Editorial

DISPOSAL OF PLATING WASTE

THE electroplating industry in our country has considerably expanded, and is well established in the post-war period. The number of jobbing plating shops in the industrial cities has increased by leaps and bounds. Major industries both in the public as well as in the private sectors have well equipped plating shops. With the increase in the plating establishments the problem of disposal of the effluent has cropped up. The highly toxic nature of many plating room effluents causes troubles which are almost unique among industrial waste problems.

The contamination is generally due to the presence of cyanides, chromates, salts of heavy metals like nickel, cobalt, zinc, cadmium, copper, tin etc. The toxic value of the effluent depends on the individual concentration of the impurities mentioned above. Before the effluents are led into municipal sewer or into natural water ways like rivers or tanks the concentration of the various toxic constituents have to be reduced to an acceptable minimum. The necessity for such a step has not yet been realised in our country perhaps due to lack of information on the consequences.

In foreign countries like the United States of America, Canada, United Kingdom, Germany and others, the plating industries have long been aware of the necessity for waste treatment. It is stated that applied research was initiated about fifty years ago. The American Electroplaters' Society, British Water Pollution Research Laboratory and other similar institutions have been conducting reasearch in this field for a long time.

It is time that we, in our country take steps to regulate the disposal of such plating effluent after due treatment. The treatment could be affected in two ways-reduction of waste within the plating room itself, and further reducing the toxic contents by suitable treatment. Among various methods of treatment, chlorination and liming are common and cheapest. Ion exchange method is costly. To impress on the plating establishment, proper legislation laws may have to be promulgated, if not in existence, restricting the contamination of domestic sewage or river water. The toxicity of the effluent may effect the secondary treatment of sewage and the digestion of the sludge in the case of municipal sewers and in the case of natural water ways like rivers, the fish and similar life may get destroyed.

A few of the industries have realised the necessity of treating the effluent and have installed treatment plants. However a large number of plating establishments have not realised the necessity for such a treatment. It is time that we bestow our attention to the problem of treating plating room waste before it presents itself as a menace to the normal disposal of sewage or to the animal life in rivers.

—S.K.