



REPORT

of M.Auezov South Kazakhstan University
on sustainable development for 2019-2021



Green AUEZOV



4. Water

Water Conservation Program Implementation



Example of Water Conservation – Fountain in Campus 1



Irrigation ditch system of Shymkent city for storm water drainage



Showery runoff from the roof of the main campus building 1

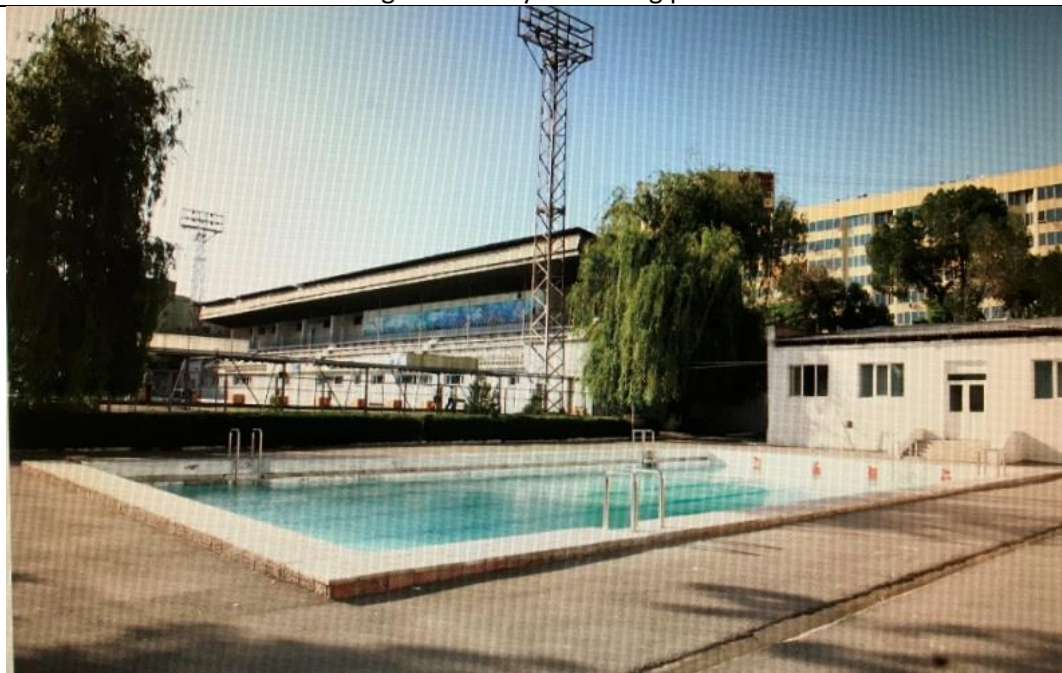
1. The university has a fountain in the shape of a tulip, which is also a decoration of the city center. The fountain is operated by the university and is equipped with special water filters that purify the water and feed it back. The fountain is open, so all the rainwater that gets inside is purified and used later for the operation of the fountain.
2. There are storm drains on the roofs of all buildings of the university, where rainwater gets. Thus, rainwater is collected from the roofs of buildings and goes through an extensive network of irrigation ditches to irrigate numerous fields, parks with vegetation or flower beds.

Thus, a water saving program is being carried out at the M. Auezov South Kazakhstan University, as a result of which more than 30% of water saving is provided.

Water Recycling Program Implementation



Large university swimming pool



Small University swimming Pool



Installation serving the swimming pools of the university



Swimming pool boilers



Installation for regulation of water supply to swimming pools



Large filters for water purification



Water treatment plant with 4 filters



S-shaped pipes for heating and preventing water cooling



University fountain with filters for water purification and recycling

The University has two swimming pools on Campus 6, a large and a small. A water recycling system is used to service them. Water enters the filters, through which it is purified and poured back into the pools. There are also filters in the fountain of the main campus building 1. There are water meters inside the buildings to keep track of water consumption. Thus, the university implements a water recycling system.

Water Efficient Appliances Usage (e.g. hand washing taps, toilet flush, etc.)



Water Efficient Appliances Usage

Appliance	Total Number	Total number water Efficient appliances	Percentage
Toilet	833	240	29%
Sink mixers	948	250	26%
		Average Percentage	27.5%

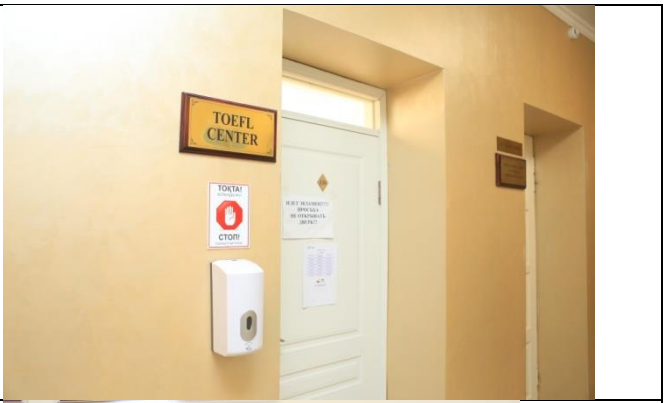
O-rings are installed inside the university's single-flow mixers to save water pressure. Double buttons are provided for flushing toilets. Pressing one button will drain the water less vigorously than pressing the other. Thus, water savings are achieved throughout the university.

Percentage of additional handwashing and sanitation facilities during Covid-19 pandemic



Disinfection tunnels in front of the entrance to each building and hostel





Hand sanitizers filled with antiseptic solution (M.Auezov South Kazakhstan University)





Quartz lamps at the university

Percentage of additional handwashing and sanitation facilities during Covid-19 pandemic
(M.Auezov South Kazakhstan University)

In the South Kazakhstan University named after M. Auezov, in connection with the Covid-19 Pandemic, the following measures were taken to prevent morbidity.

1. Disinfection tunnels installed on all campuses at the entrance. There are 16 tunnels in all educational buildings and 4 tunnels in dormitories.
2. There are 46 doors at the university, the number of permanent disinfecting mats is 46 pieces. Due to wear and tear, they are periodically replaced.
3. Each educational building and dormitories are equipped with hand sanitizers both at the entrance and on the premises. Sets of sanitizers are available at the entrance to the buildings, along the corridors on each floor, near the dean's offices, near washstands and toilets.
4. The university also purchased antiseptic solutions for sanitizers.
5. Employees visiting workplaces are provided with medical masks.
6. All auditoriums and dormitories are equipped with quartz lamps, quartzing is carried out according to the schedule. Quartz charts are posted in each auditorium.
7. At the entrance to educational buildings and hostels, security and law enforcement officers measure body temperature using non-contact medical thermometers.

Facilities	Number of Facilities
Disinfectant tunnel	20
Disinfecting mats	46
Sanitizer with antiseptic solution	727
Medical masks	50 000
Quartz lamps	340
Non-contact medical thermometers - thermal imagers	190
etc	51323

$$\text{Question [4.5]} = \frac{\text{Total Number of Facilities}}{\text{Total Number of Building}} = \frac{51323}{22} = 2332$$

Total Number of Building – 22 (include 16 Building and 6 Student dormitory)