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## Impacts of Chromium from Tannery Effluent and Evaluation of Alternative Treatment Options

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### Author(s)

Alebel Abebe Belay

### ABSTRACT

The paper has focused on the challenges/impacts of tannery effluent and evaluates the alternative treatment options used to treat, recover or recycle chromium from the waste water. The paper was done entirely on secondary data by consulting literature sources including scientific journals, chapters of books, conference report papers and websites. The results of this review paper indicated that chromium is highly toxic and carcinogenic to human beings, animals, plants and the general environment (soil and water sediment). It is found out that chrome is the primary threat when ever tanning industry comes in to practice. Though many treatment options were evaluated to prevent its consequence on the environment, neither of them could achieve to treat or recover chrome 100%. Treatment options are either; inefficient, complicated, energy demanding, costly or applicable to a certain parts of the world due to technology or skilled man power demand. Therefore, to tackle this serious challenge stringent environmental regulation with law enforcement has to be exercised to use better treatment system which is widely applicable. Polluters must also know the environmental cost of their industry and treated according to polluter pay or precautionary principles. Moreover, the general public has to be aware of it and all concerned organizations and governments has to work hand in hand to reach zero discharge level or at least to attain the EPA chrome discharge limit

### KEYWORDS

Chromium Toxicity, Environmental Impact, Chromium Recovery and Recycling, Chromium Treatment Option, Tannery Effluent

### Cite this paper

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