

SDG 6



Indicator

6.3.1

Wastewater Treatment

Misr International University (MIU) acts as a responsible body regarding waste management. By maintaining a treatment plant with a 225 m³ daily capacity and successfully recycling over 75,000 m³ of water annually for irrigation, the university has a proven, effective process in place for treating and reusing wastewater.

Treatment
Infrastructure and
Capacity

The university has established a robust infrastructure to handle campus-wide sanitation needs.

- **Collection Network:** The university operates a centralized sewage network that collects all wastewater generated across the campus.
- **Treatment Facility:** All collected wastewater is transferred to an on-site sewage treatment plant.
- **Operational Capacity:** The plant is designed to operate with a treatment capacity of **225 m³ per day**.

<p>Treatment Process and Utilization</p>	<p>The core objective of the university's treatment process is the conversion of waste into a reusable resource, minimizing the environmental footprint.</p> <ul style="list-style-type: none"> • The Process: Wastewater undergoes treatment within the plant to meet safety standards for non-potable use. • End-Use Application: The treated water is strictly utilized for the irrigation of the university's green spaces, reducing the demand for freshwater reserves. 						
<p>Quantitative Analysis & Water Usage Statistics</p>	<p>Data collected regarding the plant's output and campus irrigation needs demonstrates a high level of dependency on recycled water.</p> <ul style="list-style-type: none"> • Daily Output Analysis <p>On normal working days, the treated sewage output is calculated based on a 90% recovery rate from the input.</p> <table border="1" data-bbox="505 1058 1414 1203"> <thead> <tr> <th>Metric</th> <th>Value</th> <th>Note</th> </tr> </thead> <tbody> <tr> <td>Daily Treated Output</td> <td>207 m³</td> <td>Calculated as 90% of 230 m³ input</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Contribution to Irrigation <p>The treated wastewater forms most of the water volume used for maintaining campus vegetation.</p> <ul style="list-style-type: none"> • Total Annual Irrigation Usage: 98,098 m³ • Annual Treated Wastewater Contribution: 75,348 m³ • Daily Total Irrigation Usage: 269.5 m³ <p>This data confirms that most of the university's annual irrigation needs are met through its internal wastewater treatment process.</p>	Metric	Value	Note	Daily Treated Output	207 m³	Calculated as 90% of 230 m ³ input
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<p>Integration of Air Conditioning Drainage</p>	<p>The university has implemented a secondary water capture process involving the air conditioning (AC) systems.</p> <ul style="list-style-type: none"> • Methodology: Water generated from AC drainage is not discarded; it is diverted into the university's sewage network to be processed and reused. 						

- **Volume Recovered:** Approximately **12 m³ per day**.
- **Operational Basis:** This figure is based on the operation of total AC units for an average of 8 hours per day (excluding central air conditioning), considering permitted operating periods.