

Treatability Study of DDT Industry Wastewater

Foreword

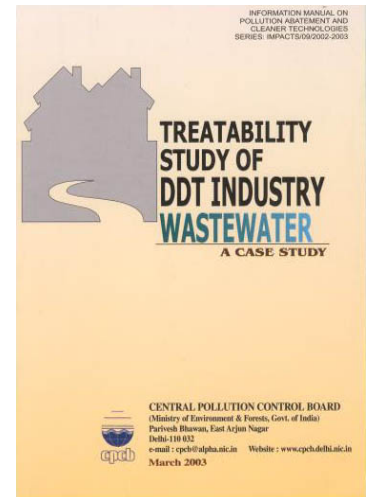
The Green Revolution in India has made the country self-sufficient in food requirements and also gone a long way in improving the economic conditions of the farmers. However, increased use of fertilizers and pesticides in agricultural sector has augmented the pollution load of the surface and sub-surface water bodies.

Presently, India has about 675 pesticides industries, manufacturing about 75000 tonnes of pesticides per annum and the consumption is about 500g/hactare. Pesticide industry is identified as one of the priority areas for treatment technologies to treat the effluent for its safe disposal and to meet the regulatory requirements.

In some countries, the use of certain persistent pesticides such as, DDT, BHC and other halo-genated organic pesticides has been banned for manufacturing as well as uses. In India, DDT and BHC are used for mosquito control and other public health programmes.

The wastewater generated from DDT manufacturing unit is normally treated by neutralization, biological (aerobit) oxidation followed by activated charcoal filtration. In the existing treatment system, dilution (about 7 to 10 times) is made with fresh water for biological treatment to reduce the toxicity load in wastewater. To overcome this problem a lab-scale investigation has been carried out in CPCB to reduce the toxicity by selective coagulation technique and by using Fenton's oxidation.

The present report contains the findings of the laboratory investigation and a proposed flow sheet for treatment of DDT manufacturing effluent . We hope, the information contained in this report will be useful for persons working in this field.



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