Environmental social advertising attracts public attention to these problems, and therefore plays an important role in the protection of nature. It should be mentioned, that such advertising is often cruel and shocking. However, only in such way, we can demonstrate to people the real harmto the environment. Greenpeace, World Wildlife Fund (WWF),and a radical organization People for the Ethical Treatment of Animals (PETA) make the largest number of advertising material [2].

Environmental advertising has the following functions: information, economic, educational, and social. Information function serves to highlight a certain environmental problem and to attract attention to it. Economic function forms a certain point of view on a problem, which can lead to economic improvement to a country. Educational function helps to spread certain social values and promotes them in society. Social function forms public consciousness and changes social behavior [3].

The aim of environmental social advertising is a change of public attitude to an environmental problem, and the inculcation of new socialvalues in the future.That's why environmental advertising is one of the way of work with social opinion. The realization of its aim affects on the effectiveness of social environmental organizations. There are a lot of state and non-state environmental programs, which use social advertising [1].

Mass media plays an important role in spreading knowledge about ecology among population and forming environmental world outlook. Because of wildly integration of electronic mass media, demand of accurate, sequential and emotionally balanced information about environmental condition and reasonable using natural resources. Apart from demonstration of concern about environmental condition, there is need to show positive developments in the protection of nature and to find constructive variants of solution to environmental problems.

It should be mentioned, that despite of the fact that the role of environmental social advertising is rather high, the question of studying the formation of mass social assessments, stereotypes and traditions remains relevant [2].

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WATER INTENSITY OF DAIRY INDUSTRY AND WAYS OF ITS OPTIMIZATION

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The piece covers the specifics of water use by dairies and ways of optimization of water consumption and water disposal by such facilities.

Keywords: water intensity, technological regulations, water use optimization.

A comparative analysis of water consumption by operators of various industries shows that food industry operators are the most water-intensive in terms of drinking water consumption per unit of output. Thus, to produce about 4,400 t of butter and cheese per year, a dairy consumes about 130,000 cubic meters of drinking water.

The main objective of the implementation of optimal water consumption is the use of environmentally friendly technology to support production with minimal harmful impact on the environment by reducing the discharge of sewage and reducing the mass of pollutants in their composition, emissions and solid waste, as well as water and energy consumption.

The calculations of specific water consumption technological standards for a number of dairies and their subsequent comparative analysis have shown the presence of a number of peculiarities in terms of water consumption: use of a large volumes of fresh drinking water for sanitizing equipment; formation of milk processing by-products: whey, which needs to be incorporated into the production process and processed; evaporated moisture (vapour) in vacuum evaporating installations; permeate water generated as a result of operation of reverse osmosis, nanofiltration and similar installations; limited use of recycled water by food industry operators in com-

pliance with the provisions of the regulations of the Ministry of Health; use of large volumes of liquid detergents (acids, alkalis, disinfectants), increasing the volumes of sewage. Under the circumstances, the development of zero discharge water use systems at dairies is largely complicated, which, however, does not prevent options for optimizing water consumption by the relevant operators.

Water consumption and, hence, sewage volumes may be reduced through:

– implementation of an equipment circulation cooling system (pasteurization and cooling units, vacuum evaporating installations, condensers and refrigeration unit compressors, etc.);

– use of condensate generated by vacuum evaporating installations to recharge the water recycling system, wash equipment, rinse equipment prior to its initial sanitary treatment;

– installation of CIP washing systems, including the circulation of detergents;

– modification of production processes to reduce the number of production operations, the scope of equipment involved and, accordingly, water consumption;

– improvement of equipment designs to reduce the volume of detergents used for washing out product residues;

– decrease in the consumption of detergents due to multifunctional nature of a single agent (detergent and disinfectant agent); strengthening detergent effectiveness of such agents through their laser treatment.

The mass of pollutants in waste water may be reduced through the implementation of a full cycle processing of milk by-products: whey drying, the use of whey as raw material for the production of dairy products (whey-based beverages), the production of rectified alcohol, raw alcohol, etc. This makes it safe to conclude that optimization of water consumption by dairies is an achievable objective.