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Water Quality Management Models in Water Resource Systems

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key words

wastewater treatment, quality, water disposal systems, simulation modeling, automation

In the article, I have presented a model of a local controlled water disposal system. It allows making analysis and optimization of wastewater management at the level of a specific facility or territory. I have formulated an optimization problem, the solution of which makes it possible to select and justify the best option for the design of the water outlet. A methodology to justify the design of a water outlet has been developed, and criteria for the effectiveness of automated technological processes for cleaning industrial wastewater have been determined in order to improve the quality of purified water.

The main attention I have paid to the selection of optimal parameters of the diffuser structure, which affects the quality of water in the control section.

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