제 목	A COMPARISON OF THE RISK DECISION-MAKING PROCESSFOR THE PROTECTION OF HUMAN HEALTH FROM AIR POLLUTION IN THE UNITED STATES AND THE REPUBLIC OF KOREA
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Abstract

Over the past several decades, the world-wide industrial nations have been intensively concerned over the increasing human health risks from various chemicals in the air. Many countries in the world have already made some plausible regulatory policies to reduce the unreasonable risks. However, the risk management policies have varied considerably from country to country due to the national and cultural attitudes relative to the characterization and control of risks.

This dissertation investigates the fundamental risk decision- making process including the risk management policy for protecting the human health from air pollution in the United States and the Republic of Korea. The two government organizations, U.S. Environmental Protection Agency (USEPA) and Korea Ministry of Environment (KMOE), are selected for the comparative analysis of a cross national research. Analytical approach is used to compare and contrast the risk decision-decision making process including methods and techniques of each country.

Two case studies, including the criteria and standards, are presented to examine similarities and differences between the two countries relative to the regulatory decision process. Sulfur dioxide and total suspended particulate in ambient air are used as non-carcinogenic examples and benzene in the air as the carcinogenic example. The following criteria are used to make evaluation : a) regulatory framework, b) principles used for the standard-setting, and c) factors affecting risk decision-making.

Specifically, the USEPA's risk decision-making system is basically an open system based on explicit procedures and principles of law. The court decisions, public participation, and peer review process have significantly affected the USEPA's risk management policy. The USEPA's approach for risk management decision is largely based on scientific calculation such as risk quantification and risk probability.

Conversely, the KMOE's risk decision-making system is essentially a closed system based on personal contracts within the Ministry and principles of confidentiality. The legal system, public participation, and peer review process play relatively a minor role in terms of health risk management decision. The KMOE's approach for risk management decision is largely based social-economic consideration rather than scientific findings through toxicological research and risk assessment technique.