

Enhancing Environmental Protection

Environmental risks and countermeasures

The construction of ecological civilisation is highlighted to a new strategic level in China. The Chinese government proposes that “stringent laws and regulations ought to be observed to protect the ecological environment”, successively issues laws and regulations on air, water and soil, etc. and enhances supervision. Correspondingly, environmental protection standards and pollutant discharge volume have become increasingly strict, thus proposing higher requirements for environment management of Sinopec Corp.

We have always paid high attention to environmental protection. We strictly obey *Environmental Protection Law* and other related laws and regulations on air, water and soil pollution prevention. We have built

relevant management system, enhancing the headquarters' role in guiding and supervising as well as the subsidiaries' role in enforcement.

In 2017, we implemented the new standards in refining and petrochemical industry, completed the treatment of sewage and flue gas, and actively conducted the comprehensive treatment of VOCs. We finished the compilation and amendment of emergency plans for environmental emergencies and heavy pollution weather, complying with the relevant national requirements. According to the national pollution permit and self-monitoring technology guidelines in relevant industries, we modified the self-monitoring plan, and implemented new requirements of sewage, flue gas and noise,

and disclosed the results. We further regulated environmental management of construction projects, enhanced assessment, and implemented “three-simultaneity” management (environmental facilities shall be designed, constructed and put into operation simultaneously with the main construction). All of the newly-built projects have obtained approval from the authorities. Meanwhile, some subsidiaries which are listed as key pollutant discharge unit have disclosed environmental information as required. Details may be referred to the websites of local governments. In 2017, the expenditure of environmental protection of Sinopec Corp. was about RMB 7.85 billion.

Actively reducing flue gas emission

Sinopec Corp. constantly works on emission reduction of main pollutants and upgrades catalytic cracking, sulphur recovery units, the heating furnaces and coal-fired boilers in refining and chemical subsidiaries to meet ultra-low gas emission requirements. We also carry out the prevention and control of air pollution in Beijing-Tianjin-Hebei region and their surrounding regions and revamp the coal-fired boilers in eastern China to reach ultra-low gas emission level.

Case Study: Addressing the Problems and Enhancing Environment Management Measures

On April 5, 2017, Sinopec Yanshan was detected to have problems in exhaust emission treatment and electronic data accounting when the Ministry of Environmental Protection conducted inspection.

Responses:

On April 6, 2017, a meeting was held specifically for the incident at Sinopec headquarters. Causes were investigated and rectification measures were implemented. The persons in charge were dismissed from their positions. The management decided to assign six teams to supervise subsidiaries within the area of “2+26” cities since April 10.

Yanshan sorted out the environmental protection work of all units focusing on “Three Wastes” emissions. Approximately RMB 800 million had been invested, VOCs treatment projects covering tank field gas and boiler revamp had been completed and 46 automatic VOCs monitoring sites were built. After this, Yanshan built wetland park in Niukouyu Ecological Center where the operation site was located, covering 80,000 square meters of area. In November 2017, the park was opened to the public for free.