HUDSON, Neale Alan

BSc Natal, BSc(Hons) Natal, MSc Natal

Thesis title:

Investigation of mechanisms governing emission of odorants

Supervisors:

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Citation:

This research project identified some of the physical and chemical factors that control odour emission rates, and the influence a sampling device may exert on the emission process.

Two widely-used sampling devices were selected to investigate the influence of wind speed, turbulence and the physical and chemical properties of odorous compounds on the emission process. Results from laboratory and field trials conducted at piggeries and cattle feedlots, demonstrated that the emission rates of most odorous chemicals increase as wind speed or turbulence increases. Sampling devices should therefore be selected and operated with care to ensure realistic emission rates are obtained.