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Water Cleaning Technology

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Abstract: The sustainable development of society in the republic of the population living section of the ecological condition of the territory of engineering communications closely associated with the results of the work. The application of modern technologies creating new engineering of improving existing communication systems, the use of the system is one of the most pressing issues geoinformasion. The required rate of water supply of the population with the quality and waster clean sanitary facilities and water discharge at the required level, which is formed in them- hygienic is significance in all respects [1;2;3]. Provide you with drinking water, water discharge and cleaning of the population's living standards improve with waster, held together by water will prevent different diseases too.

Keywords: Water, Technology, application.

Introduction

The sustainable development of society in the republic of the population living section of the ecological condition of the territory of engineering communications closely associated with the results of the work. The application of modern technologies creating new engineering of improving existing communication systems, the use of the system is one of the most pressing issues geoinformasion. The required rate of water supply of the population with the quality and waster clean sanitary facilities and water discharge at the required level, which is formed in them- hygienic is significance in all respects [1;2;3]. Provide you with drinking water, water discharge and cleaning of the population's living standards improve with waster, held together by water will prevent different diseases too.

To prevent contamination of the aquifer currently give a very large role. Household-farm waster originating from certain facilities and industrial enterprises in the water, cleaning the water basin is discharged them again. At the same time assures you of pools of water pollution to a certain extent. In recent years aimed at improving the sanitary condition of the aquifer by our government has taken a number of practical measures [4;5;6]. In particular, the most important component of the regional infrastructure of the country as it is to live a life worthy of men form the necessary conditions, housing and settlements that will be providing comfortable and convenient in all respects on the improvement of the public sector and its activities of the president of the republic of Uzbekistan "development and modernization of

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the drinking water supply and sewage systems in 2025-2030 years on the program complex" on 2025-April adopted a resolution.

Research methods. A method of cleaning reagents. One of the ways we do in the world's most (85 percent of enterprises) and water-soluble heavy metal compounds of the cleaning method. That may have been a metal sink, usually with neutralization is carried out at the same time. Cleaning of heavy metals and mixed that with the addition of different the essence is that reagantlar to form insoluble and later held view precipitation hydroxides formation.

Results. Determine the work productivity of the machine [7;8;9] for pipeline transportation. Means of transportation to work productivity is determined by the following expression:

$$P_{hours}^{tr} = \frac{600F_{or}K_{\nu}}{\left(\frac{2L}{\nu}60 + t_{or} + t_{dream} + t_{m}\right)\gamma_{kuv}} \text{ m}^{3}/\text{hr} (43)$$

Gde: G- the ability to carry the load of the means of transportation, t.; $K_{\rm e}$ apafficient use the time machine (0.7, 0.8);

 K_{ν} - coefficient use the time machine (0.7...0.8);

 K_{or} - to increase coefficient as possible 0,9 - 1,05 not exceed);

$$K_{or} = \frac{P_{\rm tr} N_{\rm tr}}{G} \quad (44)$$

 R_{kuv} - one pipe, the weight of t;

 N_{kuv} - tubes are the means of transportation, the number of pieces;

L-pipeline transportation distance, km (p assignment sheet.11);

V- transportation speed of 30-40 km/hour;

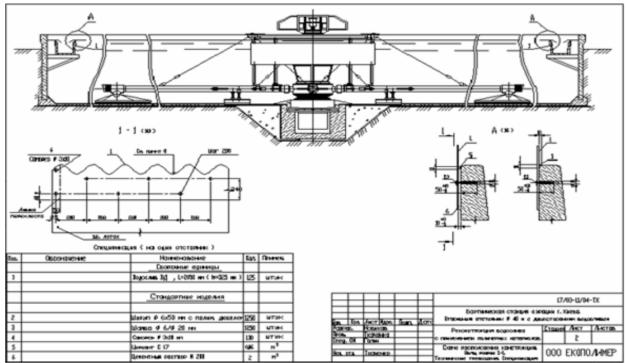
 $t_{or} t_{dream}$ - time who is going to increase and decrease the ability to carry up to 1 ton crane load when it is used to 3 minutes, 1...5 tons – can be considered equal to 5 minutes;

 t_m - manevr of time, which is going to make 2-3 minutes; minutes;

 γ_{kuv} – the weight of the pipe is 1 meter (t/m)

The cargo hold to select the device. The lifting of wells and pipe elements, push and shipping for placing special holding device is used. Pipelines to hold the load for lifting and placing objects of choice - the ability to carry the required load device, reliable solid pipes to hold (used to take the load of the rope (the rope), and would not allow his pipe insulator coating damage, structures, and taking into account the computer's seal to ensure the simplicity of application would be performed [10;11;12;13].

