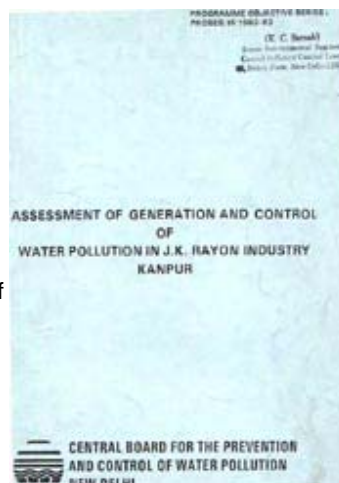


Assessment of generation and Control of water Pollution in J.K. Rayon Industry, Kanpur

Foreword

Central Board for the Prevention and Control of water Pollution came into being in 1974 and since then the Board is involved in various projects, with a view to aim at controlling the environmental pollution which are of conventional and industrial in orientation, under the Water Act, 1974. One of the ongoing projects is the Man-Made Fibres -the implementation of Minimal National Standards (MINAS) which includes synthetic and semi-synthetic (Rayon)fibres. The Pollutional load in manufacturing synthetic fibre is mainly organic in nature whereas in rayon industry the most important pollutant is zinc which is toxic to aquatic life. The toxicity of zinc in India, a tropical zone, will be more acute than in the countries with a much lower average ambient water temperature and thus concentration of zinc has to be brought down to the stringent limit which is practically achievable. To achieve such level as stipulated in MINAS by the industry, an action oriented programme of Central Board has been initiated and forms the main objective of this reported project.



The present investigative work at J.K. Rayon, Kanpur was conducted in collaboration with Uttar Pradesh State Pollution Control Board. The association of Shri P.N. Tandon, Assistant Environmental Engineer, Regional Office, Kanpur was quite helpful and is gratefully acknowledged. The help rendered by Shri M.R. Rajput and Shri R.K. Rustogi time to time at Central Board's Laboratory, Mukherjee Nagar, Delhi in the process of analysis of samples is gratefully acknowledged. The critical reading and editing of the manuscript by Dr. S.P. Chakrabarti, Technical Secretary to Chairman and the typing assistance rendered by Shri M.S. Bansal and Shri A.K. Muradha in preparing the report is acknowledged.

The present investigation is a case study on J.K. Rayon, Kanpur describing the mechanism of zinc, which is used in the regeneration process of cellulose, escapes through various routes. Based on the study, specific measures to recover zinc from wastewater to conform quality of effluent to MINAS, are recommended. Besides this Ganga water quality of a short stretch in the vicinity of J.K. Rayon is also discussed. Dr. Inamul Haq, Scientist, Central Board has conducted the investigation and prepared the report under the guidance of Dr. K.R. Ranganathan, Member Secretary, Central Board.

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