VICTORIA GOVERNMENT

GAZETTE

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By Authority Jean Gordon Government Printer Melbourne

SPECIAL

Environment Protection Act 1970

AMENDMENT TO THE STATE ENVIRONMENT PROTECTION POLICY (THE AIR ENVIRONMENT)

The Governor in Council makes the following amendment to the Policy under section 16 of the Act:

ADDITION OF NEW SCHEDULES TO THE POLICY

The following Schedules (F-7 to F-13) are added to Schedule F—Minimum Control Requirements for Stationary Sources:

"F-7 ALUMINIUM BEVERAGE CAN AND END COATING

This section describes control requirements to be applied to applicators of coatings to metal sheet, coil and cans used for aluminium beverage can and end manufacture. For the purposes of this section all coating plants within Air Quality Control Regions shall comply with the minimum requirements described in Table 7-1 during any day forecast by the Environment Protection Authority as a day of high ozone potential. In addition, those plants that give rise to justified complaints may be required to meet additional requirements, on an individual basis, as specified by a works approval, licence conditions or a pollution abatement notice.

Table 7-1 Description of Requirements

Coating Lines[a] Not Fitted With Emission Control Equipment	Coating lines shall either employ compliant coatings[b] or a combination of compliant and non-compliant coatings, provided the total emissions discharged to atmosphere, as calculated in the EPA *Volatile Organic Compounds (VOC)—Emission Chart* (Form AQS 29) is less than or equal to, that which would have resulted from the coating of the same number of sheets, coils or cans with compliant coatings.
Compliant Coatings Deemed to Meet Compliance Criteria in the Absence of Odour Complaints	

Coating Application	*VOC[c] Specific Gravity (SG)*	*Maximum[c] VOC. in Grams per Litre of Coating Solids*
Roller Coatings	0·88	555
Interior Spray	0·85	1275
End Seal Compound	0·66	1350

Coating Lines Fitted With Emission Control Equipment	No further requirements are necessary where the total of diffuse and point source VOC emissions is less than the calculated permissible level which would have resulted from the sole use of compliant coatings. The same rule as above will prevail in plants where controlled and uncontrolled lines operate, provided their total emissions are also less than the calculated permissible level.
Status Reporting	All plants that come within the scope of this section shall advise the Authority by 30 June each year, commencing 30 June 1988 of: (i) the compliance status,[d]; (ii) measured VOC[c] content of oven exhaust before and after the control equipment, as specified in the EPA standard analytical procedure;

(iii) any aspects that are likely to increase or reduce VOC emissions in the next 12 months;

(iv) proposed plan for achieving compliance, if the plant is considered non-compliant, and a timetable of events outlining any proposed reductions in VOC emissions.

These reporting requirements may be relaxed by the Authority once compliance has been achieved and maintained for a period of not less than three years.

New Premises	Any person proposing to establish a new plant shall first apply for Works Approval and shall provide evidence that VOC emissions will not exceed the criteria of a compliant plant.
New Coating Lines[f]	Any existing plant proposing to operate a new coating line must, in addition to meeting new source emission standards for the new line, ensure that the operation of all lines also meet the appropriate compliance status applicable to the whole plant at the time operation commences.

Footnotes

(*a*) Coating line consists of any conveyor equipped with one or more of the following components; cleaning or degreasing tank, surface coating or sealant applicator, volatile organic compound extraction hood or canopy, drying or curing oven and associated particulate and/or gaseous control devices.

(*b*) Compliant coating includes any coating, spray or sealant having a VOC content equal to or less than that specified for the corresponding category in Table 7–1, when applied to any can, sheet or coil to be used in the manufacture of aluminium beverage cans.

For the purpose of completing a VOC–Emissions Chart, the coating suppliers data may normally be used. In the event that audit tests are required, the following ASTM Standard Test Methods shall be applied.

(i) Volatile Organic Carbon (VOC) *ASTM D 3960–81*

(ii) Non Volatile Content ("solids") *ASTM D 3960–81 (ASTM D 2369–81 Procedure B)*

(iii) Water Content ("water") *ASTM D 3960–81 (ASTM D 3792–79 or ASTM D 4017–81)*

(*c*) Volatile organic compounds (VOC) means the sum of all compounds of carbon which contain at least one carbon to carbon bond plus methane and its derivatives, which evaporate from a coating or resin film under appropriate ASTM test conditions.

(*d*) A plant is considered to be in compliant status when its daily (diffuse and specific) discharges of VOC during any day of high ozone potential are equal to or less than the emissions that would result from the exclusive application of compliant coatings. A day of high ozone potential, as forecast by the Environment Protection Authority, is a day on which ozone is predicted to exceed 0·10 ppm (1 hour average) within the Air Quality Control Region. Forecast days are announced through the media on the day prior to a day of high ozone potential.

(*e*) For the purposes of this schedule the VOC content of the exhaust gas shall be equivalent to the measured TOC content where, TOC, Total Organic Compounds, means the sum of all compounds of carbon which contain at least one carbon to carbon bond plus methane and its derivatives. For the purposes of measurement 1 gram of TOC shall be deemed to have the same flame ionization response as 1 gram of hexane.

