WASTEWATER FROM INDUSTRIAL ENTERPRISES OF THE REPUBLIC OF UZBEKISTAN

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Abstract: Wastewater treatment of enterprises requires the introduction of new technologies that can minimize the negative impact on the environment. In this regard, modern highly efficient water treatment equipment is being successfully developed, manufactured and implemented everywhere in the Republic of Uzbekistan. Such treatment facilities for industrial enterprises are convenient for their mobility, scalability and the possibility of installation, both indoors and outdoors.
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To date, the problem of environmental pollution is extremely urgent due to the widespread availability and formation of wastewater. And the problem is not limited to large volumes of domestic wastewater, which are inevitable in small towns and, especially, large megacities. Wastewater from factories and factories is much more dangerous. Therefore, wastewater treatment of industrial enterprises is a global task that needs to be solved. There is a wide variety of industrial effluents in the world that require special study in relation to each industry. Wastewater from industrial enterprises, when it enters the surrounding ecosystem, causes irreparable damage to the environment. And when industrial effluents are discharged into the city collector, the load on urban wastewater treatment plants increases. Based on this factor, it is important for each enterprise to solve problems related to their cleaning.

Undoubtedly, it is industrial enterprises that are the main source of environmental problems associated with wastewater discharge that exist in the modern world. After all, manufacturing enterprises themselves involve the use of chemicals in various technological processes, which fall into drains and further into reservoirs. This causes enormous harm to the surrounding world.

Industrial wastewater treatment, as well as industrial effluents in general, are strictly regulated by the current legislation of Uzbekistan, based on which it becomes clear that each enterprise where wastewater is generated is obliged to minimize the negative impact and consequences of wastewater disposal. In each regional entity, standards for permissible concentrations of pollutants in wastewater that are discharged into the city sewer system are established for enterprises. And municipal sanitation services monitor their compliance. But the requirements established by the law of the Republic of Uzbekistan are often not fully met by enterprises, in the vast majority of cases, the indicators of wastewater pollution largely exceed the established norms. And one of the key factors in exceeding the standards for the content of pollutants in wastewater at enterprises is the use of treatment facilities that are quite outdated in moral and physical terms, which do not perform their functions.

And also are not subject to modernization or any reconstruction, because they are technologically unable to carry out cleaning up to modern cleaning requirements.

Wastewater treatment of enterprises requires the introduction of new technologies that can minimize the negative impact on the environment. In this regard, modern highly efficient water treatment equipment is being successfully developed, manufactured and implemented everywhere today.

Such treatment facilities for industrial enterprises are convenient for their mobility, scalability and the possibility of installation, both indoors and outdoors.

Installation on production sites in the absence of the possibility of construction of capital buildings and in places with difficult conditions for this;

It is possible to increase the treatment plants in terms of productivity and additional stages of purification;

If necessary, the production of wastewater treatment at facilities sufficiently remote from the central sewerage.

Cleaning equipment can be placed inside prefabricated frame buildings or in block containers. And for the operation of such treatment facilities on the ground, only the possibility of connecting to the electrical network and communications for the supply of wastewater for purification and removal of purified water will be required.

In order for the company to get really effective wastewater treatment, it is recommended to provide the following data for the selection of technology and equipment for modular treatment facilities:

maximum water consumption per day for cleaning;

characteristics of drains;

a variant of the drainage mode as a result of cleaning;

the direction of activity of an industrial facility or the characteristics of effluents;

In conclusion, we will say that the presence of wastewater treatment facilities for industrial enterprises allows reducing the degree of pollution to those indicators at which wastewater can be discharged into the environment without the potential risk of causing damage to it. Specialists developing water treatment technologies and equipment perform pollution calculations, determine a number of other key parameters that are taken into account during the design, production, installation and commissioning of all elements of the treatment facility complex.

Thus, the prevention of pollution of natural reservoirs by industrial effluents and environmental protection in general are the key tasks facing modern society. And our task through our activities contributes to the preservation of the environment and helps enterprises in solving problems of wastewater treatment.

References:

1.Yakovlev S.V., Karelin Ya.A., Laskov Yu.M., Voronov Yu.V. Industrial wastewater treatment. Moscow: Stroyizdat, 1990

2.Zhukov A.I., Mongayt I.L., Rodziller I.D. Methods of industrial wastewater treatment. Moscow: Stroyizdat, 1992

3. Gvozdyak P.I., Dmitrienko T.M., Kulikov N.I. Purification of industrial wastewater. // Chemistry and technology of water 1995 vol.9. No. 1.

4. Xushvaktov B. O., Artikboyev X. B., Nodirov D. M. FARFOR MAHSULOTLARI ISHLAB CHIQARISH SANOATI ZAVODINING OQOVA SUVLARINI FIZIK–KIMYOVIY USULLAR BILAN TOZALASH //Innovative Development in Educational Activities. – 2023. – Т. 2. – №. 1. – С. 42-46.

5. Yakubov, Kutfidin Asliyevich, and Xusniddin Baxriddinovich Artikboyev. "SHAHAR OQOVA SUV TARMOQLARI ISHONCHLILIGINI TAXLIL QILISH." *GOLDEN BRAIN* 1.1 (2023): 171-175.

6. Kulsky, L. A., Smirnov, O. P., & Yakubov, K. A. (1983). Determination of an optimum coagulant dose with the phase-dispersed state of impurities. *KHIM. & TEKH. VODY.*, *5*(2), 258-261.

7. Tadjiyeva, D. O., D. A. Sobirova, and D. U. Ganiyeva. "METHODS FOR DETERMINING LOSSES OF INTERNAL CONSEQUENCES OF WATER SUPPLY SYSTEMS." *Journal of Advanced Scientific Research (ISSN: 0976-9595)* 1.1 (2021).

8. Якубов, К. А., Мирзаев, А. Б., & Мавланова, Ю. И. (2018). УСЛОВИЯ ОБРАЗОВАНИЯ СТОЧНЫХ ВОД НА ПРЕДПРИЯТИЯХ ТЕКСТИЛЬНОЙ ПРОМЫШЛЕННОСТИ УЗБЕКИСТАНА. In *Социально-экономическое развитие городов и регионов: градостроительство, развитие бизнеса, жизнеобеспечение города* (pp. 709-713).