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**ICEEM/01 – Environmental Management Section**

**CASE STUDY REGARDING THE TREATMENT OF  
POLLUTANTS RESULTED FROM THE  
S.C. METADET S.A. FĂLTICENI WORK PLANT**

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**Abstract**

The Metadet Fălticeni industrial plant produced, during 1978–1992, products based manly PMMA. At the end of the activity, large quantities of ACH and other organic compounds remained in reservoirs, reactors and neutralization stations, especially in the sector of MMA synthesis from ACH.

The investigations presented in this paper envisage the determination of the pollution level with cyanides, the pollutants distribution in different environmental media, the chemical transformation of the acetone cyanohydrins deposits into hydrolysis compounds and the concentration of the CN<sup>-</sup> ions in different media and phases.

The chemical transformation possibilities of the acetone cyanohydrins deposits into different products that exist nowadays in these media and spaces were partially explained.

Two depollution technologies for media with CN<sup>-</sup> ions and organic compounds were proposed: a chemical one and a biological one. Chemical depollution has been applied with excellent results even in the case of mediums with CN<sup>-</sup> ions concentration up to 20 g/l.

*Keywords:* pollution, organic compounds, environment, CN<sup>-</sup> ion

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