Pollution Control: Minimization of Pollution load Caused by Beam house Operations in Leather Industry.

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- **Abstract:** Leather is known as a durable as well as flexible material which is done by tanning animal raw hide and/or skin. Leather making is a series of chemical and mechanical processes. The conversion of the animal skin into leather involves the production of considerable quantities of several varieties of waste products and effluents. Data provided by the leather department center indicated that sodium Sulphide (Na2S) and lime(Ca(OH)2) is responsible for most pollution (55%) of the total pollution and the percentage of (84%) of the BOD, the percentage of (75%) of the COD, the percentage of (92%) suspended solids as well as 100% of toxicity. The aim of this work is to reduce the pollution load by recycling liming solution and at the same time reduce the amount of chemicals used in other processes and reduce the cost. Recycling process was ultimately conducted by adding a makeup of sodium Sulphide, lime and water to the used liquor to adjust the concentration to the required level. Chemical analysis and experimental work indicated that the saving of sodium Sulphide, lime and water was 60%, 40% and 90% respectively and the leather produced had the same properties with that produced by conventional methods.

- **Keywords:** animal,,pollution control,beam house