(*f*) Any coating line that is about to be put into operation in addition to one or more lines declared to have been in operation regularly or occasionally.

F–8 HEAT SET WEB OFFSET LITHOGRAPHIC PRINTING PLANTS

This section describes control requirements to be applied to heatset web offset lithographic printing plants.

For the purposes of this section, all heatset web offset lithographic printing plants printing on paper in more than two colours shall comply with the minimum control requirements described in Table 8–1. In addition, those plants that give rise to justified complaints may be required to meet additional requirements on an individual basis as specified by a works approval, licence conditions or a pollution abatement notice.

Table 8–1 Description of Requirements[a]

Process Drying Oven	All emissions from the drying ovens are to be captured and vented to either a direct fired afterburner or a catalytic afterburner.
Afterburner (Direct Fired or Catalytic)	
Emission limits:	(i) Total Organic Compounds not to exceed 0·020 gram per cubic metre[b,c]. (ii) Carbon monoxide not to exceed 0·1 gram per cubic metre[b]. (iii) Nitrogen oxides not to exceed 0·04 gram per cubic metre[b]. (iv) No visible emission.
Temperature Recording:	The exhaust gas temperature shall be continuously measured and recorded. Calibration records shall be kept of all instruments measuring and recording temperature.
Sampling Provisions:	Temperature and calibration records shall be retained for a minimum period of six months from the date of original record. Sampling provisions shall be provided which comply with the EPA *Memorandum on Provision for Stack Emission Determinations*, May 1977.

Footnotes

(*a*) These requirements shall not apply to existing plants fitted with emission controls unless specified by the Environment Protection Authority in response to justified complaints. (see definition SEPP Amendments *Victoria Government Gazette* No. 120, 24 November 1982).

(*b*) Gas volumes are expressed as dry at 0°C and an absolute pressure of one atmosphere (101·325 kPa).

(*c*) Total Organic Compounds (TOC) means the sum of all compounds of carbon which contain at least one carbon to carbon bond plus methane and its derivatives. For the purpose of measurement 1 gram of TOC shall be deemed to have the same flame ionization response as 1 gram of hexane.

F–9 PETROLEUM REFINERIES

This section describes control requirements to be applied to petroleum refineries. For the purposes of this schedule, petroleum refineries shall be divided into two classes[a]. Class A refineries shall comply with the minimum control requirements described in Tables 9–1 and 9–4. Class B refineries shall comply with the minimum control requirements described in Tables 9–1, 9–2, 9–3 and 9–4.

In addition, those petroleum refineries that give rise to justified complaints may be required to meet additional requirements on an individual basis as specified by a works approval, licence conditions or a pollution abatement notice.

Table 9–1 Volatile Organic Compound Emissions

Vacuum Producing System	Non condensable organic vapours from vacuum producing systems shall be incinerated or otherwise controlled to minimize emissions of the vapours to atmosphere. Vapours from hot wells and/or accumulators associated with vacuum systems shall be collected and incinerated or otherwise controlled to the satisfaction of the Authority to minimize emission of the vapours to atmosphere.
Process Vessel	Organic vapours from process vessels shall not be vented to atmosphere until the internal pressure is less than 133 kPa (4·6 psig). Organic vapours from process vessel depressurization shall be recovered or incinerated until the desired opening pressure is reached.
Leak Detection and Repair Programs	All refineries shall carry out a leak detection and repair program for pump and compressor seals, valves and pipe flanges in accordance with Table 9–5 and the requirements below[b].

Valves	A leak detection and repair program shall be performed at intervals of not greater than 3 months for all active valves within refineries.
Pump Seals	A leak detection and repair program shall be performed at intervals of not greater than 3 months for all pump seals within refineries.
Pipe Flanges	A leak detection and repair program shall be performed for all pipe flanges which are opened for maintenance. The program may be carried out within 14 days of the commencement of operations or at operating pressure and ambient temperature before process start-up.
Compressor Seals	A leak detection and repair program shall be performed at intervals of not greater than 3 months for all compressor seals within refineries.
Non-leaking components	Active valves, pump and compressor seals which do not exceed the leak definition as defined in Table 9–5 at two consecutive quarterly inspections shall thereafter be inspected annually.
Relief Valves	Emissions from relief valves, other than pressure relief emissions, shall be controlled by either— (i) a leak detection and repair program as detailed in Table 9–5, or (ii) a closed system which vents to atmosphere via the flare system, or (iii) rupture disks.

Table 9–2 Odour Control

Odour Audits[c]	Odour audits shall be conducted yearly during the months of January, February or March to identify sources of diffuse odour emissions within petroleum refineries. Reports detailing the significance of odour sources and explanations for the emissions shall be submitted to the Environment Protection Authority before 30 April each year.
Significant Sources	Persons operating petroleum refineries shall prepare and submit plans to the Environment Protection Authority for the control of odour sources which have been shown to give rise to justified complaints beyond the boundary of the plant.