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1-picture. Clean water clean the ditches and water of industrial enterprises.

Using the working surface should be covered with rubber grip covering them in. Loadingunloading works in the next section for the pipe selected for the collection of the crane conductor is considered.

Atrophic ecological environment clean and tidy shaped territory oqova to keep in clean water which are formed of different types of solid and liquid waste with contamination avoid to get in order, one of them in the process of the use and processing of water which is formed in a compact device waster cleaned, and then the water of pools, we think that it is desirable to remove. This view point when looking waster clean water is not only the solution of the problem is from them to precipitate which is formed in the cleaning but also the treatment to give the day of the pressing problems is one.

Ecology of view point than – around and into the atmosphere produced each different type of gas is also clear problems are there, all while waste water dilute of special gas emitted to the environment when they are processed in facilities before it is taken. As a result, the surrounding environment every different type of solid and liquid waste pollution before and is taken with its ecological condition of a bit in to moderate out comes.

The city, production, and production of agricultural products and production of water with the help of waster compact device clean. This device, to the composition of biofilters and aerotenk – in the cooler was founded. The purpose of the device farm – household cleaning waste water production and physical – chemical treatment to give is designed. This device upper part biofiltr and lower part aerotenk –placed.

Waste water mechanical cleaning then originally waste water mixing with the clay coming from aerotenk to the camera comes on and this here's intervention in the process to occur is then mixed the mixture of the pump through water distribution is transmitted to the network. Effluent below the biofilter water is collected in the bottom of biofiltr and then aerosion

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through aerotenk –zone is sent. At the top of columns sinks ensure waste water with air is discharged.

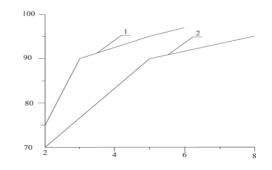
A mixture of clay from zone to zone stop aeration that it there happen to be will. Therefore the device is compact aerotenk – clay zone in aertenc share a lot of 4 - 6 g/dm³ to make up. Waste of water cleaned the burn by the next treatment to give or water to the basin is sent.

The processing towards waste water aerotenk oxygen with oxygen supplementation supplementation with additional aerasion using is performed.

Biological filter feature positive, i.e., oxidation, mass sharing feature, and the resistance is high, pollution of the substances to be with enzymatic reduction and energy costs low, aerotenk –whose cleaning effect is high.

Originally interference with the camera active clay with waste water of the intervention and the intervention of the ideal case, after aerasiya zone to the entire volume of intervention, consequently the fringe of zone to ask hanging clay is filtered through a layer of the results of untreated water waste part to clean high quality is achieved.

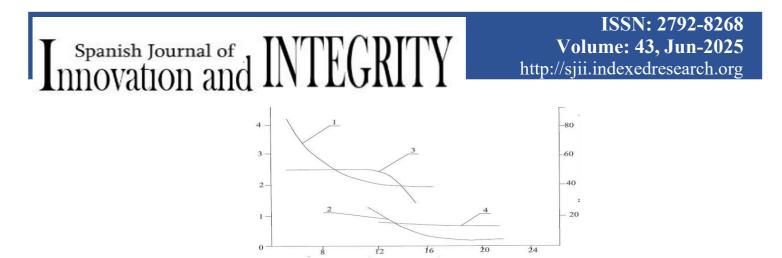
Active waste a mixture of clay and water, i.e. water waste downloads biofiltr with watering hanging fringe substance so share 3 - 6 g/dm³, to make up than high downloads downloads-hydraulic 2 - 3 times higher downloads and irrigation.



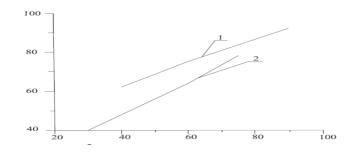
Picture 1. Of effluent flocculants the cleaning effect of water to molecular mass depends on the graph.

The city waste water compact device for cleaning flocculants when applied share of 0.5 mg/l) taken in and the amount of hanging fringe with two substances the amount of experience to 2400 mg/l and 700 mg/l I was and this flocculants molecular mass of 10^{-6} is flocculants when adding city waste water cleaning effect results in the following picture – 1 at quotes.

To the definition of viscosity associated without a multiple kation and anion with flocculants treatment when given waste water cleansing effect are detailed in the following chart. Flocculants molecular mass, much higher than is so many particle is connected with the effects of cleaning and flocculant micromolecules so high it is. This indicator flokulyant share the leak is detected ministry of water depends on the cleaning effect. Chart 1; 3 and 2 strips with see kation; 4 - line, while the anion see treatment is given when the obtained results on the basis of the generated graph is a line.



