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# Abstract

As the fine particle(PM2.5 and PM10) problem emerged as a social issue, the need to strengthen management of industrial emission facilities also emerged. About 60 thousands facilities in nationwide(20 thousands in Gyeonggi Province) emit air pollutants, which contributes about 38 percent to the total concentration of fine particle in atmosphere.

Inefficiency in management continues due to the continuous increase in the number of emission facilities, the emergence of new types of emission facilities, the resulting increase in complexity of management and supervision tasks, and chronic manpower shortages of local control government. In particular, Gyeonggi Province is having difficulty managing the emission facilities as more than 90% of the total are small, too various types, and widely scattered in large areas besides industrial complexes.

Various measures are needed in the management, such as an improvement of permit process, revision of inspection guidance for emission facilities. The redistribution of emission facility management authorities between the central government and local governments is necessary. In Gyeonggi Province, it is necessary to establish a inspection system and organization for emission facilities in a cross-county and wide-area administrative unit. The inspection management manpower and organizations of Gyeonggi Province and local county authorities should also be expanded. Guidelines for permitting standards are also needed to respond to new types of facilities. It is also urgent to introduce a smart management system using ICT in connection with the 4th industrial revolution as a future technology. In addition, it is necessary to establish a emission facilities DB system and to find ways to link this system with inspection and management.

**Keyword** air pollutants emission facilities, inspection and management of emission facilities