Table 9–3 Source Performance Requirements

Catalytic and Thermal Cracking Units	Emissions of carbon monoxide from cracking unit regeneration kilns shall not exceed 1000 ppm by volume. Particulate emissions from cracking units shall not exceed a concentration of 0·5 grams per cubic metre[d]. The opacity of gases emitted from catalytic and thermal cracking units shall be continuously measured and recorded by an instrument approved by the Authority.

Table 9–4 Sulphur Emissions

Sulphur Recovery	During such times as necessary due to the maintenance or breakdown of a sulphur recovery unit or when hydrogen sulphide production falls below the operational levels for the sulphur recovery unit— (i) sour gas stream shall be incinerated in a system designed to completely oxidise hydrogen sulphide to sulphur dioxide and discharged to atmosphere so that any visible plume is minimised, or

(ii) sour gas streams shall be directed to a back-up sulphur recovery unit. If backup facilities are not available the refinery shall ensure that within 4 hours action is initiated so that only low sulphur crude oils are processed during these events.

(iii) sour gas streams shall not be flared except as an emergency measure.

Table 9–5 Leak Detection and Repair Program

Definition	A leak shall be defined as a discharge of visible mist or a Total Organic Compound (TOC) concentration measured as close as practicable to its source which exceeds 10 000 ppm[e].
Monitoring	Leak monitoring shall be performed by slowly traversing the potential leak surface with the probe of a portable TOC detector[f]. If a leak is suspected the probe should be moved backward and forward over the site to determine the peak concentration and then held stationary for no less than 30 seconds.
Exemption	The detection and repair requirements of this Table shall not apply to any equipment item which is inaccessible for reasons of worker safety, which handles a liquid with a Reid vapour pressure less than 0·4 kPa (1·5 psia) or which handles gases containing more than 90% methane and/or hydrogen.
Leak Detection and Repair	When a leak is detected— (i) The leaking components shall be identified by a numbered weatherproof tag. (ii) The person operating the detection equipment shall record the tag number, the date and sufficient information to enable the source to be readily identified. (iii) The leak shall be repaired[g] within 7 days if the source can be repaired without shutting down the process unit being served. (iv) The leak shall be minimised within 7 days if repair cannot be effected without shutting down the process unit being served. Leaks which cannot be repaired within 7 days shall be repaired at the first available process turnaround. (v) The numbered weatherproof tags shall not be removed until the component has passed two consecutive quarterly inspections.
Calibration	The portable TOC detector shall be calibrated daily using a reference gas of equivalent concentration to the leak definition.

Footnotes

(*a*) Class A refineries shall be defined as any refinery which has as its principal operation the separation of crude oil into its major fractions. Excluded from this class are refineries with cracking facilities.

Class B refineries shall be defined as any refinery employing the processes used in Class A refineries and in addition cracking facilities, petrochemical manufacturing facilities or lubricating oil manufacturing facilities.

(*b*) The leak detection and repair program applies to all pumps and compressors other than those fitted with double mechanical seals, all block or process control valves and all flanges with the exception of any item on a line with a nominal diameter less than 30 mm.

(*c*) An odour audit involves sensory evaluation of all areas of an industrial plant to identify odour sources, sufficient sensory or physical evaluation to rank the odour sources, and investigation of the major sources to determine reasons for the emissions.

(*d*) Gas volumes are expressed as dry at 0°C and an absolute pressure of one atmosphere (101·325 kPa).

(*e*) Total Organic Compounds (TOC) means the sum of all compounds of carbon which contain at least one carbon to carbon bond plus methane and its derivatives. For the purpose of measurement 1 gram of TOC shall be deemed to have the same flame ionization reponse as 1 gram of hexane.

(*f*) The TOC detector shall conform to the following specifications:

(i) The instrument shall be capable of measuring the leak concentration.

(ii) The calibration precision shall not be greater than 10%.

(iii) The response time shall be less than 30 seconds.

(iv) The scale sensitivity shall be at least 10% of the leak definition.

(v) The instrument shall be equipped with a pump and the sample flow rate shall be between 0·5 to 3·0 litres per minute.

(vi) The analyser shall be intrinsically safe for operation in explosive atmospheres.

(*g*) Repairs shall be considered as effective when the leak rate is reduced to the point where the leaking component passes the leak detection test.

F–10 REINFORCED PLASTIC FABRICATION

This section describes control requirements to be applied to Reinforced Plastics (RP) Fabricators[a].

All RP fabricators shall comply with the minimum control requirements described in Tables 10–1, 10–2 and 10–3. In addition those RP fabricators that give rise to justified complaints may be required to meet additional requirements on an individual basis as specified by a work approval, licence conditions or a pollution abatement notice.

