

ORDER

Sanction of the President is hereby accorded, under Rule 18 of the Delegation of Financial Powers Rules, 1978, for the implementation of the project entitled "**Remediation and Reclamation of Hexachlorocyclohexane (HCH) Dumpsite by using Microbial Bioremediation Technology**" for a period of 2 Year 0 Month at a total cost of Rs. **32024192** (Rupees Three Crores Twenty Lakhs Twenty Four Thousand One Hundred and Ninety Two Only) on the terms and conditions detailed here under:-

2 The Project :

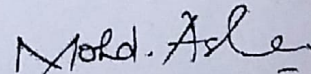
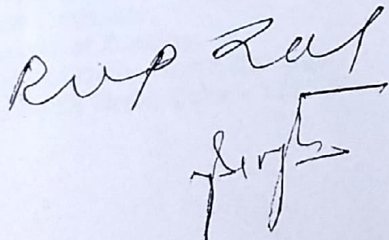
2.1 Title : Remediation and Reclamation of Hexachlorocyclohexane (HCH) Dumpsite by using Microbial Bioremediation Technology

2.2 Details of the Investigators:

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2.3 Objectives:

Overall Objectives:

1. Large scale production of HCH-degrading microbial consortia and reclamation of HCH contaminated site by implementation of bioremediation (bioaugmentation and biostimulation).
2. Screening of plants for HCH phytoremediation based on HCH accumulation efficiency and to implement microbe-assisted phytoremediation at the HCH dump site in commensurate with microbial bioaugmentation and biostimulation.
3. HCH residue analysis and change in the dynamics of microbial community before, after and during the process of bioremediation.
4. Ecotoxicity safety assessment during the course of bioremediation.

Institute wise Objectives:

Indian Institute of Toxicology Research

1. Monitoring of onsite microbial and phytoremediation process during the reclamation and restoration of soil at the HCH dump site.
2. Ecotoxicity safety assessment during the course of bioremediation by using indicator organisms.

National Botanical Research Institute, Lucknow

1. Screening of plants for HCH phytoremediation based on HCH accumulation efficiency.
2. Use of phyto-microbe-assisted bioremediation at the HCH dump site

Ramjas College

1. Collection of samples to be provided to participating institutes during bioremediation process
2. Monitoring of HCH residues and changes in microbial community in rhizospheric soil as an indicator of soil health.

The Energy And Resources Institute, New Delhi

1. Large scale production of HCH-degrading microbial consortia available with University of Delhi and by implementation of HCH bioremediation at the HCH dump site.
2. Reclamation of HCH contaminated soil with HCH residues below permissible levels.

Mohd. Aslam

University of Delhi, North Campus

1. Provide HCH degrading consortia and biostimulation know-how to TERI for implementation of bioaugmentation and biostimulation throughout the bioremediation process.
2. Monitor HCH residues and changes in microbial community during the process of bioremediation

2.4 Time Schedule:

The duration of the project is 2 Year 0 Month from the date of this sanction order.

2.5 Project Cost:

The total cost of the project is Rs. **32024192/-** (Rupees Three Crores Twenty Lakhs Twenty Four Thousand One Hundred and Ninety Two Only) as per details given below:

M. Adarsh