Results of a limited gamma spectrometry intercomparison on mineral sand products and associated issues

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New radiation control legislation in Queensland, Australia provides for the exemption of abrasive blast material upon meeting a specified release criteria. Calculation of the release criteria is based on the measurement of uranium and thorium series radionuclides in the abrasive blast media. Past experience has shown that results from different facilities vary to the extent that the material may be exempt based on the results of one laboratory but not another. Queensland Health Scientific Services embarked on the trail of running a limited intercomparison for a sample of ilmenite, a commonly used mineral sand abrasive blast material, to establish sources of variation in reported results. The results of the program are presented with comment on their implications.