Table 10–1 General Requirements

Emissions capture	Emissions from lay-up and consolidation areas shall be captured and discharged freely upwards from an elevated discharge point.
	Efflux (exit) velocity shall not be less than 8 metres per second.
Stack height	Stack heights shall be designed in accordance with Schedule E and a design ground level concentration of 1 odour unit[b].
Emissions Management	The amount of resin exposed to the atmosphere at any time shall be minimised by—
	(i) keeping resin containers closed when not in use.
	(ii) storing waste resin in closed containers.
	(iii) mixing and handling wet resin in areas set aside for this purpose which are adequately ventilated.
Dust Emissions	Cutting or sanding of RP products shall not take place in areas where dust can be emitted from the factory building other than through an adequately designed bag filter or a device of similar collection efficiency.
	The removal, transfer and disposal of fibreglass dust shall cause no visible emissions.

Table 10–2 Low Styrene Emission Resins

No later than two years after the date this Schedule is gazetted, no fibreglass fabricator shall use any prescribed resin[c] unless it is a low styrene emission resin as defined in footnote[d] except in applications which require high chemical resistance, high strength (e.g. pressure vessels) or any specific application approved by the Authority in writing.

Table 10–3 Spray Gun Technology

All new spray equipment purchased after the date this Schedule is gazetted shall be operated airlessly[e].

Footnotes

(*a*) Applies to Fabricators employing processes other than marble casting, pressure-bag moulding, matched die moulding, continuous sheeting, pultrusion, hot moulding and resin injection moulding or any process which encloses the laminate for a significant portion of the gel time.

(*b*) Odour unit is the dimensionless ratio of:

(i) the volume which the sample would occupy when diluted to the odour threshold

to

(ii) the volume of the sample

Odour is measured in accordance with *EPA Standard Analytical Procedure B2. Odour—Dynamic Olfactometry.*

(*c*) Prescribed resin means a resin containing in excess of 20% styrene and includes unsaturated polyester resins, vinyl ester resins, and bisphenolic resins but does not include gel coating resins.

(*d*) A low styrene emission shall be defined as a resin with a styrene evaporation rate less than 20 gram per square metre at 23°C determined using the test procedure in *The Measurement of Styrene Evaporation from Unsaturated Polyester Resin* (1982)—British Plastics Federation.

(*e*) Does not apply to air supplied to drive glass roving cutters.

F–11 SAFETY RELIEF FLARES

This section describes control requirements to be applied to safety relief flare systems. All flare systems shall comply with the minimum control requirements described in Table 11–1.

In addition, safety relief flares that give rise to justified complaints may be required to meet additional requirements on an individual basis, as specified by a works approval, licence conditions or a pollution abatement notice.

Table 11–1 Minimum Control Requirements

Emission Requirements	All flare systems shall operate smokelessly under routine plant operating conditions and shall employ a staged design to promote smokeless combustion or shall be equipped with a steam or air suppression system [a,b,c,d].
Liquid Knock Out	All flares receiving condensable gas streams shall be fitted with a liquid knock-out drum to minimise liquid entrainment into the flare.
Control of Smoke Suppressants	All refinery flares shall be fitted with a control system to sense flaring or the flow of gas to the flare system and automatically control the supply of smoke suppressant to the flare. All petrochemical plant flares shall be fitted with: (i) an automatic control system as described above, or (ii) an audible alarm to alert operators when flaring is occurring.
New Flare Systems	All new flare systems[e] shall be designed to minimise visible emissions by the application of the most appropriate flaring technology at the time of replacement[f].

Footnotes

(*a*) Routine plant operating conditions have been defined to include flaring resulting from scheduled plant startup, scheduled plant shutdown, continuous venting during normal operations and emergency releases at rates less than 10% of the design capacity of the flare system for existing flares and 20% of the design capacity for new flare systems.

(*b*) Excludes water suppressed flares at the Esso Longford oil and gas plant, the Esso Long Island Point fractionation plant and pit flares equipped with water suppression systems.

(*c*) Excludes the lag-time necessary to raise and deliver steam or air to the flare. This lag-time shall be determined and specified in air licences issued in accordance with this schedule. The lag-time mentioned above shall be minimised.

(*d*) Excludes petrochemical plant flares which do not give rise to visible emissions for more than 5 hours in any year.

(e) Includes reconstructed flare system but excludes flare tip replacements.

(f) Companies seeking works approval from the Environment Protection Authority for new flare systems shall submit a report evaluating the cost and performance of available flare system designs including staged flare systems and low level enclosed flare systems.

F-12 ALUMINIUM BRIGHT DIP ANODISING

This section describes control requirements to be applied to aluminium bright dip anodising facilities. All bright dip anodisers shall comply with the minimum control requirements described in Tables 12-1, 12-2 and 12-3.

In addition, bright dip anodisers that give rise to justified complaints may be required to meet additional requirements on an individual basis as specified by a works approval, licence conditions or a pollution abatement notice.

Table 12-1 Discharge Point Characteristics

Stack Heights	Stack heights shall be designed in accordance with Schedule E.
Duct Velocity	Exhaust stack and duct work shall be sized to give a mean gas velocity of not more than 9 metres per second in the ducting and exhaust stack[a].
Efflux Velocity	Exhaust stacks shall be coned to give an efflux (exit) velocity which is not less than 15 metres per second.

