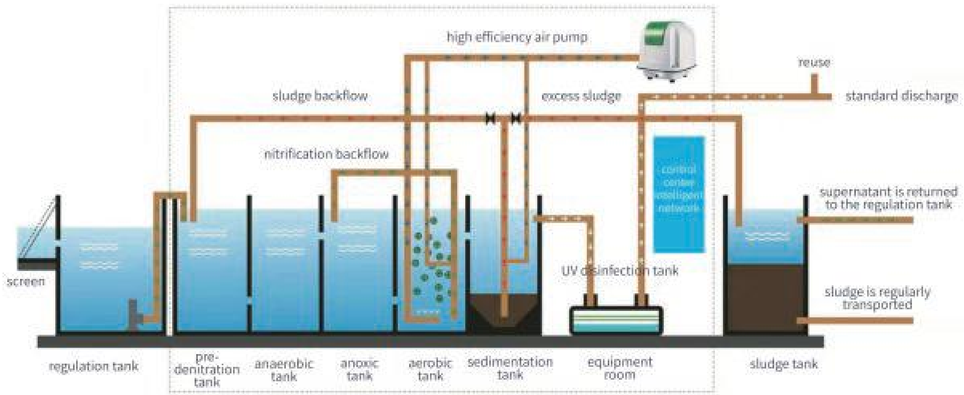
THE PIONEER OF URBAN WATER MANAGEMENT

DECENTRALIZED SEWAGE TREATMENT

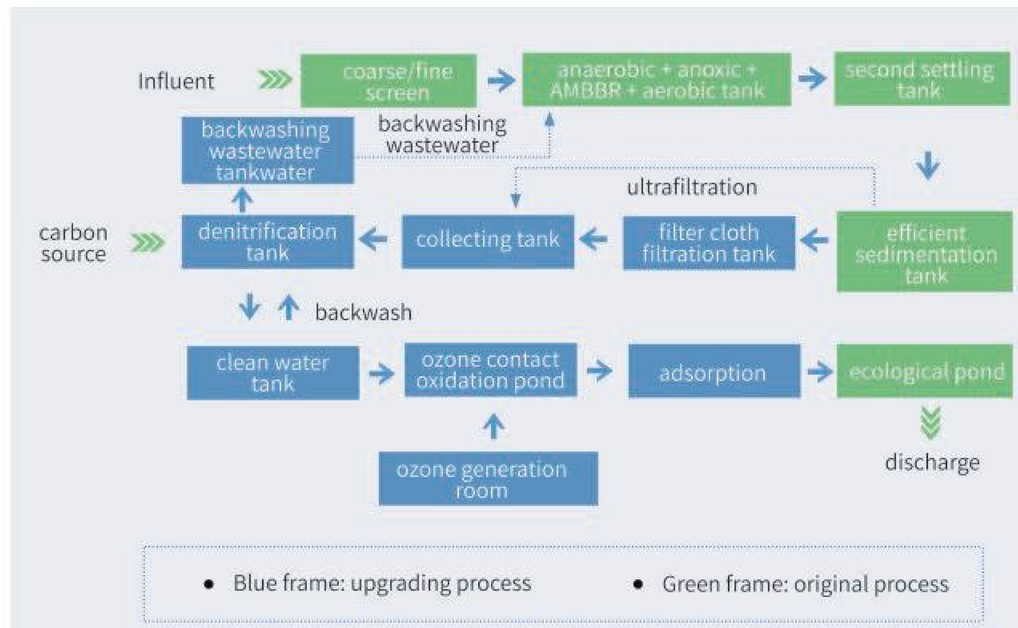


Designed with standardization and modularity Scale and automation as production target Integrating advanced technologies High efficiency & low-cost treatment	← →	Standardized Informative Intelligent Decentralized wastewater treatment

MUNICIPAL SEWAGE TREATMENT PLANT UPGRADING

A PROJECT DESIGNED TO WATER QUALITY OF INFLOW AND OUTFLOW

Monitoring item	unit	Level A	Type IV	Removal rate
CODCr	mg/L	50	≤ 30	40%
BOD5	mg/L	10	≤ 6	40%
NH_3-N	mg/L	5	≤ 1.5	70%
TN	mg/L	15	≤ 1.5	90%
TP	mg/L	0.5	≤ 0.3	40%