Picture 2. Kation and anion see flokulyantlar when applied



Picture 3. Waster flokulyant effects of clean water to charge relation of the graph

Waste water clean effektivligi of flokulyant to charge the associated graph in building two different types with was carried out. Flokatan flokaton and 200 KD share 2 mg/l when charge related without waste water tinitish effects chart

Originally from waste sand traps grill and water after deep biological cleaning process come and waste water this here or biofiltr aerotenk –taking the device in the cleaning process are. This process i.e. oxygen to biological needs (in kb), the processing of the effects of accounting for 69%, aerotenk – in Kb cleaning, the effects of accounting for 31% make up. Generalized full of clay and active biomass facilities to oxidation is achieved. Active clay is high in minerals (the 35 %) and low comparab le resistance (33 of 45) 10^{-10} cm/g having it.

After that, this device also in the next stage of the process of one of the treatment given waste of water, deep cleaning, disinfecting process also continued to sustain a can it.

Conclusion and suggestions. Use the aerator itself produced in pneumatic and pneumatic agitatorlardan; reconstruction of existing biological treatment facilities of removing nitrogen and phosphorus without implementing modern technologies; explain the hydraulic load equal to comb through the use of secondary flow to sinks; technological processes, technical solutions that allows to accept the reconstruction of structures without stop; communications use the available capacity and to the maximum extent; automation of technological processes and development of dispatching control systems; energy-saving equipment and corrosion-resistant materials, the use of consists of.

References:

1. Kuchkarova C. H. et al. The High Water Plants Water Road in Cleaning //Annual Research & Review in Biology. – 2019. – C. 1-5.

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Innovation and INTEGRITY

- Habibullaevna K. C., Xodjakulov M. N. Emergency Situations that May Occur as a Result of Public Disorder, Damage Reduction and Fire Safety Measures //International Journal of Formal Education. – 2022. – T. 1. – №. 12. – C. 74-77.
- Habibullaevna K. C. Fuel Based on Food and Agricultural Organic Waste Development of Safe Technology of Briquettes //INTERNATIONAL JOURNAL OF BIOLOGICAL ENGINEERING AND AGRICULTURE. – 2022. – T. 1. – №. 6. – C. 36-39.
- 4. Kuchkarova C. H. NATURAL DISTRIBUTION OF THE ALGAE PLANT OF THE TREATMENT OF TELEAROSOVODIS, SYSTEMATIC PLACE AND SEPARATE BIOLOGICAL FEATURES //Central Asian Problems of Modern Science and Education. – 2019. – T. 4. – №. 2. – C. 117-124.
- 5. Habibullaevna K. C., Mohinur N. MONITORING THE IMPACT OF INDUSTRIAL ENTERPRISES ON THE ENVIRONMENT //" ONLINE-CONFERENCES" PLATFORM. 2022. C. 285-288.
- 6. Habibullaevna K. C., Maftunakhan O. DEVELOPMENT OF SAFE TECHNOLOGY OF FUEL BRIQUETTES //" ONLINE-CONFERENCES" PLATFORM. 2022. C. 281-284.
- 7. Habibullaevna, K. C. (2023). Protection of Workers Sleep on Modern Solutions. *Miasto Przyszłości, 43, 225-230.*
- 8. Kh, K. C. (2023). Principles of Development of Engineering Ecology. *American Journal of Engineering, Mechanics and Architecture (2993-2637), 1*(10), 39-41.
- 9. Кучкарова, Ч. Х. (2023). СОВРЕМЕННОЕ СОСТОЯНИЕ ОХРАНЫ ОКРУЖАЮЩЕЙ СРЕДЫ В УЗБЕКИСТАН. Mexatronika va robototexnika: muammolar va rivojlantirish istiqbollari, 1(1), 85-87.
- 10. Kuchkarova, C., Jumanova, M., Tursunov, X., Urinova, S., & Nurmatov, J. (2023, June). Prospects for improving the technology of biological treatment of domestic and municipal waste water. In *AIP Conference Proceedings* (Vol. 2789, No. 1). AIP Publishing.
- 11. Habibullaevna, K. C. (2023). Analysis of Industrial and Environmental Safety Management Systems. *Best Journal of Innovation in Science, Research and Development*, *2*(6), 211-214.
- 12. Kochkarova, C., Abdurakhmanov, A., Jumanova, M., Tursunov, H., & Jalilov, A. (2023). Analysis of urban communal water supply. In *E3S Web of Conferences* (Vol. 402, p. 09024). EDP Sciences.
- 13. Habibullaevna, K. C. (2022). MEASURES TO ENSURE NOISE AND VIBRATION SAFETY IN MANUFACTURING ENTERPRISES. In " ONLINE-CONFERENCES" PLATFORM (pp. 289-293).