

FOREWORD

The original version of this Environmental Management Manual was published in 1996 with a second edition published in 2000. Both were well received by the members of the Printing Industries Association of Australia. Since that time there have been significant changes in environmental legislation. This revised and updated version of the Manual has been produced to keep the Association and its members abreast of this new legislation. The main changes in the new version include:

- changes in state environmental legislation that have occurred since 2000;
- An update on the National Pollutant Inventory, the National Environmental Protection Measure for Used Packaging Materials, and the National Packaging Covenant;
- use of hotlinks to enable printers to access the reference documents quickly;
- new sections on dangerous goods, cleaner production and discharge to sewer systems; and
- current views on best practice environmental management.

As before, this manual has been designed for the printing industry as a tool for printers to identify and manage environmental issues associated with their operations. The key environmental issues that need to be addressed by printers are:

- the discharge of Volatile Organic Compounds (VOCs) into the atmosphere from solvent use;
- the proper disposal of solvent waste;
- the management of dangerous goods;
- the discharge of pollutants into the stormwater and sewer system and /or waterways;
- the proper disposal of photographic chemicals;
- the recycling and disposal of waste, including inks, paper, plates and pallets;
- the impact of noise on the surrounding community;
- complaints from the surrounding community;
- the management of Polychlorinated Biphenyls, Asbestos and land contamination; and
- the impact on the environment from emergency situations
- better managing the company by the adoption of cleaner production principles.

All of these issues are addressed in this manual. It is important to note that this manual may not address all of the issues associated with a particular facility, but should be used as a basis from which other information may be obtained.

As with previous editions, key requirements have been emphasised in **bold print**.

Section 3 of the manual provides a brief outline of the legislation applicable in your state. The types of environmental licences that may be applicable to your site are detailed below.

Victoria

- A licence is required under the Environment Protection (Scheduled Premises and Exemptions) Regulations for printing works using more than 100 kg per day of organic compounds that have a boiling range between 50 °C and 260 °C (premises using heat set web offset lithographic (HSWOL) printing plant are exempt from licensing for discharges or emissions to the atmosphere with respect to HSWOL printing plant, although they still require a works approval prior to the installation of new equipment). An exemption from the requirement to hold a licence can be obtained if less than 5kg/day of volatile organic carbons (VOCs) are emitted from any one point.
- A licence or approval is required under the Environment Protection (Prescribed Waste) Regulations 1987 for the storage, treatment and disposal of prescribed wastes.



- A trade waste agreement with the relevant sewerage authority must be obtained for discharges of trade waste to sewer under the Water Act 1989 and Water Industry Act 1994.
- Dangerous good risk assessments must be completed for each site.
- Water cooling towers require registration in some areas.

South Australia

- A licence is required under the Dangerous Substances Act 1979 for keeping and conveying dangerous substances (over a specified quantity).
- A licence is required under the Environmental Protection Act 1993 for an activity producing listed wastes.
- A permit is required under the Sewerage Act 1929 for the discharge of trade waste to the sewer system.
- A licence is required under the Environmental Protection Act 1993 for the discharge of contaminated water to the stormwater system.

Northern Territory

- A licence is required under the Dangerous Goods Act and Regulations for the storage of chemicals (over a specified limit).
- A waste disposal licence is required under the Water Act 1992 for the discharge of wastewater into a water course, lake or aquifer.
- A permit is required under the Water Supply and Sewerage Act 1988 for the discharge of trade waste to sewer.

Tasmania

- A permit is required under the Environmental Management and Pollution Control Act 1994 for the release of contaminants into the environment.
- A licence is required under the Dangerous Goods Act 1976 for the storage of chemicals, (above a certain quantity).
- A licence is required to discharge trade waste to sewer under the Rivers Pollution Act 1981.

Western Australia

- A licence is required under the Explosives and Dangerous Goods Act 1961 for the storage of chemicals (above a certain quantity).
- Approval is required under the Environmental Protection Act 1986 and the Water Corporation Act 1995 and associated by-laws for the release of contaminated water to the sewer or stormwater system.
- Under the terms of the Environmental Protection (Controlled Waste) Regulations 2001, a licence or permit from the Department of Environmental Protection is required for the removal from any premises of more than 200 L of liquid waste in any 12 month period. It must also be ensured that controlled waste collections are undertaken by a suitably licenced contractor, and that collection tanks on premises are registered with the Department.