Table 12-2 Nitrogen Oxide Management

The formation of nitrogen oxides in bright dipping baths shall be minimised.

Process Conditions	Process time, nitric acid concentration and bath temperature shall be minimised to the lowest values consistent with product quality.
Acid Additions	Nitric acid makeup to the baths shall be by way of small frequent additions at least every 6 racks.
Grease Removal	Items to be bright dipped shall be free of visible surface grease or similar impurities.
Lost Parts	Items of work lost in the baths shall be recovered immediately.

Table 12-3 Fume Scrubbing

All fume from bright dip baths shall be collected and discharged to atmosphere via a packed bed scrubber designed as follows:

Exhaust Fan	The exhaust fan shall be located on the bath side of the scrubber.
Residence Time	The mean residence time of gas in the packing shall not be less than 0·55 seconds.
Liquor pH	The scrubbing liquor pH shall be maintained between 8 and 9 pH units using an automatic dosing system.
	Scrubbing liquor pH shall be continuously monitored and indicated.
	Means shall be provided to prevent the exhaust fan from operating unless the pump supplying liquor to the scrubbing unit is operating.

Footnote

(a) This requirement shall not apply to existing bright dip anodisers with duct velocities exceeding 9 metres per second in the absence of justified complaints. (see definition SEPP Amendments *Victoria Government Gazette* No. 120, 24 Nov. 1982).

F-13 POWDER COATING LINES

This section describes control requirements for powder coating lines. For the purposes of this schedule all powder coating lines shall comply with the minimum control requirements described in Table 13-1.

In addition, powder coating lines which give rise to justified complaints may be required to meet additional requirements on an individual basis as specified by a works approval, licence conditions or a pollution abatement notice.

Table 13–1 Minimum Control Requirements

Control Equipment[a]	Powder coating lines shall be equipped with one of the following control devices fitted after the cyclone to further remove particulate matter from the exhaust gases: (i) Fabric dust collector (FFDC); (ii) Water scrubber system; (iii) Any device of equivalent performance to the above equipment.
FFDC	The FFDC shall be —adequately sized to cater for the maximum air volume[b]. —fitted with a device to clearly and accurately indicate at all times the pressure differential across the fabric. —operated strictly in accordance with the manufacturers instructions.
Scrubbing systems	Water scrubbers shall be maintained to ensure that sludge does not accumulate and that water intakes do not become blocked. Water levels shall not drop below the operational levels for the scrubbing system.
Stack Height	All waste emissions to atmosphere shall be discharged freely upwards from a stack not less than 3 metres higher than any building or obstruction within 15 metres of the stack.

Footnotes

(*a*) Secondary control devices shall not be required on a manual powder booth provided the cyclones serving the booth are fitted with interlocks to ensure that the fan cannot be operated when the recovery bins are removed and a level indicator is provided to alert operators when the cyclone collection hopper is full.

(*b*) The air to cloth ratios for fabric filters serving powder booths may be varied depending on the type of cloth, size of booth and cleaning mechanism. But as a general guideline the following is recommended:

	Air to Cloth Ratio: $m^3/min/m^2$
Mechanical shaker	0.4—0.6
Reverse air	0.4—0.6
Reverse pulse	1.5—2.0.

AMENDMENTS TO SCHEDULE F–6

Substitute the following amended Schedule for Schedule F–6 of the Policy:

"This section describes control requirements to be applied to the rendering industry. For the purposes of this section, all rendering plants shall comply with the minimum requirements described in Table 6–1. In addition, those rendering plants that give rise to justified complaints, may be required to meet additional requirements, on an individual basis, as specified by a works approval, licence conditions or a pollution abatement notice.

Table 6–1 Description of Requirements for Rendering Plants

Rendering	
Processing	Material to be rendered down shall be processed as soon as possible after slaughter or death, to reduce the odours caused by decay.

Vapour Control	(i) *Existing Plant* All cooker and pressing vapours shall be vented to odour removal equipment. Solid rendered material shall be removed to bagging area by enclosed conveyor. (ii) *New Plant* (*a*) All new batch or continuous high temperature cooker plants shall totally enclose that area of plant comprised of raw material hoppers, cookers, percolators, centrifuges and presses. Vapour collection from these sources can be either separate or integrated with plant ventilation air extraction to odour removal equipment. Solid rendered material shall be removed as in (i) above. (*b*) All new continuous low temperature plants may be required to enclose raw material hoppers and cooker/dryer equipment.
Odour Removal	The odour level of air discharged to atmosphere shall not exceed 200 odour units. Cooker and pressing vapours having levels higher than 200 odour units will be treated in odour removal equipment comprised of— (i) knock out box and condenser—direct or indirect, and (ii) fume incinerator or chemical wet scrubber, or (iii) other equipment demonstrated to meet the odour emission limit requirements to the satisfaction of the Authority in consultation with the licensee. Odour removal equipment shall operate such that the air discharged to atmosphere does not exceed an odour level of 200 odour units. For new plant with separate ventilation air extraction, the odour level in the ventilation air exhaust shall be determined in accordance with the dispersion requirements but shall not exceed 200 odour units. Building ventilation should be designed to bring ventilated air to a single point(s) so that odour removal equipment can be installed if necessary.
Odour Dispersion	The following dispersion requirements shall be met: (i) Chimney heights shall be designed in accordance with the requirements of Schedule E. (ii) Exhaust velocity, minimum of 6 metres per second and free vertical discharge.
Sampling Provisions	These shall comply with the EPA *Memorandum on Provision for Stack Emission Determinations* May 1977, on both existing and new plants. (i) Fume incinerator— exhaust gas temperature shall be continuously measured and recorded. Temperature recordings shall be marked to show true calendar date and time of day. Calibration records shall be kept of all instruments measuring and recording temperature. Temperature recordings and calibration records shall be retained for a minimum period of 6 months from the date of original record.

