



---

## **Assessment of E.S.Co. wastewater effects on some soil chemical properties**

**M.J. Mokhtari<sup>1</sup> and P. Najafi<sup>2</sup>**

1. M.Sc. Student of Islamic Azad University, Khorasgan Branch
2. Assistant Professor of Islamic Azad University, Khorasgan Branch

The aim of this research was to determine the impact of different kinds of wastewater of Esfahan Steel Company (E.S.Co.) on chemical quality of soil properties. For this purpose, a part of landscape area of E.S.Co. was selected and a completely randomized block design was conducted with two treatments and three replications. The treatments were included that irrigation with domestic wastewater (DW) and irrigation with industrial wastewater (IW). After three years through 2001 until 2004, the soil samples were collected from soil profiles in different treatments and the EC and SAR values of extract saturation soil were analyzed. The results indicated that EC and SAR were reached to standards level based on FAO recommendation. In addition, the mean of EC in DW was lower than same value in IW with significant difference at 5% level based on LSD test. The SAR in IW did not show any significant difference as compare of DW.

**Keywords:** Domestic wastewater, Industrial wastewater, E.S.Co., EC, SAR

---

<sup>1</sup> Corresponding author

Email: ateftehtady@yahoo.com