## **Project title:**

Advice on use of coal ash from DCPP with overburden at Gare Palma IV/1 opencast mine, Tamnar- Phase IV(1)

**Project No -** CNP/4909/2019-20

## **Executive Summary:**

This project is the extension of the previous project wherein the management of JSPL, Dongamauha Captive Power Plant, Tamnar wanted to utilize the ash generated from their power plant as a backfill material in opencast mines and approached CSIR-CIMFR to develop a methodology of dumping coal ash and to monitor the same. Accordingly, field visit was carried out to collect the mining data and studies on environmental parameters like rainfall, temperature, depth of phreatic surface, particulate matter etc. in the core and buffer zone of the mine. The existing location where ash filling was proposed had open fire at the edge of forest area, a method of backfilling coal ash along with overburden to douse the fire was suggested where in the base of the site is to be filled with overburden of height 2m and alternate layer of coal ash of 4m is to be filled while maintaining the slope angle of 28 degrees. The top of the dump should be covered with 2m thick overburden and adequately compacted. Influence of ash backfilling operation in the core and buffer zone on water table, rainfall, particulate matter etc. was found to within stipulated standards.