

## **Case Study 3 for “Guidelines for Auditing Climate Change” Project**

### **1、 Name of the audit assignment :**

Research upon the Causal Relation between Financial Input for Exhaust Gas Treatment in Controlled Key Enterprise “X” and the Improvement of Air Quality

### **2、 Audit Objectives :**

A representative company targeted in air pollution: “X” Nonferrous Metal group Corporation. Ltd. was selected by auditors to carry out analysis and assessment upon the impact of its exhaust gas emission upon air quality with its financial input in environmental protection projects in recent years in view and put forward accordingly solutions and recommendations for the improvement of air quality.

### **3. Audi Methodology:**

Quantitative analysis, including Trend Test (Rank Correlation Coefficient) Evaluation Method and Comprehensive Pollution Index Appraisal were used.

### **4. Audit Contents:**

Exhaust gas emission trend in “X” Nonferrous Metal group Corporation. Ltd.; Comprehensive atmospheric quality appraisal in industrial Area of “Y”

city; characteristics of urban atmospheric pollution of “Y” city as well as cause analysis upon the trend of pollution.

## **5. Audit Findings:**

During the whole period of Tenth-Five Year Plan for National Economic and Social Development and early years of Eleventh-Five Year Plan for National Economic and Social Development, “X” Nonferrous Metal group Corporation. Ltd. has made certain achievements in improving atmospheric quality with intensified efforts for controlling and preventing pollution. But air pollution situation is still not so optimistic as the annual concentration of sulfur dioxide (SO<sub>2</sub>) and Inhalable Particulate Matter (IPM) fail to continually and stably attain National Grade II. Standards and the frequency of acid rain is relatively high. In future, for controlled key enterprises, like “X” Nonferrous Metal group Corporation. Ltd., should further increase spending on energy conservation and emissions reduction with the complete upgrading of backward technologies and facilities that are energy intensive, raw material-consuming or highly polluting. With the improvement of atmospheric quality in its surroundings in a gradual way, the sustainable development of the city could be promoted and a “win-win” situation could be seen in economic returns and environmental impacts.

## **6. Audit Recommendations:**

6.1. To increase spending in pollution control and reduce the total discharge quantity of the pollutants. We should increase the financial input in pollution

control, especially the funds used in controlled key enterprises for shutting down backward production technologies and facilities and reducing the total discharge quantity of the pollutants. Competent authorities should intensify their efforts of supervision and monitoring to ensure the safety and performance of financial input for pollution control.

6.2. To strengthen industrial pollution control and reduce the discharge intensity of pollutants. We should focus on control of key pollution sources by ensuring the key pollution sources meeting the discharge limits steadily and implement a rolling control plan for key pollution sources. We shall put the emission of sulfur dioxide (SO<sub>2</sub>) under strict control and provide a thorough solution to the SO<sub>2</sub> pollution in the extractive metallurgy industry of nonferrous metal (such as Lead & Zinc Smelting, Copper Smelting and Molybdenum Smelting). We should put the heavy metal pollution in extractive metallurgy industry (such as Lead & Zinc Smelting, Copper Smelting, Molybdenum Smelting and Ferro-Alloys) under strict control.

6.3. We shall carry out an intensive and comprehensive rectification upon urban environment in order to improve comprehensive atmospheric quality. We should list SO<sub>2</sub>, Inhalable Particulate Matter (fine particulate in particular) as key areas for controlling urban atmospheric pollution, and our monitoring system should focus on accidental release of toxic pollutants such as phosgene, alkaline air, hydrogen sulfide and chlorine.

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