

13.0 AIR POLLUTION CONTROL EQUIPMENT

A.W.N. has extensive experience in the process design and specification of equipment for the control of atmospheric contaminant emissions to air from a range of industrial processes. Examples of previous projects include:-

1. Nuplex Industries (Australia) Pty. Ltd., Hallam

Pilot scale control equipment trials, specification of wet chemical packed bed scrubbing system for the control of odorous emissions to air from various sources in the alkyd resin manufacturing process.

2. Aspen By-Products Pty. Ltd., Preston

Pilot scale control equipment trials, process design, specification and commissioning of wet chemical packed bed scrubbing system for the control of odorous emissions to air from various sources in the sausage casings manufacturing process.

3. Dynamic Fertilisers Pty. Ltd., Pakenham

Pilot scale control equipment trials, process design, specification and commissioning of incineration system for the control of odorous emissions to air from the poultry manure dryer.



LEFT
H₂S pilot scale scrubbing trials,
Associated Minerals, WA

CENTRE
Sulphuric acid mist removal
efficiency tests, electrostatic
precipitator, Tasmania

RIGHT
Poultry manure dryer,
Dynamic Fertilisers, Victoria

4. Philip Morris Ltd., Moorabbin

Pilot scale control equipment trials, process design and commissioning of wet chemical packed bed scrubbing system for the control of odorous emissions to air from various sources in the cigarette manufacturing process.

5. Riverland Oilseed Processors Pty. Ltd., Numurkah

Pilot scale control equipment trials, process design and specification of wet chemical packed bed scrubbing system for the control of hydrogen sulphide emissions to air from the oilseed solvent extraction process.

6. BTR Nylex Ltd., Frankston

Process design and specification of incineration system for the control of odorous emissions to air from the polypropylene/wood flour extrusion process.

7. Bridgestone Australia Ltd., Dandenong

Pilot scale control equipment trials, process design and specification of wet chemical packed bed scrubbing system for the control of odorous emissions to air from the rubber underlay Banbury mixing and curing processes.

8. Horizon APC

A.W.N. Consultants was commissioned by Horizon APC to conduct pilot scale wet chemical packed bed scrubbing trials. The trials were designed to evaluate the performance of two mass transfer packing materials in removing sulphur dioxide from an air stream, utilising a number of scrubbing liquors.

9. Nylex Corporation Ltd., Mentone

The Odorgard process consists of a packed bed scrubbing tower, employing a sodium hypochlorite/sodium hydroxide scrubbing liquor recirculation loop, fitted with an in-line catalytic reactor. The purpose of the catalytic reactor is to promote the decomposition of sodium hypochlorite to oxygen and sodium chloride, increasing oxidation reaction rates and decreasing hypochlorite usage.

A.W.N. Consultants was commissioned by Nylex Corporation, Mentone, to conduct pilot scale Odorgard scrubbing trials on a process exhaust serving PVC calendering equipment.