



New South Wales

Protection of the Environment Operations (Clean Air) Regulation 2021

under the

Protection of the Environment Operations Act 1997

Her Excellency the Governor, with the advice of the Executive Council, has made the following Regulation under the *Protection of the Environment Operations Act 1997*.

MATT KEAN, MP
Minister for Energy and Environment

Explanatory note

The object of this Regulation is to remake, with minor changes, the *Protection of the Environment Operations (Clean Air) Regulation 2010*, which is repealed on 1 September 2021 by the *Subordinate Legislation Act 1989*, section 10(2). This Regulation makes provision for the following—

- (a) domestic solid fuel heaters,
- (b) the control of burning,
- (c) emissions from motor vehicles and motor vehicle fuels,
- (d) emissions from activities and plant,
- (e) the control of volatile organic liquids,
- (f) limits on the sulfur content of liquid fuel,
- (g) savings and formal matters.

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Protection of the Environment Operations (Clean Air) Regulation 2021

under the

Protection of the Environment Operations Act 1997

Part 1 Preliminary

1 Name of Regulation

This Regulation is the *Protection of the Environment Operations (Clean Air) Regulation 2021*.

2 Commencement

This Regulation commences on 1 September 2021 and is required to be published on the NSW legislation website.

Note— This Regulation replaces the *Protection of the Environment Operations (Clean Air) Regulation 2010*, which is repealed on 1 September 2021 by the *Subordinate Legislation Act 1989*, section 10(2).

3 Definitions

In this Regulation—

Approved Methods (Modelling and Assessment) Publication means the document entitled *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales* prepared by the EPA and published in the Gazette, as in force from time to time.

Approved Methods (Sampling and Analysis) Publication means the document entitled *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales* prepared by the EPA and published in the Gazette, as in force from time to time.

CEM, together with a number, means a monitoring method of that number prescribed by the Approved Methods (Sampling and Analysis) Publication.

Central Coast Metropolitan Area means the Central Coast local government area.

Greater Metropolitan Area means—

- (a) the Central Coast Metropolitan Area, and
- (b) the Newcastle Metropolitan Area, and
- (c) the Sydney Metropolitan Area—B, and
- (d) the Wollongong Metropolitan Area, and
- (e) the local government areas of City of Cessnock, Municipality of Kiama, City of Lithgow, City of Maitland, Mid-Western Regional, Muswellbrook, Port Stephens, City of Shoalhaven and Singleton.

monitoring method means a continuous emissions monitoring method prescribed by the Approved Methods (Sampling and Analysis) Publication.

Newcastle Metropolitan Area means the local government areas of City of Lake Macquarie and City of Newcastle.

Sydney Metropolitan Area means the local government areas of Bayside, Blacktown City, Municipality of Burwood, Camden, City of Campbelltown, City of Canada Bay, City of Canterbury-Bankstown, Cumberland City, City of Fairfield, Georges River, City of Hawkesbury, Hornsby, Municipality of Hunter's Hill, Inner West, Ku-ring-gai, Lane Cove, City of Liverpool, Mosman, North Sydney, Northern Beaches, City of Parramatta, City of Penrith, City of Randwick, City of Ryde, Municipality of Strathfield, Sutherland Shire, City of Sydney, The Hills Shire, Municipality of Waverley, City of Willoughby and Municipality of Woollahra.

Sydney Metropolitan Area—B means the local government areas of Bayside, City of Blacktown, City of Blue Mountains, Municipality of Burwood, Camden, City of Campbelltown, City of Canada Bay, City of Canterbury-Bankstown, Cumberland City, City of Fairfield, Georges River, City of Hawkesbury, Hornsby, Municipality of Hunter's Hill, Inner West, Ku-ring-gai, Lane Cove, City of Liverpool, Mosman, North Sydney, Northern Beaches, City of Parramatta, City of Penrith, City of Randwick, City of Ryde, Municipality of Strathfield, Sutherland Shire, City of Sydney, The Hills Shire, Municipality of Waverley, City of Willoughby, Wingecarribee, Wollondilly and Municipality of Woollahra.

test method means a test method prescribed by the Approved Methods (Sampling and Analysis) Publication.

the Act means the *Protection of the Environment Operations Act 1997*.

TM, together with a number, means a test method of that number prescribed by the Approved Methods (Sampling and Analysis) Publication.

Wollongong Metropolitan Area means the local government areas of City of Shellharbour and City of Wollongong.

Note— The Act and the *Interpretation Act 1987* contain definitions and other provisions that affect the interpretation and application of this Regulation.

