

## Preventive Measures for Workers of Incineration Plants from Exposure to Dioxin

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### ABSTRACT

The dioxin problem was first recognized by the detection of dioxin in mother's milk in 1998. The Ministry of Health and Welfare (Currently, Ministry of Health, Labour and Welfare, MHLW) reported the detection of dioxin ranging from 0.39 – 8.8ng TEQ/g in the soil around a municipal incineration plant for waste treatment at Nose-cho, Osaka Prefecture which strongly impacted citizens.

The Ministry of Labour (Currently, MHLW) performed the health examination of workers in response to this report about the effect of dioxin exposure. The surveillance detected the higher level of dioxin in the workers' blood ranging from 13.4 – 805.8 pgTEQ/ g lipid with the average of 84.8pgTEQ/g lipid in comparison with the level of 1.3~53pgTEQ/g lipid (2001.12) of the inhabitants around the plant.

The Government issued the Principle for the Promotion of Preventive Measures for Dioxin Exposure, and announced the tolerable day intake level of dioxin, and enacted the Regulation for Prevention of Dioxin Effect (Legislation No. 105) in July 1999. The MHLW also issued the Summary of Preventive Measures against Dioxin Exposure for the Workers in Waste Incineration Plants (MHLW Labour Standards Bureau Notification No.401-2) in April, 2001. The Notification categorizes the exposure levels to dioxin by 1 – 4 levels, and defines the kinds of respirators and the other PPE to be used at each level. The presentation will review the results of workplace environment contamination measurements in incineration plants.