afghanistan through a steel pipeline. The construction of the Amu Darva under-bed crossing has become the milestone for the use of field pipelines for the supply of OKSVA regiments.

PULI-KHUMRI GORGE CHALLENGE

In order to support OKSVA intense operations, it was required to deliver about 800 thousand tons of petroleum products per month. Under difficult climatic and road conditions, the vehicle-based battalions only were unable to perform this task. According to the calculations made, for uninterrupted delivery of every thousand of tons of fuel and lubricants it was necessary to use the trailers with total capacity of 6-8 thousand tons.

Therefore, in May 1980, Soviet military pipelayers were ordered to deploy a field pipeline with 150 mm piping diameter at distance of 254 km long from Hairaton to Puli-Khumri. 10 days were all that needed

THE PIPEWORK SYSTEM WAS SUBJECT TO DYNAMIC CHANGES, CONSTANT ENHANCEMENT, WITH SOPHISTICATION OF ITS PROCESS DIAGRAMS

proposed to deploy fuel depots in the Kabul direction in the area of Termez of Uzbekistan and Hairaton of Afghanistan and to connect them with the fuel pipelines passing through the border river. As early as in the 20s of January, the military pipelayers commenced to perform their task.

It was not anything but simple to cross the Amu Darya, nicknamed to complete the task. The pipeline was crossing six hard-paved motor roads and 28 dirt roads and then passed through the Puli-Khumri gorge, 24 km long, as well as through a mountain saddle at an altitude of 1,450 meters.

As of middle of 1980, the OSKVA pipework and storage system included a district fuel depot in Termez, three pipeline strings that were crossing Amu Darya, a unit of district depot based in Hairaton, a main trunk of the pipeline with the two intermediary tank farms, along with the army fuel depot in located in Puli-Khumri.

The pipework system was subject to dynamic changes, constant enhancement, with sophistication of its process diagrams, hook-up of additional tank farms, stationary and field depots to previously laid pipelines. At the end of 1981, Hairaton and Puli-Khumri were connected with the second string of the field pipeline with 100 mm piping diameter.

STRAIGHT THROUGH SALANG SADDLE

In 1982, aviation units stationed in Bagram reported to the command that there was a fuel shortage in the fuel depots. There were two reasons for this: on the one hand, combat aviation has become more widely used to support major military operations, and on the other hand, the increased insurgent attacks on Afghan highways have led to the need for largescale use of air transporters, whose fuel consumption was particularly high. Under those circumstances, the military pipelayers were given a new task consisting in expanding of the pipeline system in the Kabul direction to Bagram airport.

The first string of the field pipeline with 100 mm piping diameter along Puli-Khumri-Bagram route was deployed in August, 1982. This 184 km long section passed through extremely difficult terrain: through the main ridge of the Hindukush, on steep slopes, under thin air conditions.

The hardest of it all was the crossing of the Salang saddle. In that location, a tunnel passes through the mountain range at 3368 m elevation above sea level. In order to protect the pipeline from rockfalls and avalanches, it was installed right in the tunnel, while safeguarding it from accidental slamming by military vehicles with the help of the concrete trays.



The pipeline laid in August 1982 ensured the supply of jet fuel to the army fuel depot deployed in Bagram, as well as to the airfield depot of the Afghan armed forces. So soon as the first months of its operation, it made possible not only to cover the ever-increasing current fuel demand, but also provided a means for fuel accumulation.

By the end of 1984, the work on deployment of field pipelines on the Kabul direction was fully completed. Their total length was over 900 km.

HERAT VECTOR OF WORKS

In parallel with the construction of the pipework system towards Kabul, the similar work, albeit on a smaller scale, was executed on the Herat direction. In May 1980, an under-bed pipeline crossing of three strings 10 km each was laid across the Kushka River. Due to the flat terrain, gentle banks and a small (15-20 m) width of the river, its construction was not as difficult as the one at crossing the Amu Darya.

In December 1984, deployment of the pipeline along the route of Turagundi - Herat - Jamjaran (Shindand region) has begun. The 240 km long steel line crossed four mountain saddles, there were three large and about 30 small settlements along the route. In order to avoid damage to the pipeline as a result of the Mujahideen attacks, a 12 km long piping section passed directly through Herat city.