Part 2 Domestic solid fuel heaters

4 Definitions

In this Part—

certificate of compliance, in relation to a heater, means—

- (a) in the case of a heater sold before 1 September 2019—a certificate issued by a body approved by the EPA and certifying that all heaters of that model—
 - (i) comply with Standard 4012 and Standard 4013, and
 - (ii) have an overall average efficiency of not less than 55% as tested and calculated in accordance with Standard 4012, and
 - (iii) have an appliance particulate emission factor, as tested and calculated in accordance with Standard 4013, not greater than—
 - (A) 2.5 g/kg, for heaters without catalytic combustors, or
 - (B) 1.4 g/kg, for heaters with catalytic combustors, or
- (b) in the case of a heater sold on or after 1 September 2019—a certificate issued by a body approved by the EPA and certifying that all heaters of that model—
 - (i) comply with Standard 4012 and Standard 4013, and
 - (ii) have an overall average efficiency of not less than 60% as tested and calculated in accordance with Standard 4012, and
 - (iii) have an appliance particulate emission factor, as tested and calculated in accordance with Standard 4013, not greater than—
 - (A) 1.5 g/kg, for heaters without catalytic combustors, or
 - (B) 0.8 g/kg, for heaters with catalytic combustors.

certificate of exemption means a certificate issued by a body approved by the EPA, being a certificate exempting all heaters of a particular model from compliance with Standard 4012 and Standard 4013.

heater means any solid fuel burning appliance that is designed, manufactured or adapted for domestic use.

model of heater means a particular design of heater made by a particular manufacturer.

Standard 4012 means the document entitled AS/NZS 4012:2014, *Domestic solid fuel burning appliances—Method for determination of power output and efficiency*, as in force from time to time.

Standard 4013 means the document entitled AS/NZS 4013:2014, *Domestic solid fuel burning appliances—Method for determination of flue gas emission*, as in force from time to time.

5 Application of Part

- (1) This Part applies to heaters, including the wholesale and retail sale of heaters.
- (2) However, this Part does not apply to the sale or installation of heaters of the following kind—
 - (a) a masonry appliance built on site,
 - (b) a central heating appliance,
 - (c) a cooking stove appliance,
 - (d) an appliance intended for use solely for heating water,
 - (e) an appliance intended for use solely for distributing heat through ducts,
 - (f) a pellet heater.

- (3) In this clause—
- central heating appliance** means a heating appliance that is intended for space heating of premises by transferring heat to the living areas of the premises by ducted hot air, hot water or another fluid.
- cooking stove appliance** means a solid fuel burning appliance—
- (a) that has at least one cooking hot plate, and
 - (b) that has an oven with a volume of not less than 28 litres, and
 - (c) around which gaseous combustion products are capable of being routed.
- pellet heater** means a domestic, automatic, continuous feed, pellet fuel burning appliance that is designed and manufactured to burn compressed wood or biomass pellets.

6 Requirement for certificates of compliance when heaters are sold

- (1) A person must not sell a heater to any other person unless—
- (a) the heater is marked in accordance with Standard 4012 and Standard 4013, and
 - (b) a certificate of compliance is in force in relation to heaters of the same model as that heater, and
 - (c) in the case of a sale to a person whose business includes the wholesale or retail sale of heaters—a copy of the certificate of compliance has been given to the purchaser.
- Maximum penalty—200 penalty units, in the case of a corporation) or 100 penalty units, in the case of an individual.
- (2) This clause does not apply to a heater of a model for which a certificate of exemption is in force.

7 Interference with heaters

- (1) A person must not—
- (a) alter the structure, exhaust system or inlet air system of any heater of a model that is the subject of a certificate of compliance or certificate of exemption, or
 - (b) mark on a heater that it complies with Standard 4012 or Standard 4013, or both, if the heater is not of a model that is the subject of a certificate of compliance.
- Maximum penalty—200 penalty units, in the case of a corporation or 100 penalty units, in the case of an individual.
- (2) This clause extends to any person who causes or permits the doing of a thing that is prohibited under this clause.
- (3) Nothing in this clause makes it an offence for a person to carry out any repair work on any heater, including repairs or alterations in accordance with a notice under section 96 of the Act.

Part 3 Control of burning

Division 1 Preliminary

8 Definitions

In this Part—

approval means an approval in force under Division 3.

domestic waste means waste, other than vegetation, that is of a kind and quantity ordinarily generated on domestic premises.

domestic waste management services has the same meaning as it has in the *Local Government Act 1993*.

