

THE DETECTION OF GEOCHEMICALLY STRESSED VEGETATION AT MINE TAILING, LANDFILL AND MINERALIZED SITES

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ABSTRACT

The detection and monitoring of geochemically stressed vegetation in areas of mine tailings, near surface mineralization, and landfill sites require the use of specialized remote sensing techniques. An understanding of how vegetation is likely to respond to specific geochemical conditions and how that response is recorded is fundamental to technique development.

In this paper, several case studies are presented. Stressed vegetation at mine tailings sites was detected from ground and airborne spectral data. Stressed vegetation at some mineralized and landfill sites was only detected using ground spectral techniques. These observations were supported by detailed soil, geochemical, biogeochemical, ground and airborne spectral data.

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