

Industrial Wastewater Treatment and Applications

Arivalagan Pugazhendhi*

Department of Environment and Labour Safety, Ton Duc Thang University, Vietnam, Asia

Opinion

Industrial wastewater is a by-product of commercial product manufacture. Water is necessary for practically every step of manufacturing across a variety of sectors, whether it comes from the food we eat, the drinks we drink, the clothes we wear, or the paper and chemical goods we use. Water can pick up a number of impurities throughout the manufacturing process, which must be removed to appropriate levels before being discharged from an industrial manufacturing plant. Suspended solids (TSS), fats-oils-greases (FOG), pH, bacteria, selenium, heavy metals and other controlled chemicals and compounds are examples of components that may require treatment.

Depending on the sort of company that produces it; industrial wastewater has a wide range of quality and volume. It might be extremely biodegradable or not and it could include or not contain components that are resistant to treatment. These include organic synthetic chemicals and heavy metals, the content of which varies greatly between developing and industrialised nations' wastewater. The rising amount of synthetic substances included in and released to the environment is the fundamental problem with industrial wastewater. Jiménez provides a list of the most frequent contaminants discovered in industrial emissions. Due to the difficulty in tracking toxic compounds and their fate, as well as the need for complex and expensive treatment methods to remove them from wastewater, it is prudent and cost-effective to consider the implementation of cleaner production methods in industries, as well as raising societal awareness to reduce the use of such compounds.

In the mining and metal industries, technological breakthroughs in the field of industrial wastewater treatment are at the forefront of deep scientific discovery

and vision. Anthropogenic and geological factors both contribute to arsenic and heavy metal poisoning of groundwater. As civilization advances, the science of industrial wastewater treatment must be reframed. In today's scientific environment, challenges and problems are surmounted. Environmental engineering study is in a situation of crisis and profound comprehension over the world. Drinking water treatment and industrial wastewater treatment should be the focus of global research and development efforts. Millions of people throughout the world lack access to safe drinking water and adequate sanitation. Poverty, hardship, illiteracy and a lack of food and clean water are wreaking havoc on the social and economic fabric of nations all over the world. Today, social, economic, energy and environmental sustainability are all intertwined. As a result, human civilization, scientific progress and long-term development are all on the verge of huge catastrophes. In such a severe circumstance, humankind's industrial advances must be reimagined and rebuilt.

Treatment of industrial wastewater properly may help your organisation maintain the environment, its equipment and its reputation. Food processors, for example, discovered that deploying SUEZ North America's solutions allowed them to avoid regulatory penalties and shutdowns, reduce pollutants and restart compliant wastewater discharge.

SUEZ solutions have helped power plants comply with the Coal Combustion Residues (CCR) regulation by dewatering ponds, treating low-level waste, leachate, coal pile and runoff streams and remediating groundwater. Chemical processing industries discovered that working with SUEZ on an integrated and collaborative strategy across the product lifecycle allowed them to lower their environmental impact while maintaining their competitiveness.

How to cite this article: Pugazhendhi, Arivalagan. "Industrial Wastewater Treatment and Applications" J Environ Anal Chem 8(2021): 341.

**Address for Correspondence:* Pugazhendhi Arivalagan, Department of Environment and Labour Safety, Ton Duc Thang University, Vietnam, Asia, E-mail: Pugal_smile89@gmail.com

Copyright: © 2021 Pugazhendhi A. This is an open-access article distributed under the terms of the creative commons attribution license which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are credited.

Received 09 November, 2021; **Accepted** 23 November, 2021; **Published** 30 November, 2021