NSW

- A licence is required under the Protection of the Environment Operations Act 1997 (POEO Act) if a printing works generates more than 10 tonnes a year, or stores on site more than 2 tonnes at any one time, of hazardous waste, industrial waste or Group A waste (refer later for a description of these wastes).
- Even if a licence is not required under the POEO Act, generators of the above waste types must keep records of the quantities generated, stored, treated or disposed of, and must use the EPA 3-docket system if such wastes are transported from the premises for treatment or disposal.



- A licence is required under the POEO Act for the discharge of waste waters with the potential to pollute surface waters.
- A licence under the Dangerous Goods Act 1975 is required for keeping and transporting dangerous goods (over a specified quantity). Note that this will be replaced by a mandatory notification/registration system later in 2004.
- A Trade Waste Agreement needs to be obtained from the owner of a sewerage system for discharging trade waste to that sewerage system.
- Water cooling towers require registration in some local government areas

Queensland

- An environmental authority is required under the Environmental Protection Act 1994 for the release of contaminants to the environment, (depending on the nature and quantity of the waste).
- A trade waste permit is required under the Sewerage and Water Supply Act 1994 for the discharge of trade waste to sewer.
- A licence is required under the Dangerous Goods Safety Management Act 2002 for the storage of flammable and combustible liquids (over a certain quantity)

Australian Capital Territory

- A licence is required under the Dangerous Goods Safety Management Act 2002 for the storage of dangerous goods.
- A permit approving the discharge of trade waste to the municipal sewerage system is must be obtained under the Electricity and Water Act 1988.
- An environmental authorisation is required under the Environmental Protection Act 1997 (section 42) and the Environment Protection Regulation 1997 (No 36), for the release of certain pollutants into waterways.
- An environmental authorisation is required under the Environmental Protection Act 1997 for the use of ozone depleting substances.

The relevance of these licences to your site should be verified in Section 3 and contact should be made with the relevant regulatory authority to ensure that all licensing requirements have been identified. Local authority requirements, such as by-laws, should also be verified.

TABLE OF CONTENTS

1.	INTRODUCTION	1
2.	ENVIRONMENTAL ASSESSMENT PROTOCOL	3
2.1.	SITE IDENTIFICATION	3
2.2.	BACKGROUND	3
2.3.	CHEMICALS	4
2.4.	AIR EMISSIONS.....	5
2.5.	LIQUID WASTE.....	6
2.6.	SOLID WASTE.....	7
2.7.	NOISE.....	7
2.8.	OTHER ISSUES.....	8
3.	LEGISLATIVE FRAMEWORK.....	10
3.1.	COMMONWEALTH LEGISLATION	10
3.1.1.	Other Commonwealth Statutes	10
3.1.2.	National Packaging Covenant.....	10
3.1.3.	NEPM for Used Packaging Materials	11
3.1.4.	National Pollutant Inventory	12
3.1.5.	Australian Standards and Guidelines	12
3.1.6.	Greenhouse Challenge	12
3.1.7.	Commonwealth Government Contacts	13
3.2.	AUSTRALIAN CAPITAL TERRITORY LEGISLATION.....	14
3.2.1.	Environmental Protection Act 1997.....	14
3.2.2.	Environmental Protection Regulations 1997	14
3.2.3.	Dangerous Substances Act 2004.....	14
3.2.4.	Water and Sewerage Act 2000.....	14
3.2.5.	Other ACT Statutes.....	15
3.2.6.	ACT Contacts.....	15
3.3.	NSW LEGISLATION	16
3.3.1.	Protection of the Environment Operations Act 1997	16
3.3.2.	Environmentally Hazardous Chemicals Act 1985	17
3.3.3.	Ozone Protection Act 1989.....	18
3.3.4.	Dangerous Goods Act 1975	18
3.3.5.	Sydney Water Act 1994	19
3.3.6.	Waste Avoidance and Resource Recovery Act 2001.....	19
3.3.7.	Other NSW Statutes	20
3.3.8.	NSW Contacts.....	20
3.4.	VICTORIAN LEGISLATION	21
3.4.1.	Dangerous Goods Act 1985.....	21
3.4.2.	Environment Protection Act 1970.....	21
3.4.3.	Environment Protection (Scheduled Premises and Exemptions) Regulations 1996.....	22
3.4.4.	Environment Protection (Prescribed Waste) Regulations 1998.....	22
3.4.5.	State Environmental Planning Policies (SEPPs) & Industrial Waste Management Policies (IWMPs).....	22
3.4.6.	Minimising VOC Emissions from Victoria's Printing Industry	24
3.4.7.	Water Act 1989 and Water Industry Act 1994	24
3.4.8.	Victorian Contacts.....	24
3.5.	TASMANIA LEGISLATION	25
3.5.1.	Environmental Management and Pollution Control Act 1994.....	25
3.5.2.	Dangerous Goods Act 1998 and Dangerous Goods (General) Regulations 1998	25
3.5.3.	Local Government Act 1993.....	25
3.5.4.	Other Tasmania Statutes	26
3.5.5.	Tasmanian Contacts	26
3.6.	QUEENSLAND LEGISLATION	26
3.6.1.	The Queensland Environmental Protection Act 1994.....	26
3.6.2.	Integrated Planning Act 1997	27
3.6.3.	Sewerage and Water Supply Act 1949	27
3.6.4.	Dangerous Goods Safety Management Act 2002	27
3.6.5.	Other Queensland Statutes	28



