

EPA Guidelines

Joineries – dust and noise control

Updated August 2008

EPA 109/08: This guideline provides information to woodworking joineries on control systems for common dust and noise pollution problems and will help them meet the required standards under the Environment Protection Act 1993.

Legislation

The principal legislation addressing pollution in South Australia is the *Environment Protection Act 1993* (the Act). In particular, section 25 imposes the general environmental duty on all persons undertaking an activity that may pollute to take all reasonable and practicable measures to prevent or minimise any resulting environmental harm.

Environment protection legislation also includes Environment Protection Policies (EPP), which may outline both recommendations and mandatory requirements for the protection of a particular aspect of the environment, such as air quality.

Environment Protection (Air Quality) Policy 1994

Regulation of air pollution is primarily governed through the *Environment Protection (Air Quality) Policy 1994* (Air Policy). The Air Policy specifies maximum pollution levels for a range of emissions to the atmosphere, including dust or solid particles, and requires that the best practicable means of control be used to minimise air pollution.

The maximum concentration of solid particles, measured at testing points determined by the Air Policy, is a total mass of 250 mg per m³ of residual gases after completion of the process and before amalgamation with air, smoke or other gases.

Although the concentration of solid particles emitted may be below the maximum pollution level, the total volume of pollutants emitted may still result in environmental nuisance. The Environment Protection Authority (EPA) reserves the right to set a more stringent pollution level for solid particles should environmental nuisance still occur from the total emission.

Environment Protection (Noise) Policy 2007

Industrial premises must not allow excessive noise to be emitted from their activities. The EPA may issue an environment protection order requiring that the excessive noise be curtailed within a specified period.

Maximum permissible noise levels for various areas are listed below.

Description of area in which the noise source is situated	Maximum permissible noise levels dB(A)	
	7 am–10 pm	10 pm–7 am
Rural living	47	40
Residential	52	45
Rural Industry	57	50
Light industry	57	50
Commercial	62	55
General industry	65	55
Special industry	70	60

Controls and mitigation

Low dust loads and coarse dust

The minimum requirement for low dust loads and coarse dust is a high-efficiency cyclone dust collector. For example, general use saws may be connected to extraction systems served by high-efficiency cyclones.

Fine dust filtration

In general, the fine dust is generated by moulding machines and requires an air-to-cloth ratio of less than 4:1 (4 m³ per minute: 1 m² of cloth¹) for pulse air cleaned filters using felt material. A larger filter area is required for woven cloth and/or mechanical shaker cleaning. The air-to-cloth ratio may need to be decreased by 50% for each factor, to 2:1, then 1.5:1²

Coarse sawdust

Coarse sawdust can be filtered with a slightly higher air-to-cloth ratio of 4.5:1 (4.5 m³ per minute: 1 m² of cloth³), so individual small filters on sanders may be appropriate.

Self audits

An environmental audit should be conducted every year to ensure that your joinery works are operating in accordance with environmental objectives and within legislative requirements. Setting up environmental complaint procedures and training staff to recognise and minimise environmental nuisance or harm are also good ways of achieving on-going monitoring.

¹ Imperial measure conversion 13:1 (ft³ per minute:ft² of cloth)

² Imperial measure conversion 6.5:1, then 4:1 (ft³ per minute:ft² cloth)

³ Imperial measure conversion 15:1 (ft³ per minute:ft² cloth)

Currency of these guidelines

These guidelines offer advice to assist with compliance with the general environmental duty and specific environmental policies. They are subject to amendment and persons relying on the information should check with the EPA to ensure that it is current at any given time.

FURTHER INFORMATION

Legislation

Legislation may be viewed on the internet at: <www.legislation.sa.gov.au>

Copies of legislation are available for purchase from:

Service SA Government Legislation Outlet 101 Grenfell Street Adelaide SA 5000	Telephone: Facsimile: Internet: Email:	13 23 24 (08) 8204 1909 < shop.service.sa.gov.au > < servicesa@saugov.sa.gov.au >
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For general information please contact:

Environment Protection Authority GPO Box 2607 Adelaide SA 5001	Telephone: Facsimile: Freecall (country): Internet: Email:	(08) 8204 2004 (08) 8124 4670 1800 623 445 < www.epa.sa.gov.au > < epainfo@epa.sa.gov.au >
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