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Aroclor Toxicity - Coventry Corporation Water Industry

DVNH/ARW

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I suggest that you summarise (1) the number of Aroclor-insulated transformers and capacitors that have been supplied (2) the kinds of organisation and of industry that have taken them (3) the safety and other performance record.

The chemical handbook citation comes from "Dangerous Properties of Industrial Materials" by N. Irving Sax and necessarily gives overall guiding information for all conditions of usage. Some of the more serious effects would develop only after long-exposure and are common to chlorinated hydrocarbons which the dry-cleaning and degreasing liquids such as carbon tetrachloride and trichloroethylene are typical.

When used in transformers and capacitors the Aroclors are enclosed, except for suitable breathers, and there is no nuisance from fumes so that they can be used indoors without endangering personnel. Leakage of Aroclor is unlikely to occur to the extent of serious discharge, and would probably never be more than seepage in which case the manufacturer of the machine should be called upon to rectify it. If there is a risk of contaminating streams, wells or other water supplies, provision should be made by means of a suitable sump below the transformer to collect any liquid that might be discharged and this should be destroyed by mixing with oil and burning on waste ground.

For any given application it is necessary to weigh up the advantages of an Aroclor-filled transformer against the intrinsic difficulties of using the organic materials that confer the advantages but there is a considerable background of user experience to draw upon.

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