

## **P202. HEALTH AND SAFETY HAZARDS IN FLUE DUST RECOVERY**

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Recycling industry provides the revenue of wastes to protect environment, humanity and economy as a result of several recycling processes. Recycling is necessary for humankind when the depletion of scarce natural world resources and unlimited wants taken into account.

The metal recycling sector has a command of a wide area due to its diversified types and forms. Recycling of iron, steel, aluminum, copper, lead, and zinc (zinc oxide) can be an example to frequently recycled metal. Therewithal, waste subjected to recycling may be solid materials such as scrap, powder or liquefied metal can be also subjected to recycling.

Without causing environmental problems recovery of flue dust one of the wastes in iron and steel industry is of great important. In Turkey approximately 500,000 tons per year of flue dust arise in steel industry. In European Union countries, total released amount of flue dust is in the range of 750.000 – 1.200.000 tons/per. When chemical analysis of flue dust examined, it is observed that high values of iron and carbon accompanied by harmful elements like Na, K, Zn, and Pb etc. If necessary measures are not taken, exposure of flue dust will create serious hazards to the health of employees.

Within the scope of this study, a short term field observations were made at these company recycled zinc from flue dust, processes, and risks private to this industry were analyzed and occupational health and safety's data were collected from each of the four companies. A workshop called "Health and Safety Hazards in Metal Recycling Industry" was organized by CASGEM on 23 December 2015. In this workshop representatives of these four companies and related social partners brought together to discuss health and safety problems and intercompany cooperation has been put forward in the context of the solution of these discuss health and safety problems. In this study, as well as literature review, workshop results are also evaluated.

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