天津市二氧化硫排放现状及削减工作报告

一、二氧化硫排放现状

长期以来, 煤炭在我市能源结构中占主导地位。由于大气中二 氧化硫主要来源为矿物类燃料燃烧所致, 其中煤炭燃烧过程中释放 的二氧化硫占全市二氧化硫排放量的90%以上, 所以燃煤是大气中二 氧化硫的主要来源。此外,由于天津市热化率相对偏低,冬季采暖 期民用燃煤量较高,由此形成的低空面源影响较为突出,导致二氧 化硫成为主要污染物,控制二氧化硫污染问题成为天津市大气污染 防治工作的重心。

- (一) 民用燃煤炉灶二氧化硫排放情况
- 1、二氧化硫排放状况
- 2、二氧化硫控制措施
 - (二) 天津市工业锅炉、窑炉二氧化硫排放情况
- 1、二氧化硫排放状况
- 2、二氧化硫控制措施
 - (三) 天津市火电厂及二氧化硫排放情况
- 1、二氧化硫排放状况
- 2、二氧化硫控制措施

我市在克服能源超常规增长, 电力需求紧张等不利因素的影响, 积极采取有效措施, 使我市电力行业二氧化硫防治工作取得突破性 进展。

- (1) 有效控制电厂燃煤含硫量。
- (2) 积极实施电厂烟气脱硫工程。

(3) 制定法规、政策、标准保障防治措施落实。

二、二氧化硫削减提议

- "十五"期间,在全国二氧化硫排放总量持续增长的严峻形势 下,我市作为二氧化硫控制区,克服能源持续增长的不利因素,采 取实施蓝天工程行动,完成"十五"期间国家下达的二氧化硫削减 10%的目标。
- (一) 贯彻落实全国大气污染防治工作会议精神, 按照《国务 院关于落实科学发展观加强环境保护的决定》中"2004年底前投运 的二氧化硫排放超标的燃煤电厂,应在2010年底前安装脱硫设施" 的要求,在"十一五"期间内陆续完成全市各电厂全面实施烟气脱 硫安装工程工作。
- (二)"十一五"期间加大投入,对现有 400 余台 10 t/h 以上 工业及供热燃煤锅炉实施烟气高效脱硫改造工程,确保二氧化硫排 放达到天津市《锅炉大气污染物排放标准》II时段标准要求。
- (三) 加强对燃煤锅炉脱硫设施建设和运行的监管, 以及对已 与国家签定责任书的电厂的督查力度。
 - (四)继续实施 10 t/h 以下燃煤锅炉改燃和拆除并网工程。
- (五)落实国家二氧化硫、烟尘总量控制目标,积极推行二氧化硫 排污许可证制度。

三、二氧化硫削减工作存在的难点问题

- (一) 政府缺乏长期的使用清洁能源的激励政策。
- (二) 现有的排污收费政策不能如实反映出污染者应付的环境 责任的价值。
 - (三) 对燃煤锅炉安装脱硫除尘装置是有效控制二氧化硫污染、

减少二氧化硫排放量的有效手段。

(四) 供热、燃气收取一次性费用偏高,且管网覆盖不到位。

天津市环保局 二〇〇六年九月十五日

Brief Report on SO2 Emission Reduction in Tianjin

1 Current Status of SO2 Emission

Coal is in the dominant position in the energy structure in Tianjin. More than 90% of the SO2 in Tianjin come from coal combustion. Therefore coal burning is the main source of SO2 in the ambient air in Tianjin. Especially in the heating season winter, SO2 become the major pollutants and SO2 emission pollution control has been the focus of air pollution control work.

- 1.1 SO2 Emission from household stoves
 - 1) SO2 emission status
 - 2) SO2 emission control measures
- 1.2 SO2 Emission from industrial boilers and Kilns
 - 1) SO2 emission status
 - 2) SO2 emission control measures
- 1.3 Power Plants and SO2 Emission in Tianjin
 - 1) SO2 emission status
- 2) SO2 emission control measures

There are tremendous progress made in SO2 Emission reduction in power sector through the following measures:

- (1) Effectively keep sulphur content in coal used in power plant within the limit
 - (2) Proactively implement de-sulphur process
 - (3) Strengthen regulatory requirements

2 Proposed SO2 Emission Reduction Target for TJ

Tianjin is defined as the one of the "SO2 Control Area" in the 10th Five Year Plan and has achieved 10% SO2 Emission Reduction Target during 10th Five Year Plan.

- 2.1 Will ensure the implementation of the task outlined in the State Council Decision: Install de-sulphur facilities in all power plants in Tianjin by 2010
- 2.2 Increase investment to allow existing 400 industrial and heating boilers with capacity more than 10t/h to be renovated to install highly efficient de-sulphur devices, so that SO2 emission will be in compliance with the requirements for period 2 stipulated in Tianjin Boiler Emission Standard.
- 2.3 Enhance management and supervision of de-sulphur facility installation and operation. Particular attention will be given to the power plants which have signed agreement with SEPA.
- 2.4 Continue upgrading boilers less than 10t/h from coal-powered into gas powered and remove them from the pipeline network
- 2.5 Ensure implementation of total emission control on SO2 and total soot and to actively promote SO2 Emission Permit System.

3 Challenges

- 3.1 Lack of long-term incentives to use clean energy
- 3.2 Existing pollution discharge fee does not reflect the value that polluters should pay for its environment liability
- 3.3 Installation of De-sulphur facilities on coal-powered boilers is an effective way to reduce SO2 pollution and SO2 emission.
- 3.4 The One-off charge to heating and gas is too expensive, especially in the case that network connection coverage is limited still.

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