Note— The *Local Government Act 1993* defines **domestic waste management services** as services comprising the periodic collection of domestic waste from individual parcels of rateable land and services that are associated with those services.

9 Application of Part

This Part does not apply to or in respect of the following—

- (a) the carrying out of emergency bush fire hazard reduction work, within the meaning of the *Rural Fires Act 1997*,
- (b) the destruction, by burning, of a prohibited plant or prohibited drug under the *Drug Misuse and Trafficking Act 1985*,
- (c) the destruction, by burning, of an animal that has died, or is reasonably suspected to have died, as the result of a disease, within the meaning of the *Biosecurity Act 2015*, by a person who—
 - (i) is an authorised officer exercising functions under that Act, or
 - (ii) is acting as authorised or required by an emergency order, control order, biosecurity zone regulation, biosecurity direction or biosecurity undertaking under that Act or by the mandatory measures under that Act.

Note— In addition to section 133 of the Act, which allows the EPA to prohibit the burning of fires in the open or in incinerators, and the prohibitions imposed by this Part, other legislative controls exist in relation to the lighting of fires—see the *Rural Fires Act 1997*, the *Biodiversity Conservation Act 2016* and the *Local Land Services Act 2013*.

Division 2 Control of burning generally

10 General obligation to prevent or minimise air pollution

- (1) A person who burns anything in the open or in an incinerator must do so by such practicable means as are necessary to prevent or minimise air pollution.
Maximum penalty—100 penalty units, in the case of a corporation, or 50 penalty units, in the case of an individual.
- (2) Without limiting subclause (1), the ways of preventing or minimising air pollution may include the following—
 - (a) taking into account the potential for smoke impacting on any person having regard to—
 - (i) wind direction, and
 - (ii) weather conditions, and
 - (iii) the length of time that the material being burnt is likely to burn,
 - (b) taking reasonable measures to ensure that the material being burnt is not wet,

- (c) burning only material that is suitable for disposal by burning, having regard to possible effects on human health and the environment.

11 Prohibition on burning certain articles

- (1) A person must not burn a prohibited article—
 - (a) in the open, or
 - (b) in an incinerator that is not authorised or controlled by a licence under the Act.Maximum penalty—100 penalty units, in the case of a corporation, or 50 penalty units, in the case of an individual.
- (2) It is not an offence under this clause to burn a tyre for the purposes of the giving of instruction in methods of fire fighting by an officer or member of a fire fighting authority, within the meaning of the *Rural Fires Act 1997*, or by a fire control officer, within the meaning of the *Rural Fires Act 1997*, when acting in the officer's or member's official capacity.
- (3) The EPA may, by written notice given to a public authority, exempt the public authority from the operation of subclause (1).
- (4) The EPA may grant such an exemption only in relation to the burning of prohibited articles in the course of any of the following activities—
 - (a) research to improve safety in relation to the flammability of materials and smoke reduction, including the development of testing procedures,
 - (b) training of fire-fighters,
 - (c) rating of the effectiveness of fire extinguishers and fire suppression systems,
 - (d) testing undertaken to certify that manufactured or imported products comply with Australian Standards or International Standards or meet any legislative requirements placed on them.
- (5) An exemption—
 - (a) is subject to any conditions that may be specified in the written notice by which it is granted, and
 - (b) may be amended or revoked by a further written notice given to the public authority, and
 - (c) unless sooner revoked by the EPA, remains in force—
 - (i) for a period of 12 months from the date it is granted, or
 - (ii) for such other period as is specified in the written notice by which it is granted, and
 - (d) extends to apply to any person acting at the direction of the public authority to which it is granted.
- (6) In this clause, ***prohibited article*** means any of the following—
 - (a) tyres,
 - (b) coated wire,
 - (c) paint containers and residues,
 - (d) solvent containers and residues,
 - (e) timber treated with copper chromium arsenate (CCA) or pentachlorophenol (PCP).