The military pipelayers have reported on the completion of the pipeline construction in 10 days. 22 pumping stations as well as three intermediate tank farms were fitted to it. Similar to the layout on the Kabul direction, the fitted pumping stations were placed only in the vicinity of motorized rifle and tank units.

Initially, it was planned to supply only jet fuel, but later it became a stable way of pumping for diesel fuel and small amounts of motor gasoline.

By the beginning of 1985, a system of field pipelines with a total length of almost 300 km was created in the Herat area. It included a district fuel depot located in the town of Kushka, a transshipment depot based in Turagund, an army depot stationed in Shindand, along with two airfield petroleum product depots.

Pumping of fuel through the pipelines continued until the last days of the presence of OKSVA units in Afghanistan, which were withdrawn on February 15, 1989. During nine years of service in Afghanistan, Soviet military pipelayers have gained invaluable expertise concerning operation of long-distance field pipe-

Based on: «How Fuel Helped to Army during the Afghanistan War». -Moscow: published by Senior veterans of the Fuel Service of the Russian Armed Forces, 2009.

AUTHORGULZHAN MUSAGALIEVA

THE FIRST AUDIENCE IS MY FAMILY

HOW 15-YEAR-OLD MIRZHAN ZHIDEBAY AND DIMASH KUDAIBERGEN, YERZHAN MAXIM ARE FAMILIAR, AND HOW JSC "CPC-K" HELPED THE YOUNG SINGER TO GO TO THE PROJECT "VOICE.KIDS"? READ ALL THE ANSWERS IN THE INTERVIEW THAT MIRZHAN GAVE TO OUR PUBLICATION



irzhan, you are a young, but already a bright star in the musical sky of Kazakhstan. At the age of 14 you became widely known after your participation in the Russian television project "Voice.Kids". You have reached the final of the competition this spring, attracted hundreds of thousands of TV viewers throughout the post-Soviet

space, received high ratings of the jury members, vocal professionals. I heard that from now on you are always in touch with your mentor – Polina Gagarina?

Yes, we have a chat room "Gagar's Nestlings", where we constantly communicate and even make common clips. We also create a quest game for our fans with all the "voices»

of season seven. Polina Gagarina believed in my strength and taught me a lot. I will remember her lessons and instructions for life.

How was your desire to participate in the "Voice.Kids" project was affected by the 2nd place in the "Jastolqyn" contest held as part of the international program "CPC for talented children!" and organized by JSC "CPC-K"? ("Jas-tolqyn" contest is held among gifted children of Atyrau, Aktobe, Mangistau and West-Kazakhstan regions. The winners of the Grand Prix participate in the final event in the capital of Russia – Editor's note).

I made a lot of new friends in the "Jas-tolqyn" contest. Those days will always be in my memory. It so happened that I took the 2nd place. But the idea of going to Moscow at all costs did not leave me. I began to prepare very hard for the project "Voice.Kids". And look, I've got to the final. There, at the "Jas-tolqyn" contest, I gained a lot of experience as well. Yeah, half a step wasn't enough to win. But not everyone manages to make it to the final, so I think it was a victory, too.



AT THE "VOICE. KIDS SHOW, MIRZHAN PERFORMED LISTEN IN ENGLISH FROM THE BEYONCE REPERTOIRE

What genres of music do you listen to yourself?

I listen to songs of different genres, but I prefer classics.

You have several duets with famous Kazakh performers, recently released a cover with Amre. Do you already have many friends among musicians?

I realized that friendship is not bound by such conventions as nationality, religion, even age. Despite all these differences, I have a lot of friends and with each passed contest more and more of them.

But there are simply friends and there are the best friends?

For me it's Yerzhan Maxim (Finalist of Season VI of "Voice.Kids" – Editor's note). We have been friends with him since the "Bakytty Bala" project. Our parents also became friends.

Speaking of parents, how early did you start improving your vocals and how did they feel about it?

I've been doing concerts at home since early childhood. My first scene was a chair, and my first audience was my family. I believe that I grew up in a musical family. My father, although he has no special education, is very good at music. And my mom's first education is in music. She has awards of several contests and plays a lot of instruments, even a kobyz! It was my parents who instilled my love for music.

And when did the final desire to be a singer arise?