	(ii) Wet scrubber— inlet temperature of scrubber shall be continuously indicated. Solution strength of scrubbing liquors shall be measured and recorded regularly as per licence conditions.
Emission Monitoring	(i) Odour measurements shall be conducted whenever required in writing by the Authority using *EPA Standard Analytical Procedure No. B2 Odour—Dynamic Olfactometry.* (ii) All other measurements shall use proceudres acceptable to the EPA.
Condensate Removal	Condensate shall be discharged to sewer wherever sewer connection is available. Where lagoon and land disposal is used, it may be necessary to take this additional odour into consideration.
Blood or Feather Drying	
Vapour Control	(i) Existing plant. Odour level in the exhaust chimney gases from blood or feather drying process(es) shall not exceed 200 odour units. (ii) New plant. All new plants shall totally enclose the dryer equipment such that vapour collection is either separate or integrated with plant ventilation air extraction. The odour level of the vapour collected shall not exceed 200 odour units.
Dispersion Requirements	As for rendering.
Visible Emissions	No visible emission, except water vapour, is permitted from the chimney.".

AMENDMENTS TO CLARIFY THE INTENT AND OBJECTIVES OF THE POLICY

The Policy is amended by substituting those parts of the Policy identified below in columns one, two and three with the wording given in column four:

Page No.	*Part, Clause or Schedule*	*Existing Text*	*New Text*
2295	Part V, Clause 32	General. Exhaust, evaporative and crankcase emissions shall continue to be controlled. New emission requirements shall be developed, where practicable, in consulation with the Australian Environment Council, other States, Territories and the Commonwealth. Such requirements shall be implemented through Regulations and through amendments to this Policy.	General. Exhaust, evaporative and crankcase emissions shall continue to be controlled. New emission requirements shall be developed, where practicable, in consultation with the Australian Environment Council, Australian Transport Advisory Committee, other States, Territories and the Commonwealth. Such requirements shall be implemented through State Acts, Regulations and through amendments to this Policy.
2295	Part V, Clause 33	The Authority shall implement a surveillance and enforcement programme to control emissions from motor vehicles.	The Authority shall continue a surveillance and enforcement programme to control emissions from in-service motor

Page No.	Part, Clause or Schedule	Existing Text	New Text
			vehicles. These programmes shall address the issues of repair and maintenance of emission control equipment and shall concentrate on preventation of tampering with emission control systems and the discharge of visible smoke. Random visits to Licensed Motor Car Traders shall be undertaken to inspect and test in-service vehicles for compliance with the Regulations.
2295	Part V, Clause 35	Motor Vehicle manufacturers shall be encouraged to produce motor vehicles which meet emission requirements without adversely affecting fuel economy or driveability.	Motor vehicle manufacturers shall be encouraged to produce motor vehicles which meet emission requirements without adversely affecting fuel economy or driveability. Unleaded petrol shall be widely available from 1 July 1985 and shall be used by all new passenger cars and derivatives made after 1 February 1986 to enable the use of catalytic converters to achieve reduced emissions.
2295	Part V, Clause 37	Specific Controls. New motor vehicles shall be required, as soon as practicable, to meet emission requirements over the full range of adjustments provided by the manufacturer for the engine, ignition and fuel system.	Specific Controls. New passenger cars and derivatives made after 1 February 1986 shall be constructed to prevent adjustment of carburettor or fuel injection idle air/fuel mixture.
2295	Part V, Clause 43	Buffer Zones. The Authority shall encourage land use planning to complement the purposes of the Policy. The provision of buffer zones in accordance with the guidelines adopted by the Authority shall be encouraged and, where practicable shall be specified in licence conditions.	Buffer Zones. The Authority shall encourage land use planning to complement the purposes of the Policy. In particular the Authority shall develop guidelines specifying the buffer zone requirements for industry and shall encourage planning authorities to give regard to these guidelines when rezoning land or siting new industry.
		Where a permanent buffer zone can be provided within the boundary of the premises on which a source of waste emissions is located, the Authority may apply design ground level concentrations for odorous substances of particulates and the	Buffer Zones may be specified as a requirement in air licences to limit the impact of odours, particulates or the local effects of Class C-2 Biologically Accumulated Indicators. Where a source of waste emissions is situated in an industrial area,

