

<p>Project Title: Slope Stability condition of active mine slope at Malanjkhand copper project, HCL</p> <p>Project No.: SSP/374/2019-20</p>	<p>Executive Summary:</p> <p>A project on assessment of slope stability condition of active mine slope at Malanjkhand Copper Project of Hindustan Copper Limited (HCL) was awarded to CSIR-CIMFR, Dhanbad. The assessment of slope stability was to be done periodically for one year using slope monitoring technology with use of total station. Visual inspection of conditions of toe, crest & slopes of highwall was also to be carried out. The purpose was to detect any instability condition developing in any part of mine as a function of time. This would help the mine management in taking timely and appropriate remedial measures for safety of pit slopes and mining machineries.</p> <p>CSIR-CIMFR Slope Stability team conducted scientific study of pit slope movement conditions and provided periodical study reports. Total station instrument along with more than hundred pillar monitoring stations were used in the assessment of instability condition of Malanjkhand Copper Project of HCL.</p> <p>Low movement data indicates safety and stability of slopes, thereby providing confidence to mine operators to continue mining. High amount and rate of pit slope wall movement indicates alarming condition and suggests appropriate and timely action to deal with the situation. Such studies has been conducted by CSIR-CIMFR Slope Stability team for several years continuously, giving real confidence and scope of continuing mining unhindered by any slope failures.</p>
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