



Combined methanol and ammonia center under construction.



Construction of unit SK-200, a new sulfuric acid production facility, is in full swing at Shchekinoazot.

Larisa Timofeeva.  
Photo: Alexsei Pirayev  
and Shchekinoazot's media  
department.

Before New Year, the most joyful and anticipated holiday, it is customary to give a recap of the outgoing year. Shchekinoazot, a major and dynamically growing enterprise in the region, did just that. What did the company succeed in doing in the passing year, what are its plans for 2018 and what is it particularly proud of?

The large-scale last news conference in 2017 was attended by Anatoly Surba, the Director General of Shchekinoazot, Irina Podchufarova, the Director for Human Resource Management and Social Development at Shchekinoazot, Vyacheslav Kurganov, the Technical Director, and Dmitry Kozhenkin, the chairman of the company's trade union committee.

In 2018, the company is launching four new production facilities: the methanol and ammonia plant, the sulfuric acid and dimethyl ether plant, treatment facilities. In what stage are these projects now? What is the level of investments for each of them?

Anatoly Surba: "Methanol and ammonia are our primary products, and the investments in them amount to about 18.5 billion rubles. The project is going almost according to the schedule: we plan to do the start-up and commissioning in the first half of 2018. The sulfuric acid plant is being built with the participation of a Chinese company, and the investments amount to about 2 billion rubles. Jointly with Petro Carb Chem (Germany), we will be producing dimethyl ether of perfumery quality. The launch is scheduled for the second quarter of 2018. Russia currently does not produce anything like this. When our dimethyl passes testing, we will see a much better quality in Russian cosmetic products."

We plan to launch the new treatment facilities in June 2018. After putting it into operation, all wastewater will be treated. Our current aim is to

SHCHEKINOAZOT:

# In 2018, we are launching four new production facilities



Anatoly Surba



Vyacheslav Kurganov



Irina Podchufarova



Dmitry Kozhenkin

treat 100% of our wastewater, but our old treatment facilities are nearly overloaded. The investments in this project amount to about 800 million rubles. This year we started installing an ammonium sulfate (a mineral fertilizer) compacting plant.

**The quality we reached is currently unparalleled in Russia. I'm sure we will be setting the bar for everyone to aim at.**

Ammonium sulfate is now stronger, the granules are larger, and the difference in price between compacted ammonium sulfate and the crystalline one is about \$50. It is almost 1/3 more expensive. It will be profitable for us."

**From a strategic point of view, what do you gain by launching these new complexes?**

"The methanol and ammonia production center will make it possible for the company to attain a sales level of 24 billion rubles in less than a year. With the launch of this production facility and the increased production of other products (volumes are now increasing), the company's income will exceed what was planned in 2017 by almost 500 million rubles.

After we launch the production facilities, we will fully switch our production site to self-made sulfuric acid. And the acid being produced in Efremov will be transferred to KuibyshevAzot. This will be a great achievement.

As far as dimethyl ether is concerned, the production output will not be large — 22,000 tonnes — but this product will be very important for us because currently all the dimethyl ether in Russia is imported from China and Europe."

**What are these complexes technically? Who are your partners for these projects, how safe are these projects environmentally?**

Vyacheslav Kurganov: "The combined methanol and ammonia center is the first plant in the world with such a distribution of capacities among the products: M-450/A-135. This is one of the most high-tech complexes to use an efficient energy-saving technology. Environmental aspects are also seriously considered. Halidor Topsoe (Denmark) is the technology licensor, the designer of the basic project and the supplier of basic equipment. We have been working with Halidor Topsoe for a long time on a number of projects; our relations are friendly and extend beyond those of mere business partners. Severodonetsky ORGHIM is the general design contractor, and they are also developing the documentation for the project. Currently, Neftzavodmontazh LLC (Volgograd, Russia) is mounting the installation. We are confident that the project will be a success."

Sulfuric acid production is our second joint project with Chinese People's Republic. Jianguo Qingfeng (China) is

the licensor, the designer of the basic project and the supplier of most of the equipment. We plan to begin start-up and commissioning works by summer 2018. We will be using the acid mainly for caprolactam production. These very high-quality acids will be offered to the market. The general design contractor and the designer of the basic project is Promstroyengineering (Russia).

The capacity of the new treatment facilities will be 1,200 cubic meters per hour. We also plan to reconstruct the existing treatment facilities to increase their efficiency.

**The new treatment facilities will be unique. They will be based on a biological treatment method in a bioreactor that has ultrafiltration membranes.**

The water will be treated to a degree sufficient for recycling it within our production or discharging to surface water bodies. The general design contractor is May Project OJSC (Russia).

The licensor for the dimethyl ether production is ThyssenKrupp (Germany). The general design contractor and developer of the project documentation is the Novomoskovsky Ammonia Manufacturing Institute."

Anatoly Surba: "The company pays close attention to the environmental aspect. The production facilities we are now working on will have the smallest possible impact on the envi-



The complex to produce dimethyl ether of perfumery quality is now underway.