Page No.	*Part, Clause or Schedule*	*Existing Text*	*New Text*
		local objectives for Class 2 indicators at or beyond the boundary of that buffer zone.	other than a Light Industrial area or its equivalent, the Authority may apply the design ground level concentrations of odorous indicators or particulates and the local objectives for Class C-2 Biologically Accumulated Indicators at the boundary of the industrial zone. In doing this, the Authority shall give due regard to the effects or impacts on other industries within the zone.
2297	Schedule C	Design Ground Level Concentration	Design Ground Level Concentration
		ppm / mg/m³	ppm / mg/m³
	Acrylonitrile	0·67 / 1·5	0·067 / 0·15
	Carbon Tetrachloride	0·33 / 2·2	0·17 / 1·1
	Chloroform	0·83 / 4·0	0·33 / 1·59
	Ethylene Oxide	1·7 / 3·0	0·03 / 0·05
	Epichlorohydrin	0·17 / 0·63	0.067 / 0·25
	Formaldehyde	0·067 / 0·10	0·033 / 0·05
	n-Hexane	3·3 / 12·0	1·67 / 6·0
	Methylene Chloride	6·7 / 24·0	3·3 / 12·0
	Trichloroethylene	3·3 / 17·8	1·67 / 9·0
Explanatory Note:			
Schedule C	The proposed changes to certain Class 2 indicators and design ground level concentrations are based on changes proposed by the *Ninety-sixth Session of the National Health and Medical Research Council—October 1983 (NHMRC—Approved Occupational Health Guide—Threshold Limit Values [1983–84]).*		
2298	Schedule E General	A plume calculation procedure shall be performed for stationary sources to ensure that the predicted maximum ("worst case") three minute ground level concentration for any indicator does not exceed the design ground level concentration prescribed below. The plume calculation procedure should consider local conditions, the effect of background concentrations, the contribution of adjacent sources and the need to preserve the capacity of the local air environment to receive future waste emissions. The Authority shall develop and publish the detailed plume calculation procedure as soon as	A plume calculation procedure shall be performed for stationary sources to ensure that the predicted maximum ("worst case") ground level concentration for any indicators does not exceed the design ground level concentration prescribed below. The plume calculation procedure should consider local conditions, the effect of background concentrations, the contribution of adjacent sources and the need to preserve the capacity of the local air environment to receive future waste emissions. The Authority shall publish the detailed plume calculation procedure and shall update the

Page No.	Part, Clause or Schedule	Existing Text	New Text
		possible. Existing Authority practice shall continue to be used until the detailed plume calculation procedure is adopted by the Authority.	procedure as specialist or more advanced dispersion models become available.
2298–2299	Schedule E Design Ground Level Concentrations	The design ground level concentrations prescribed below for Class 1, Class 2 and Class 3 indicators shall be based on an averaging period of three-minutes. CLASS 1 INDICATORS: The design three-minute ground level concentration for carbon monoxide (CO), nitrogen dioxide (NO_2) and sulphur dioxide (SO_2) shall be determined by multiplying the acceptable levels given in Schedule B for a one-hour averaging period by a factor. This factor shall be determined using established mathematical techniques and accepted technical data and shall be adopted by the Authority as soon as possible. An equivalent design ground level concentration for lead shall be established. CLASS 2 AND CLASS 3 INDICATORS. The design three-minute ground level concentrations of Class 2 and Class 3 indicators shall be those prescribed in Schedules C and D respectively except as prescribed in Schedule F.	The design ground level concentrations prescribed below for the Class 1 indicators shall be based on an averaging period of one hour. The design ground level concentrations prescribed below for Class 2 and Class 3 indicators shall be based on an averaging period of three minutes. CLASS 1 INDICATORS: The design one-hour ground level concentration for carbon monoxide (CO), nitrogen dioxide (NO_2), and sulphur dioxide (SO_2) shall be the acceptable levels given in Schedule B for a one hour averaging period. CLASS 2 AND CLASS 3 INDICATORS. The design three minute ground level concentration of Class 2 and Class 3 indicators shall be those prescribed in Schedules C-1 and D, respectively, except as prescribed by Schedule F. The design ground level concentration for gaseous fluorides shall be the levels given in Schedule C-2 for the local objectives at 24 hours, 7 days and 90 days.
2299	Schedule E Plume Calculation, Procedure	The prediction of maximum ("worst case") three-minute ground level concentrations for an individual source subject to licensing should be followed at two levels of complexity: a relatively simple analysis should be used for small to moderate sized sources, and an extensive analysis which may include the use of physical models should be used for large sources and discharges of significant amounts of Class 2 and Class 3 indicators.	The prediction of maximum ("worst case") ground level concentrations for an individual source subject to licensing should be carried out using either: a relatively simple analysis should be used for small to moderate sized sources, and an extensive analysis, which may include the use of physical models, should be used for large sources and discharges of significant amounts of Class 2 and Class 3 indicators.

