Abstract

Title: **Remediation of Contaminated Lands in Ireland**

Researcher: **Oliver Moroney**

Supervisor: **Eugene O'Sullivan**

Submission Date: **September 2010**

Purpose: The purpose of this dissertation is to undertake an investigation into remediation of contaminated land in Ireland, and in particular the regulatory process, sustainable remediation, human health risk assessment and remediation techniques.

Methodology: A comprehensive literature review was undertaken on the remediation of contaminated lands in Ireland. The methodology identified for sourcing the primary data was an interview between the researcher and participants. The participants were senior managers from different organisations who are actively involved in remediation projects throughout Ireland and the UK.

Findings:

1. The research found there is a specialist market for the remediation of contaminated lands in Ireland and there can be financial savings with the exsitu treatment of contaminated soil rather than the traditional method of dig and dump.
2. Contaminated soil increased from 168,000 tonnes to 407,000 tonnes (2001– 2006).
3. Only 10% of contaminated soil is treated in Ireland, the rest is exported to Europe.
4. The research found little Irish literature relating to sustainable remediation, human health risk assessment and remediation techniques.
5. The assessment of contaminated lands and remediation techniques are all largely based on UK and European practices.

Recommendations include informing potential clients of Company A's capabilities, knowledge sharing with sister companies, forming a working relationship with another remediation contractor, periodically attending contaminated land and brownfield seminars and maintaining a master copy of documentation on remediation projects undertaken by Company A.

Keywords: brownfield remediation, regulatory process, remediation techniques, sustainable remediation, human health risk assessment, contaminated land.