

Metadata Details

Title

Physico-Chemical Analysis of Waste Materials Produced at Indian Scientific Base Maitri in Antarctica.

Science Keywords

Category	Sun-Earth Interactions
Topic	Water Quality/Water Chemistry
Expedition Year	2007-2008
ISO Topic	Environment

Summary

Abstract

Activities which can have an effect on the environment at Maitri station are mainly: operation of generator, snow vehicle movement, disposal and treatment of waste, workshop activity, fuel storage and oil spill, station activity, new construction activity, executing science projects etc. Physico-chemical analysis of waste materials viz. wastewater, ash and waste oil samples collected during the 27th expedition under the Environmental Management Plan was carried out. The most important parameter for wastewater, biological oxygen demand (BOD) at inlet to WWTP was found as 397 mg/l and at outlet (after treatment) was 107 mg/l. Food Ash sample was found to have higher iron and magnesium contents 23.2 and 10.4 mg/l respectively. Considerable quantity of zinc was found in waste oil samples.

Purpose

The aim of the study was to carry out a monitoring and assessment study of the waste materials at Indian Scientific Base Maitri and to have their physico-chemical characterizations.

Data Center