In 2017, the ammonium sulfate compacting unit was put into operation.



The close-knit professional team of the new methanol and ammonia production unit.

ronment. For example, the emission of nitrogen oxide in Europe is 150 mg per cubic meter, and in Russia it is 100 mg. We would like to bring that number to under 20. And that is feasible."

**What are the key results of 2017?**

Anatoly Surba: "The key achievement for me is the stable operation of the whole plant. The production targets for almost all products are being over-achieved. And it is very important that we managed to finance all four of our projects. We control all the equipment and designing ourselves. This approach keeps the construction costs very low. For example, we are planning to put an ammonia and carbamide production facility in Efremov. I think we will manage to build the production facilities for 3 times less than some of our colleagues supposed. All of this would not be possible without our team, which has learned to implement construction professionally and efficiently. We are planning to produce 600,000 tonnes per year; this is a small fraction of the global consumption. But this is significant for our company, for the whole Efremov district and for the Tula Oblast. This will create jobs."

**Any success depends on people. We all know that there is a lack of engineers and technicians. How are you solving this problem?**

Irina Podchufarova: "The success of an enterprise is really determined by people, and a lot of it is the quality of their education and how skilled and

882  
MILLION DOLLARS  
production investments in 2005-2018.

343  
MILLION RUBLES  
the environmental budget in 2010-2015.

300  
EMPLOYEES  
go to the Black Sea for vacations each year.

40  
THOUSAND RUBLES  
the average salary of the industrial personnel at Shchekinoazot.

competent they are. Our HR policy is an integral aspect of achieving our key goals and our Development Strategy. We have set very high requirements for our personnel. Modern technologies are not only efficient, but also rather complex. And machine operators, when managing the technological process at their workplace, must have comprehensive skills and knowledge as well as an education with a background in chemistry.

To resolve the issues of qualified personnel, our company cooperates with chemical engineering universities, for example, Ivanovo State Chemical Technology University, Dmitry Mendeleev Russian University of Chemical Technology and its Novomoskovsk branch. We also cooperate with Tula State University and others.

We are currently working on joint training programs with Dmitry Mendeleev Russian University of Chemical Technology and its Novomoskovsk branch. We also cooperate with our societies: Shchekino Polytechnic College. Our leaders regularly attend the College and give lectures, set up tours at the plant and organize classes here and head the commissions for the defense of university theses.

Students of the college and the universities do their internship at the plant, which allows them to see the work first-hand and have a real profession when they graduate.

Training and education at Shchekino is a continuous process. We have a Training School for Young Managers. Specialists looking to make a career who stand out in a positive light and

demonstrate a high level of potential continue their training while working at the plant. Shchekinoazot has a license to train for more than 100 working professions. We can train our own future personnel. We have already employed people for all the four new construction sites. More than 300 people got jobs. More than a third of those employed in 2017 are young people under 35. Supporting young specialists is our policy.

**We always welcome ambitious and creative young people! Working for our enterprise is interesting and prestigious, and the staff turnover is less than 1%.**

**What can a person earn at Shchekinoazot and what is included in the benefits package?**

"The average salary of the production personnel is about 40,000 rubles. We pay attention to raising the salaries and include this in the budget. In five years, we have managed to increase the work performance by 89% and raise salaries by 49%. From an economic perspective, these indicators are very important.

From 2015 to 2016, the salary grew more than 12%. We expect the indicator to be 6.5% in 2017.

It implies payments and benefits beyond the employment agreements. These include additional allowances for anniversary, retirement, childbearing, wedding, financial aid in tough situations, paid days off for farewell events when a child is going to school for the first time and other important events. For young newcomers, there is a one-time payment of double minimum salary for the Tula Oblast: 26 thousand rubles. We also compensate rental payment for non-residents renting accommodation. We try to support those who participate in contests: there is an additional payment for different specializations, professional excellence, participation in investment projects, etc."

**What does the trade union do to support the employees? What programs does it implement?**

Dmitry Kozhenkin: "The trade union is a mediator between the personnel and the company's administration. The result of our work is the collective agreement that has a large number of social benefits beyond the Russian Federation Labor Code. All the payments are made in full.

The trade union assigns financial aid to those trying to deal with adversities in life and provides zero-interest loans for 6 months in certain cases. Our teams enjoy group travel arrangements on weekends to theaters, museums, circus. All the organization costs are paid by Shchekinoazot. 600 people participate in various sports events.

Our key activity is the health program for the employees: every year 300 people go to the Black Sea, 60 people receive health resort treatment, 90 children of employees go to children's camps, 80 Shchekinoazot labor veterans get free stays at the Sintelk health and recreation resort. We always give our veterans presents for New Year and other occasions."

**What would you like to wish to the enterprise and all Tula Oblast residents?**

Anatoly Surba: "My wish for our employees is that they successfully achieve their goals. The enterprise is growing, and I hope that continues in 2018. And I wish all Tula residents health, well-being and that all their wishes come true."