

**WASTE INCINERATION AND EMISSION CONTROL BY CEMENT PLANTS IN GERMANY****R. Bolwerk***Council Government Muenster, Muenster, Germany*

At present, there are many cement factories in Germany which use, secondary materials (tyres, waste oil, waste plastic, liquid /solid, contaminated soils) in the production of cement. Key factors include favourable conditions inside rotary tube kilns, optimized process and safety technology and improved exhaust gas cleaning systems and a comprehensive control of the input substances. The requirements differ for each plant and these must be examined and defined as part of the licensing procedure in accordance with the Federal Immission Protection Act. The evaluation criteria for environmental compatibility are laid down in, among other places, the German Recycling and Waste Act. This act states that environmental compatibility of an utilisation process should be assessed mainly on the basis of the expected emissions, the energy utilisation, the residues produced and the effect on the product. With regard to the emissions of the exhaust values of the cement rotary kilns can only be achieved in other burning processes by the means of large-scale after-cleaning equipments. The measuring results show that the concentrations of - trace elements, chlorbenzols, chlorphenols, PAH, PCDD and PCDF have not been proved or they have been far below the limit values in force in Germany. Strict input criteria of various secondary fuels are important for low emission remain under limiting values. The article show the experience from Germany for environmentally friendly utilization of secondary materials in cement kilns.