3.6.6.	Queensland Contacts.....	28
3.7.	WESTERN AUSTRALIAN LEGISLATION	29
3.7.1.	Environmental Protection Act 1986.....	29
3.7.2.	Water Corporation Act 1995.....	30
3.7.3.	Explosives and Dangerous Goods Act 1961.....	30
3.7.4.	Other Western Australia Statutes	31
3.7.5.	Western Australian Contacts.....	31
3.8.	NORTHERN TERRITORY LEGISLATION	32
3.8.1.	Waste Management and Pollution Control Act 1999.....	32
3.8.2.	Dangerous Goods Act 1981	32
3.8.3.	Local Government Act 1993.....	32
3.8.4.	Public Health Act 1952.....	32
3.8.5.	Water Act 1992.....	32
3.8.6.	Water Supply and Sewerage Act 1988	33
3.8.7.	Other Northern Territory Statutes	33
3.8.8.	Northern Territory Contacts.....	33
3.9.	SOUTH AUSTRALIAN LEGISLATION.....	34
3.9.1.	Dangerous Substances Act 1979.....	34
3.9.2.	Petroleum Products Regulation Act 1995	34
3.9.3.	Environment Protection Act 1993.....	35
3.9.4.	Local Government Act 1999.....	35
3.9.5.	Public and Environmental Health Act 1987.....	35
3.9.6.	Sewerage Act 1929	36
3.9.7.	Water Resources Act 1997.....	36
3.9.8.	Other Statutes, Guidelines and Codes	36
3.9.9.	South Australian Contacts.....	36
4.	GUIDELINES.....	37
	GUIDELINE 1: SOLVENT MANAGEMENT - AIR EMISSIONS	38
	GUIDELINE 2: SOLVENT MANAGEMENT - LIQUID WASTE	40
	GUIDELINE 3: OZONE DEPLETING SUBSTANCE MANAGEMENT.....	44
	GUIDELINE 4: PHOTOGRAPHIC CHEMICALS MANAGEMENT.....	45
	GUIDELINE 5: FUEL, OIL AND GREASE MANAGEMENT.....	46
	GUIDELINE 6: OTHER LIQUID WASTE MANAGEMENT.....	47
	GUIDELINE 7: TRADE WASTE TO SEWER	49
	GUIDELINE 8: GENERAL SOLID WASTE MANAGEMENT	50
	GUIDELINE 9: WASTE PAPER AND CARDBOARD MANAGEMENT.....	52
	GUIDELINE 10: NOISE MANAGEMENT.....	53
	GUIDELINE 11: COMPLAINTS MANAGEMENT	54
	GUIDELINE 12: POLYCHLORINATED BIPHENYL MANAGEMENT	55
	GUIDELINE 13: ASBESTOS MANAGEMENT	56
	GUIDELINE 14: CONTAMINATED LAND MANAGEMENT	57
	GUIDELINE 15: EMERGENCY RESPONSE	58
	GUIDELINE 16: NATIONAL POLLUTANT INVENTORY	59
	GUIDELINE 17: CLEANER PRODUCTION	60
	GUIDELINE 18: WEB BASED ENVIRONMENTAL INFORMATION FOR PRINTERS	63
5.	WORKSHEETS.....	65