At an early age, I did not think that I would sing, because I had a very hoarse voice. Even my mother thought it would be hard for me to perform with that voice. Despite this, from the 5th grade I started to participate first in the city's and then in regional competitions. Almost immediately I began to take first places. After such success, my mother decided to go to the help of a professional vocalist to "refine" my voice. The job was done, and I began to participate in national and international competitions.

The "Bakytty Ball" contest that you won in 2018, please tell us more about it.

It is a project of Dimash Kudaibergen, the annual children's song contest in Aktobe region. Dimashaga (Aga is a respect for elders - Editor's note) and I are countrymen, his grandfather and father are from Mugaljar district, where I was born. I think that our land, the homeland of outstanding personalities - Zhubanov brothers, for example, gave it such a huge talent. Like Dimash Kudaibergen, I dream of representing Kazakhstan at the world level, and I plan to participate in international adult competitions over time. I will do my best to make our country sound proud to the world.

These are really ambitious plans, but there are many adult international competitions: commercial, charitable,



MIRZHAN WITH PARENTS

many others? Do you plan to participate in all of them or are there criteria for selection?

I believe that if a person has decided to become a professional singer, he/she must periodically participate in competitions and each time gain new experience. You don't need to take part in commercial competitions – there are so many of them, you should focus on world-class projects where you can really get professional experience. But the final decision on participation in this or that project is, of course, made at the family council.

Your mother, Bakytgul Dzhagiparovna, talked about it: "We pay attention
to the level of the contest, especially
to the professionalism of the jury".
She told me about your busy "star"
schedule and the lessons you missed
because of the concerts, which then
have to catch up... Who do you feel
more now - a singer or a schoolboy?

On stage, I feel more grown up than I do at home. When I perform, it's as if I'm completely immersed in the song and try to convey the emotions that are expressed inside the track. And at home, I'm just a regular kid who likes to have fun, play football with his friends in the yard. In general, if it wasn't for my music career, I would probably have been a volleyball player. But I want to sing, and I want to create by means.

LISTEN TO YOUR HEART!

CPC PANORAMA CONTINUES TELLING YOU ABOUT CREATIVITY OF OUR COLLEAGUES. VICTORIA FEDOSEYENKO FROM NOVOROSSIYSK-LAND ADVISOR, LAND LAW GROUP, JSC CPC-R-HAS **EXPANDED HER PHOTO GALLERY AND** RECEIVED NEW AWARDS SINCE THE PUBLICATION IN THE FEBRUARY ISSUE





Victoria, for the time since preparation of the previous publication, you have received a diploma of an international photo contest. Could you please tell us about this win and your favourite hobby?

I've always been attracted to drawing and design. I used to help my girlfriends with make-up and choice of clothing styles. I also used to draw sketches of dresses. I graduated from an art school and was going to apply to the Mukhina School [Leningrad Vera Mukhina Higher School of Art and Design], but it didn't work out that way. While studying at the institute, I used to draw wall newspapers and congratulations.

Odd as it may seem, I became interested in photography thanks to Instagram in 2018. Though not being a fan of this social networking service, I created an account there, so as to keep track of interests of my eldest son. And unexpectedly, I found in

Instagram a reflection of my hobbies: music, English language, and, eventually, photography.

In Instagram, I saw photos made by a photographer from Spain. 'My mobile phone today is my third eye,' said his status. It became an epiphany and the beginning of my photo experiments. My visual aids for learning were works of Vincent James-a famous fine art photographer from San Francisco, who has his personal showroom and website. In our correspondence, he appreciated my works and asked what camera I used. He was very surprised to find out that I took pictures with my phone and said that I had talent... It may have been his subjective opinion, but it inspired me.

I am keeping in touch with photographers from difference countries via Instagram and learn from them. I have visited photo exhibitions in Saint Petersburg-it was incredible experience



and example. During the stay-at-home order, such trips had to be cancelled, but I got an opportunity to visit exhibitions of famous fine art photographers from various countries virtually and free of charge.

I learned how to use photo processing apps and took several online classes in the Druzya Photo School. I'm planning to study at the Nikon School of Photography as I now have a camera of this brand.

What were peculiarities of adaptation to new coronavirus conditions for you-in terms of both your job and your hobby? What have changed in each of these areas? Did you face any challenges and how did you meet

Adaptation in the stay-at-home conditions was not an easy thing to handle. What distinguishes the office work is that it is fully adapted to professional needs and requires no attention switch to home issues. While at the office, you can very quickly resolve and discuss many things with your colleagues, including the ones from different Departments and regions. Communication with contractors, on-site visits, sometimes even to another region—all of that had to be restructured according to new realities.

