Environmental Protection

【 Green Production and Sustainable Development】

Environmental protection is the lifeline of an enterprise. The United Laboratories, with a strong sense of social responsibility, adheres to the sustainable development concept of "environment priority" and properly handle the relationship between development and environment. Embracing the national environmental protection strategy, the Group invested resources, imported international advanced technology and equipment and assembled first-rate professional team to build green productivity and an economic industry chain of environmental friendliness and recycling and achieve a win-win for both environment and economic development.

Well-Established Environmental Protection System

The environmental protection system of The United Laboratories, as compared with those of its peers in China, is among the better configured and has a higher proportion in the investment. It is a large comprehensive wastewater treatment system that integrates biochemistry, physical chemistry, aerobiotic and anaerobic, with wastewater and exhaust gas emission both in conformity with relevant national standard and environmental requirements. In order to elevate our level of environmental management, improve our environmental performance and environmental awareness of the staff, the Group has successfully adopted the ISO14001 International Standard for Environmental Management Systems. In light of the considerable attention and innovativeness the Group attached to environmental protection, was invited to become a "governing unit of China Environmental Friendly Enterprise Alliance".

Governing unit of China
Environmental Friendly Enterprise Alliance

Outstanding Enterprise in
Environmental Protection

Wastewater Treatment

The United Laboratories always adheres to green environment and sustainable development and considers environment friendliness as a priority in the process of engineering construction, enterprise development and production and operation. Wastewater is treated with the "preprocessing – hydrolytic acidification - Upflow Anaeroic Sludge Blanket (UASB) – Cyclic Activated Sludge System (CASS) – catalytic oxidation – secondary sedimentation tank – measuring tank" procedure, with multiple workshop sections including biochemical operation, environmental detection room, four-effect evaporation, machine maintenance, polarization instrument scrutinizing at every step, assisted with various contingency plans and management systems to ensure to the utmost extent the 24-hour continuous functioning of sewage treatment facility and up-to-standard wastewater discharge. Moreover, the Group invested in and set up COD online monitoring system, through which wastewater is monitored at the outfall and discharged if its COD is up to standard. The system is interconnected with the government environment online monitoring platform and achieved real-time data transmission and monitoring.

The Group's environmental indexes, including chemical oxygen demand (COD), biochemical oxygen demand (BOD_5), suspended solids (SS) and pH value are all in accordance with national and governmental standards.

Waste Gas Treatment

The Group established deodorization system and biogas desulphurizing system which primarily comprise induced draught system, plasma decomposition system, caustic soda liquid spray absorption, biosorption, etc., to undertake sealed treatment to the emission source of odorous gas originating from the running environmentally protective facilities, such as anaerobic UA reaction tank and hydrolysis acidification pool. Complete deodorization is achieved by collecting gas with sealed pipeline to be discharged after being processed up to standard.

The Group's environmental indexes of sulfur dioxide (SO_2), oxynitride (NO_X) and dust are all in accordance with relevant national standards.

Solid Waste Treatment

The Group, strictly in compliance with the national administrative regulations on hazardous and solid waste and with corresponding management system, records and contingency plans for hazardous and solid waste, disposes its wastes in a legal, appropriate and explicit manner. Among the wastes, zymophyte residue is transferred and disposed of at a company with hazardous waste business license qualification to be recycled for organic fertilizer production; and sludge is transferred to a company with hazardous waste business license qualification to be comprehensively disposed of and utilized.

Environmental Sustainability

The Group strives to forge a sustainable business model which is "safe, environmentally friendly and efficient", with an aim to improve its production process in both advancement and environment-friendliness. With persistent innovation and exploration, we will keep up our endeavour to be an admired company celebrated for its environment-friendliness, energy saving and internationalized management while continuing our pursuit of green production and sustainable development.

• Cyclic Economic & Industrial Chain

Our subsidiary in Inner Mongolia managed to boost local economy through purchase of local premium corn, which in turn enhanced the income of the farmers. Up to now, it has established a cyclic economic & industrial chain that runs Corn Fermentation – 6-APA Intermediate Products – Amoxicillin Bulk Medicine – Amoxicillin Finished Products, the upper end of which connects with the origins of corn and starch processors, the middle section connects with intermediate bulk medicine and finished products, and the lower end connects with the organic fertilizer producers, with the by-products (fungi residue) turned into organic compound fertilizer after non-hazardous treatment, undergoing a magic conversion from waste to wealth. By forging such a beneficial cyclic economy & industrial chain, we strive to achieve higher standard.

• Optimization of Production Process

Our proprietary "Green Enzymatic Method" Amoxicillin bulk medicine process is the most advanced production process in the world. It underwent significant improvements in environmental friendliness compared with the traditional chemical processes.

• Optimization in Waste Water and Gas Treatment

By recycling the reclaimed water, we have reduced the consumption of one-off water; and we deployed MVR (ultra-condensation for high-density waste water) technology in high-density waste water treatment, which enabled us to significantly reduce the production of pollutants such as COD, BOD and inorganic salts at source. In respect of waste gas treatment, we applied the low-temperature plasma technology in the end treatment and subsequent treatment of waste gas.

• Resource Recyle

Methane, the product of solid waste treatment, can be piped to the burner for heating the boilers after desulphurization, saving 15 tons of standard coal a day. It contributes to energy saving, emission reduction and resource recycling.

• Landscape Gardening

We have been constantly increasing the area of plant coverage, trying to make our factory a green and comfortable workplace.