Page No.	*Part, Clause or Schedule*	*Existing Text*	*New Text*
	Schedule E, Plume Calculation Procedure, Step 9	9. Estimate maximum ("worst case") three-minute ground level concentrations.	9. Estimate maximum ("worst case") ground level concentrations.
2300–2301 as amended 24 Nov 1982	Schedule G and Schedule H (3 Total particulate matter)	All stationary sources except fuel fired units used for steam or electricity generation and incinerators.	All stationary sources except fuel fired units used for steam or electricity generation, incinerators and glass manufacturing furnaces.
3898 as amended 24 Nov 1982	Schedule F-2 Concentrate Batching Plants [Table 2–1 Cement Fabric Filter Dust Collector (FFDC)]	The FFDC shall be adequately sized to cater for the maximum air volume. Its air to cloth ratio shall not exceed 0·8 cubic metres per minute per square metre of cloth area.	The FFDC shall be adequately sized to cater for the maximum air volume.
2302 column 2 paragraph 1	Explanatory Notes Purpose and *Function of State* Environment Protection Policy	The statutory procedures for formulating Policies place *special emphasis on* opportunities for public participation. Before declaration by the Governor-in-Council, a draft Policy is advertised, issued for public review and comment and revised in the light of comments received before being recommended to the Government for declaration under the Environment Protection Act.	The statutory procedures for formulating Policies place *special emphasis on* opportunities for public participation. Before declaration by the Governor-in-Council, a draft Policy is advertised, issued for public review and comment and revised in the light of comments received before being recommended to the Government for declaration under the Environment Protection Act. The Authority is prepared to recommend and consider where appropriate *amendments to make policies* more stringent where: —the Authority receives new information on the environmental effects of discharges or the vulnerability of the environment; —better control technology becomes available; —industry relocates and new standards are needed to protect the environment in that area; —*the level of environment* protection expected by the community increases; —new beneficial uses need protection; or —existing beneficial uses need better protection.

Page No.	Part, Clause or Schedule	Existing Text	New Text
			On the other hand, the Authority is prepared to consider and where appropriate recommend amendments to make policies less stringent where a person affected by a policy can satisfy the Authority that: —it is not possible to meet SEPP emisssion or discharge limits using reasonably available technology for that industry; —the discharge of wastes to nominated levels above SEPP limits would be unlikely to result in policy objectives (including design ground level concentrations) being exceeded; and —the discharge would be unlikely to affect beneficial uses adversely.

ADMINISTRATIVE AMENDMENTS TO BRING THE POLICY INTO LINE WITH THE ENVIRONMENT PROTECTION (REVIEW) ACT 1984

The Policy is amended by inserting the text given in Column 4 as follows:

Page No.	Part, Clause or Schedule	Extent of Amendment	New Text
2294	Clause 4 after "Precursor"	New definition	"Scheduled Premises" means any premises prescribed by regulations made under the Act to be scheduled premises [but does not include any premises exempted from the requirements of sections 19A or 20 of the Act].
2294	Clause 4 after "Waste"	New definition	"Works Approval" means an approval of works issued under the Act.
2295	Clause 14	Replace existing text	Control of wastes shall be achieved by works approval, licensing, pollution abatement notices and regulations.
2295	Clause 17	Amend opening words	Works approval and licence conditions and regulations shall be based on the following considerations.

Page No.	*Part, Clause or Schedule*	*Existing Text*	*New Text*
2295	Clause 20	Replace existing text	General, unless exempted, emissions of wastes from scheduled premises shall be controlled by works approval and licensing. Wastes from stationary sources which are not scheduled premises shall be controlled by pollution abatement notices or regulations where appropriate.
2295	Clause 22	Replace existing text	Persons responsible for the emission of wastes from stationary sources specified in Schedule F must comply with the control requirements prescribed by the appropriate section of Schedule F.
2295	Clause 25	Replace existing test	A plume calculation, as outlined in Schedule E, shall be carried out for each scheduled premises to ensure that, in the vicinity of the source, the predicted maximum ground level concentrations of emitted wastes do not exceed the design ground level concentrations prescribed in Schedules C, D and E except as prescribed by Schedule F.
2295	Clause 28	Replace second sentence	In addition, a large new source may be required to employ best available control technology or, in some cases, may be issued with a works approval only where reductions in emissions from other sources in the same region offset the effects of the proposed emissions from the new source.
2295	Clause 43	Replace second sentence	The provision of buffer zones in accordance with the guidelines adopted by the Authority shall be encouraged and, where practicable, shall be specified in works approval and licence conditions.
3898 3899 3900	Schedule F2 Schedule F3 Schedule F4	In each of these (3) cases replace the following words "in licence conditions or a pollution abatement notice".	With the words "by a works approval, licence conditions or a pollution abatement notice".

Dated:

Responsible Minister:
T. W. ROPER
Minister for Planning and Environment

Clerk of the Executive Council

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