To some extent, recommendations distributed via corporate e-mail on a regular basis helped us overcome the difficulties. I arranged a work place for myself and tried to keep regular hours and follow the daily routine. I wrote down the work tasks and marked what had been done and what hadn't. Continuous communication by phone with my immediate supervisor helped together we discussed and resolved a lot of matters.

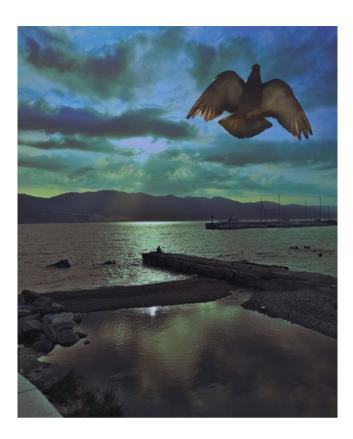
I received more time for my hobbies and more opportunities to be with my six-year-old son, the youngest of three.

In the context of personal growth and self-analysis, the stay-at-home period did me good, but at the same time it showed me a tremendous value of and my imperative need for faceto-face professional communication with colleagues. Truly, real professionals, highly qualified specialists, and all-round nice people work at our company.

In your opinion, what is the place of mobile photography in modern fineart photography?

Modern fine-art photography is multidimensional in its areas and styles. Photos can capture the most exciting moments of our life-they elevate and expose; they make us think and dream, cry and admire.

Mobile photography is an actively developing art. Smartphones with excellent cameras have appeared, and nowadays everybody can try on the role of both a photographer and





mass media by capturing a moment of life and pressing the Post button.

For me, as an amateur, photography is a way to express my feelings and thoughts. I see how beautiful the world is and want to show it to everyone. My photos in the Google profile have two million views already!

I take pictures on the way to work, during business trips, and at any spare minute. Sometimes, I go to the sea. When the restrictions in Novorossiysk were lifted, I took photos of sunrises on the waterfront twice on Sundays at four in the morning. I've realized that I belong to the sort of people who would stop at nothing to get a beautiful impressive shot. And I like it.

What is it that you enjoy shooting most of all?

My favourite objects are streets, bridges, elements of buildings, nature, and landscape/sky combinations. Sometimes, I want to capture some scene to convey emotions of participants and the significance of events.

Who are they-audience and connoisseurs of your photography works?

My sons are the first whom I address with a question if a new picture has turned out well. They sometimes give me practical advice.

I post my photos on several dedicated websites, such as FOAP. I have photographer peers from abroad and many followers. We correspond and share our pictures and ideas. I am publishing my works in Instagram and taking part in the 35AWARDS photo competition.

Would you please share some details about this award with us?

35AWARDS is an international competition of photographers, which was established in 2015. In its first year, there were 36 thousand participants from 110 countries, and in two years over 103 thousand persons from 160 countries submitted more than 257 thousand photos to the competition. 35AWARDS selects and awards 100 best photos of the year in various nominations. I took part in the 5th annual award in the Empty City Streets, Street Photography: Shadows, and Quarantine (COVID-19) nominations. My works made it to Top 33, Top 27, and Top 34 in these nominations, respectively, and I received a 35AWARDS certificate diploma as one of 50 best

photographers in Novorossiysk. Several of my works reached the final stage of the competition for selection of 100 best photos of the year.

The 35AWARDS diploma inspired me to continue with my creativity. Of course, I'm not going to compete with masters and acknowledged fine art photographers: I'm just an amateur. But it feels nice that my works are also able to bring joy and that people like them. They give positive energy, and I thereby contribute my bit to expansion of beauty in the world.

What are you motivators to the beginner photographers?

I've seen a lot of amazing, atmospheric, alive photos taken by my CPC colleagues who don't consider themselves photographers. And I learn from them. You need not be a recognized master to take beautiful pictures. A piece of advice? Listen to your heart! Look at the world with your eyes wide open, every day, as for the first time ever. Because today it is completely different from what it was yesterday, and tomorrow it will change again. Our world is amazing and incredible. And so are people around us.



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