FEATURES

- Use of strong ozone oxidation to further reduce effluent COD
- AMBBR (anoxic membrane bioreactor) process, dedicated active biofilm
- Unique post-denitrification biofilter and resin adsorption process to ensure total effluent total nitrogen less than 1.5mg / L

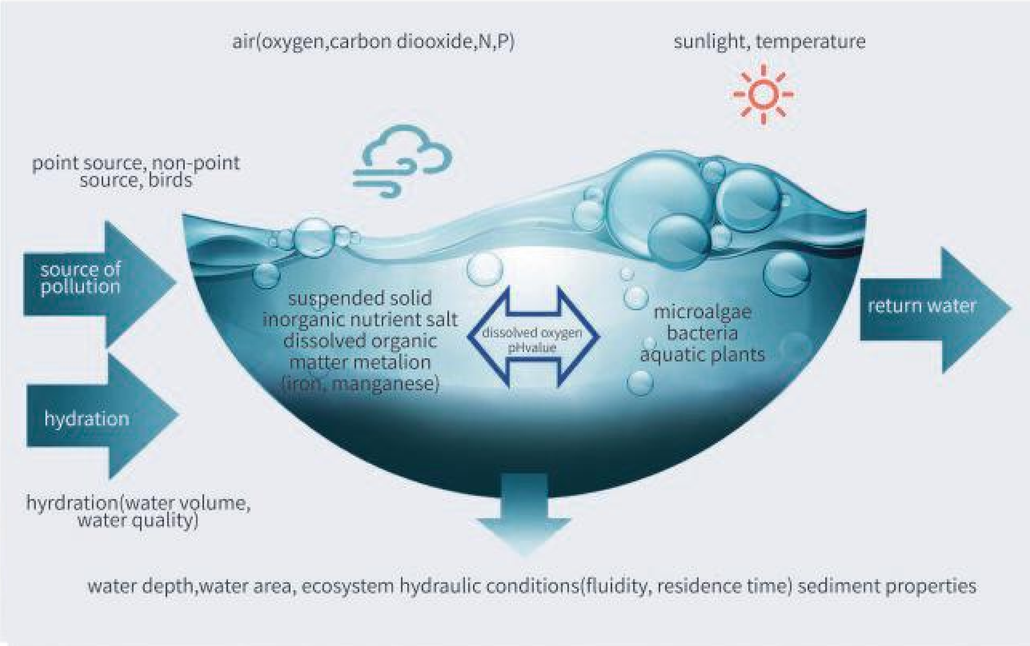
BIOREMEDIATION——BIO-PURIFIER FOR RIVER & LAKE

WHAT IS BLACK ODOR WATER BODY

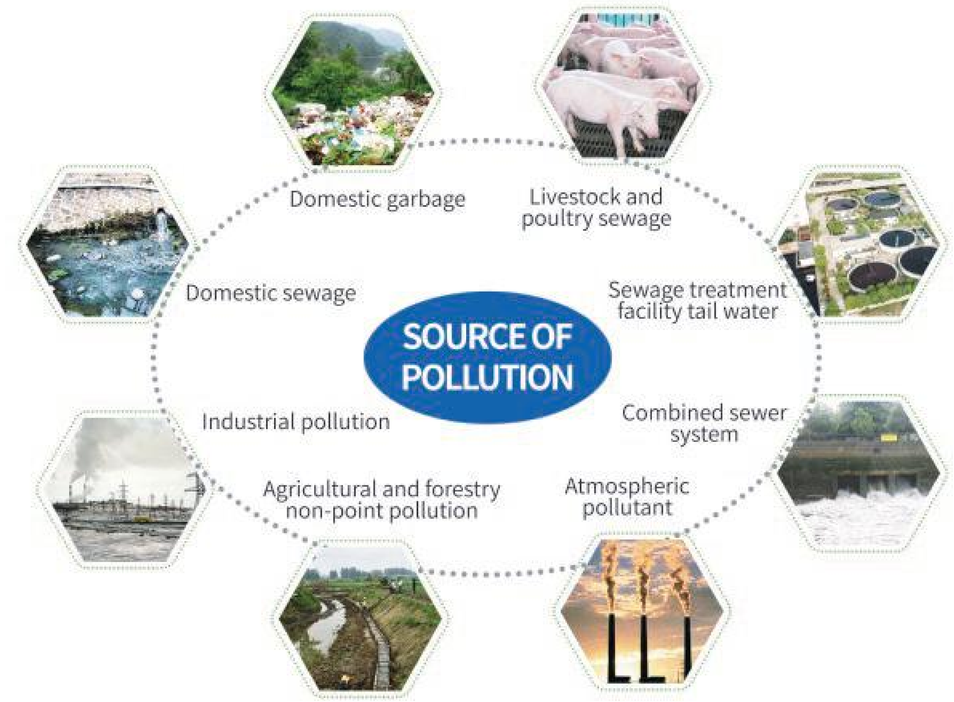
Black-odor water body is a body of water that has lost its ecological function.

