



Metric 6.3

Saint Louis University

strengthening water conservation, wastewater management, and safe sanitation systems across its campuses to ensure reliable, clean, and sustainable water services for the entire university community.



6 CLEAN WATER
AND SANITATION





Indicator 6.3.1

Saint Louis University Wastewater treatment



6 CLEAN WATER
AND SANITATION



Implements Wastewater Treatment

In compliance with Ordinance No. 18, s.2016 (Environmental Code of Baguio City) and the Philippine Clean Water Act of 2004 (RA 9275), Saint Louis University (SLU) has installed and operates Sewage Treatment Plants (STPs) across its campuses to ensure the safe and sustainable management of domestic wastewater. The system covers effluents from kitchens, wash areas, and toilets, treating them on-site before discharge into storm drains leading to the Balili (Class B) and Bued (Class C) Rivers.

SLU's tertiary treatment facilities, developed in partnership with KBWorld Trading Corporation, combine Advanced Oxidation Process (AOP) and biofiltration technologies. The AOP stage uses ozone-generated hydroxyl radicals to break down organic and inorganic pollutants, while biofiltration through multi-media filters removes remaining solids and pathogens. The system achieves 80–95% BOD reduction, over 90% TSS removal, and ensures compliance with DENR Administrative Order 2016-08 (General Effluent Standards).

Quarterly monitoring confirms that SLU's effluent consistently meets Class B and C water standards (BOD <2 mg/L, TSS <2 mg/L, Fecal Coliform <1.8 MPN/100 mL). Immediate corrective actions—such as ozone recalibration or filter replacement—are implemented when needed, in coordination with DENR-EMB and accredited laboratories.

Sewage Treatment Plant Capacity

Campus	Capacity	Receiving Body of Effluent	Water Classification
SLU Main			
1. STP 1	300 cu.m	Balili River	Class B
2. STP 2	250 cu.m	Balili River	Class B
SLU Maryheights	440 cu.m	Bued River	Class C
SLU Navy Base	170 cu.m	Balili River	Class B
SLU SHMC	Upgraded from 200 cu.m to 390 cu.m	Balili River	Class B



Implements Wastewater Treatment

All STPs support SLU's sustainability and water reuse initiatives, with treated water repurposed for irrigation, fire suppression, and other non-potable applications. Each STP is equipped with a full set of treatment components—including coarse and fine filters, ozonation units, sequencing batch reactors (SBR), anoxic and septage tanks, chemical precipitation chambers, chlorination systems, sludge digesters, and effluent wet wells—all designed to improve treatment performance and protect surrounding water bodies.

SLU's fifth STP at Maryheights Campus and fourth STP at Navy Base highlight the university's decentralized wastewater management strategy—ensuring full treatment, odor-free effluent, and reuse in partnership with community beneficiaries such as the ICM Missionary Sisters.

The upgraded STP at Sacred Heart Medical Center (SHMC) doubled its capacity from 200 to 390 cu.m/day to handle hospital wastewater. Its AOP-biofiltration system effectively removes pharmaceutical residues and pathogens, ensuring effluent quality far exceeding Class B standards.

SLU follows a decentralized wastewater management strategy, with multiple STPs operating at the Main Campus, Navy Base Campus, Maryheights Campus, and Sacred Heart Medical Center (SHMC). The upgraded SHMC STP doubled its capacity from 200 to 390 cu.m/day and uses AOP-biofiltration to treat hospital wastewater, including pharmaceutical residues and pathogens, producing effluent that exceeds Class B quality standards.

SLU's treatment plants feature technologically advanced components—including coarse and fine filters, ozonation units, sequencing batch reactors (SBR), anoxic and septage tanks, chemical precipitation chambers, chlorination systems, and sludge digesters—each designed to optimize treatment performance and safeguard downstream water quality.

Through these initiatives, SLU demonstrates leadership in environmental stewardship and sustainable water management, directly advancing UN Sustainable Development Goal 6 (Clean Water and Sanitation) and the CICM advocacy for the Integrity of Creation.

Sources:

<https://www.slu.edu.ph/2023/04/12/slu-wastewater-treatment-system-gets-upgraded-to-latest-innovative-technology/>
<https://www.slu.edu.ph/2024/05/20/slu-conducts-blessing-ceremony-for-the-slu-navy-base-campus-sewage-treatment-plant/>
<https://www.slu.edu.ph/2025/01/28/slu-conducts-blessing-ceremony-for-the-slu-maryheights-campus-sewage-treatment-plant/>



Sewage Treatment Plants at the SLU Campuses

