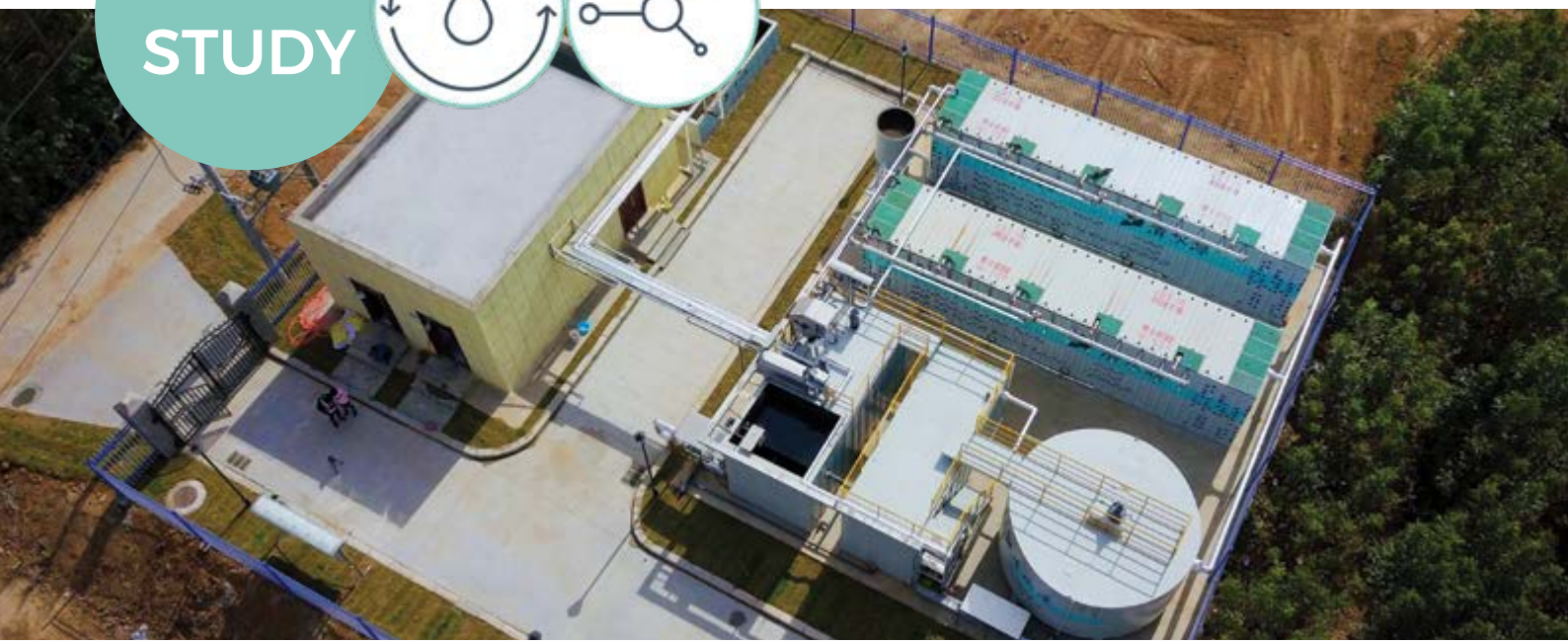
CASE STUDY



Aspiral™ Smart Packaged Wastewater Treatment System

Rural Wastewater Treatment, Henan Province, China

- **Location:** Taiping Village, Luolong District Henan Province, China
- **Capacity:** 300 m^3/day (79,200 GPD)
- **Technology:** Aspiral™ MABR-based Smart Packaged Wastewater Treatment System
- **Customer:** Qingshuiyuan Environment Technology Co. Ltd

Background

To comply with new and expanding government regulations for wastewater reuse, Taiping village, located in Henan Province, needed a wastewater treatment plant to treat effluent produced by 5,000 residents that was previously untreated in this rural setting.

The Challenge

- The remote location and limited accessibility of the site make it difficult for normal transportation to deliver the system and equipment
- The installation and commissioning schedule of the entire plant equipment was extremely tight with only ten days for completion
- The commissioning of the plant was during the region's rainy season, which caused occasional water flows that impacted the influent design parameters and the equipment scope

Solution Criteria

- Meets Class effluent
- Capacity: 300 m^3/day
- Low energy consumption
- Economical CapEx & OpEx
- Environmentally friendly

fluence

CASE STUDY • Luolong Henan | 300 m^3/day Aspiral™

The Solution

The plant is constructed using an Aspiral™ MABR-based solution, which was chosen due to its innovative capabilities and unique advantages:

- Lower energy consumption
- Smart remote monitor and control
- Efficient Nitrogen and Phosphorous removal
- Modular, portable, scalable

Design Parameter (mg/L)	pH Range	NH_4–N	COD	TN	TP	TSS	BOD
Influent	6~9	30	400	40	5	300	200
Effluent	6~9	< 5	< 50	< 15	< 50	< 10	< 10

检 测 报 告

Test Report

杭环检第 181001201 号

项 目 名 称：

委 托 单 位：

杭州市环境检测科技有限公司

3rd Party Wastewater Test Report

Released by Henan MOL Testing Company
Report#No. MOLT201810033

Item (mg/L)	pH	NH_4-N	COD_{cr}	TN	TP
Influent	7.34	22.7	99	24.4	1.86
Effluent	**7.41**	**0.344**	**16**	**10.4**	**0.393**
Class 1A Standard	**6 ~ 9**	**< 5/8**	**< 50**	**< 15**	**< 0.5**

** Class 1A Standard refers to the National Standard of P.R.China GB18918-2002 Pollutant Discharge Standard of Municipal Wastewater Treatment Plants*

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