The odorous black water is a phenomenon in which water turns black and emits odorous gas. It is a serious phenomenon among environmental pollution, and it severely threats the sustainable development of society and survival of mankind. And the urban odorous black water remarkably influence urban landscape, daily life of citizens

WHAT IS THE INFLUENCING FACTOR



SOURCE OF POLLUTION



The organic substances that cause black odorous water pollution are mainly composed of C, H, O, N, P, S and other elements, and their composition is particularly complicated. Black and odorous water pollution mainly comes from the direct discharge of domestic sewage, the littering of garbage, and the smuggling of industrial wastewater. Excessive pollution results in the imbalance of oxygen supply and oxygen consumption in the water body. The water body is under oxygen and even anaerobic conditions convert pollutants and produce odorous substances such as ammonia nitrogen, hydrogen sulfide, volatile organic acids, and black substances such as iron and manganese sulfide.

Pollution Degree Classification		
Characteristic index	Mild black odor	Severe black odor
transparency (cm)	25-10	<10
DO (mg/L)	0.2-2.0	<0.2
ORP(mV)	-200-50	<-200
NH_3-N(mg/L)	8.0-15	>15
Note :When the water depth is less than 25cm, the transparency is 40% of the water depth.		

INDEPENDENT PATENT TECHNOLOGY

The bio-purifier for river & lake is a bioremediation system developed by our company for the efficient purification of black odor water and surface water worse than Grade V, which integrates technical characteristics of various river water bioremediation and has a number of research and development patents.

SEWAGE INTERCEPTION

sewage interception
non-point source control

INTERNAL SOURCE CONTROL

Garbage cleaning
Biological debris & floating debris treatment
Frequent dredging

ECOLOGICAL RESTORATION

Shore repair
Ecological purification
Artificial aeration

OTHER TECHNOLOGY

Flowing water cycle
Clear water supply
Local processing
Bypass processing

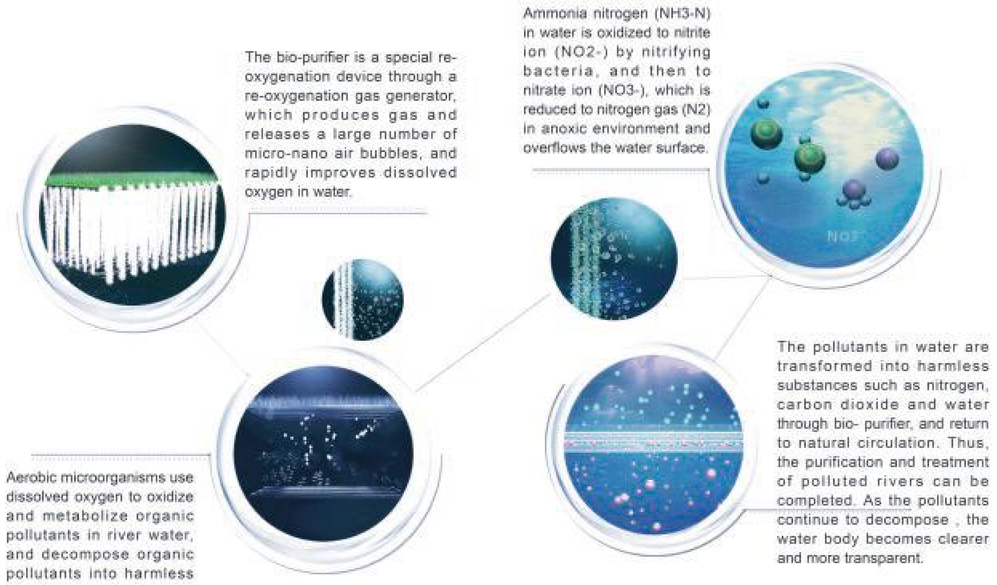
Bio-purifier adopts bio-contact oxidation biomembrane process which combines in-situ microbial activation with special microorganism to form a high-efficiency biomembrane.

