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(71)Name of Applicant :

1)Andhra University

Address of Applicant :Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam --

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)K. Tulasi

Address of Applicant :Research Scholar, Department of Civil Engineering, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam -----

2)C. N. V. Satyanarayana Reddy

Address of Applicant :Professor, Department of Civil Engineering, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam -----

(57) Abstract :

ABSTRACT: Title: Method of Neutralization of Phosphogypsum for Use in a Base Lining System of Phosphogypsum Dumping Yard
The present disclosure proposes a method of neutralization of phosphogypsum for use in upper part of composite base lining system. The method comprises the steps of adding 10 to 50 weight percent of an industrial alkaline waste by-product and 0.5 to 2 weight percent of lime to the phosphogypsum in order to neutralize the phosphogypsum. The neutralized phosphogypsum is further tested to satisfy the permeability requirement of the upper layer of the composite base lining system suggested by CPCB. The neutralization of the phosphogypsum is achieved at 50% fly ash and 1.6% lime. Phosphogypsum is neutralized with 50% fly ash and 1.6% lime is has a required permeability of $3.99 \times 10^{-7} \text{m/s}$.

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