

# **DESIGN AND CONSTRUCTION OF MODERN SYSTEMS FOR PINNIPEDS IN RUSSIA. THE LEGISLATION REQUIREMENTS AND PRACTICAL SITUATION**

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Various Pinnipeds are kept in most Russian zoos. A huge gap exists between the historically established scheme of their maintenance (small pools with fresh water, frequent complete water changes, regular powerful chlorination) and the requirements of the international zoo associations. And since 2020 – also Russian national legislation requirements.

It is much easier to ensure proper water quality in small volumes inside buildings. For many years, high-quality exhibitions of the Voronezh, St. Petersburg and other aquariums have been successfully operating. But an attempt to extrapolate this type of system to large outdoor pools faces problems of temperature drop, large water discharge to the terrain, and economic feasibility

Even when planning completely new expositions from scratch, it can be difficult to take all these factors into account. Above this, municipal funding for most zoos also requires the project to pass State Expertise. In those institutions water treatment systems for pinnipeds are often evaluated by experts based on their experience with urban water treatment facilities

The project division of Aqua Logo Engineering received positive conclusions of the state expert Review on the projects of systems for keeping pinnipeds in Moscow and Perm zoos even before the entry into force of the law of 1937 from 30.12.2019, which now regulates such systems. We were pioneers. Now it will be a little easier for us and our colleagues. There is something to refer to both in legislation and in expert practice

The report discusses the main requirements for the maintenance of pinnipeds and ways to implement them in practice depending on the situation in various zoos