Bio-purifier integrates aerobic reoxygenation, hydrolysis acidification, anaerobic treatment, aerobic treatment and other biochemicals.

Bio-purifier has the ability of continuous digestion of water pollutants, gradual improvement of water quality and improvement of water self-purification ability.

CHARACTERISTICS

PURIFICATION PRINCIPLE



TREATMENT PROCESSES

Black-odor & stinky ⋙ Black-odor water---grey water ⋙ Grey water--- clean water

Black-odor & stinky elimination ⋙ Clear & transparent

WATER QUALITY BEFORE TREATMENT

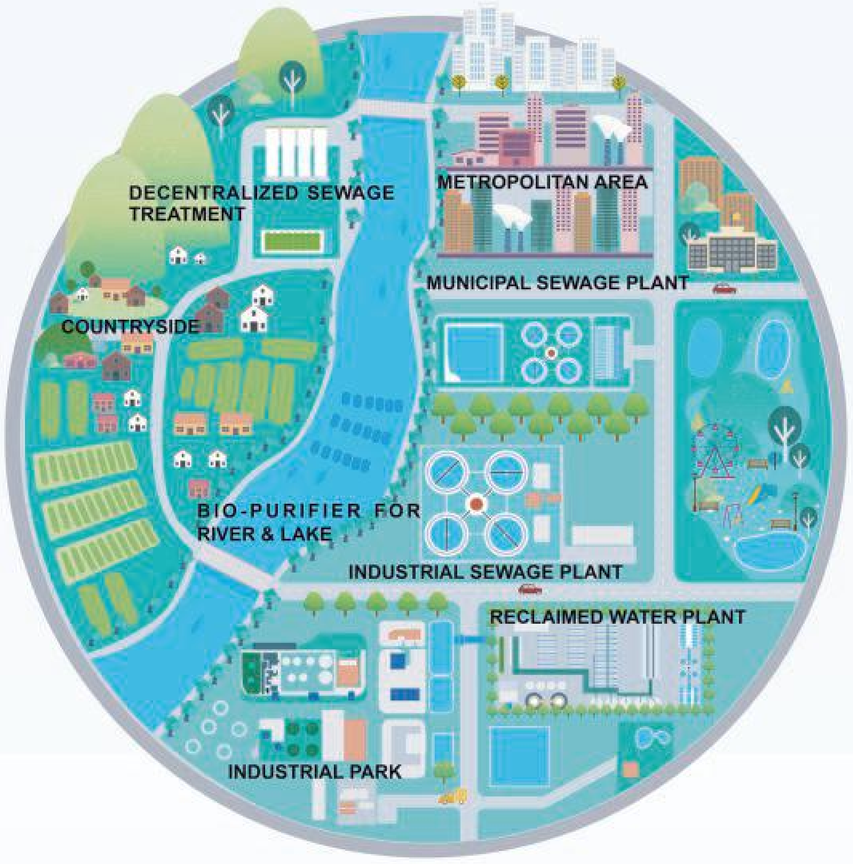
Index before treatment	COD (mg/L)	BOD (mg/L)	NH_3-N (mg/L)	SS (mg/L)	pH
Water quality	68	42	14	30	6.0~8.5

WATER QUALITY AFTER TREATMENT

Index after treatment	COD (mg/L)	BOD (mg/L)	NH_3-N (mg/L)	SS (mg/L)	pH
Water quality	≤ 40	≤ 10	≤ 4	≤ 8	6-9

CASES

- 20,000 tons/day black odor water remediation project,China
- Black odour water treatment in Suzhou Development Zone,China
- Black odor water treatment in Xiaoxian,China
- Black odor water treatment in Tangshanliming,China
- Xiaoxian Daihu Lake Water Quality Improvement Project,China
- Three Rivers Regulation Project in Pukou District,China



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Comprehensive service provider for water environment management