Division 3 Control of burning in local government areas

12 Offences

- (1) A person must not, in a local government area specified in Part 1 of Schedule 1, burn anything in the open or in an incinerator, except in accordance with an approval.
Maximum penalty—100 penalty units, in the case of a corporation, or 50 penalty units, in the case of an individual.
- (2) A person must not, in a local government area specified in Part 2 of Schedule 1, burn any vegetation in the open or in an incinerator, except in accordance with an approval.
Maximum penalty—100 penalty units, in the case of a corporation, or 50 penalty units, in the case of an individual.
- (3) A person must not, in a local government area specified in Part 3 of Schedule 1, burn anything, other than vegetation, in the open or in an incinerator, except in accordance with an approval.
Maximum penalty—100 penalty units, in the case of a corporation, or 50 penalty units, in the case of an individual.
- (4) It is not an offence under this clause—
 - (a) to cook or barbecue in the open, or to light, maintain or use a fire for recreational purposes such as camping, picnicking, scouting or other similar outdoor activities, so long as only dry seasoned wood, liquid petroleum gas (LPG), natural gas or proprietary barbecue fuel, including a small quantity of fire starter, is used, or
 - (b) to burn vegetation, in the course of carrying on agricultural operations, on premises on which the vegetation grew, including—
 - (i) the burning of vegetation for the purposes of clearing, other than for construction, or
 - (ii) the burning of stubble, orchard prunings, diseased crops, weeds or pest animal habitats on farms, or
 - (iii) the burning of pasture for regenerative purposes, or
 - (c) to burn anything for the purposes of the giving of instruction in methods of fire fighting by any of the following persons when acting in the person's official capacity—
 - (i) an officer or member of a fire fighting authority, within the meaning of the *Rural Fires Act 1997*,
 - (ii) a fire control officer, within the meaning of the *Rural Fires Act 1997*,
 - (iii) an industrial fire control officer, or
 - (d) to burn anything under the authority of, and in accordance with, a bush fire hazard reduction certificate issued under the *Rural Fires Act 1997*, or
 - (e) to burn anything in an incinerator that is authorised or controlled by a licence under the Act, or
 - (f) to burn anything in an incinerator that—
 - (i) is equipped with a primary and secondary furnace, and
 - (ii) is designed, maintained and operated in a manner that ensures the maintenance of appropriate temperatures for the complete combustion of anything that the incinerator is designed to burn and prevents the escape of sparks or other burning material, and

- (iii) is equipped with suitable equipment that is designed, maintained and operated for the purposes of controlling air impurities in the exhaust gas once the incineration process has been completed, and
 - (iv) is not installed in a residential building comprising home units, flats or apartments, or
 - (g) to burn air impurities by the process known as flaring if the flare is designed, maintained and operated so as to prevent or minimise air pollution.
Note— See clause 50(a) for an operating requirement for flares.
- (5) It is not an offence under subclause (3) to burn domestic waste on residential premises in a local government area specified in Part 3 of Schedule 1, being premises on which the waste was generated, if domestic waste management services are not available to those premises.

13 Approval for certain fires or incinerators

Note— An approval may be granted so as to permit burning in circumstances where it would otherwise be prohibited under this Division.

However, burning may still be prohibited by an order of the EPA under section 133 of the Act or by an order under the *Rural Fires Act 1997*.

- (1) The EPA may grant an approval for the purposes of this Part—
 - (a) to any class of persons—by notice published in the Gazette, or
 - (b) to any particular person—by written notice given to the person.
- (2) The council of a local government area specified in Part 2 of Schedule 1 may grant an approval for the purposes of this Part in respect of the burning of dead and dry vegetation on the premises on which the vegetation grew in the local government area—
 - (a) to any class of persons—by notice published in the Gazette and in such other manner as the council is satisfied is likely to bring the notice to the attention of persons of that class, or
 - (b) to any particular person—by written notice given to the person.
- (3) Before granting an approval for the purposes of this Part, the EPA or local council concerned must take the following matters into consideration—
 - (a) the impact on regional air quality and amenity,
 - (b) the impact on local air quality and amenity,
 - (c) the feasibility of re-use, recycling or other alternative ways of disposal,
 - (d) any opinions of the sector of the public likely to be affected by the proposed approval,
 - (e) in the case of an approval under subclause (2)(a)—any opinions of the EPA in relation to the proposed approval.
- (4) An approval—
 - (a) is subject to such conditions, if any, as are specified in the notice by which the approval is granted, and
 - (b) may be amended or revoked by notice given or published in the same way as the original notice granting the approval was given or published, and
 - (c) remains in force for a period of 12 months, or such other period as is specified in, or implied by, the approval, from the date it is granted unless sooner revoked by the authority that granted it.

Part 4 Motor vehicles and motor vehicle fuels

Division 1 Interpretation

14 Definitions

In this Part—

ADR or **Australian Design Rule** means a national standard under the *Road Vehicle Standards Act 2018* of the Commonwealth, section 12 as in force from time to time.

complying exhaust pipe—see clause 18.

diesel engine means an engine that is designed to operate on automotive diesel fuel.

excessive air impurities has the same meaning as it has in Part 5.8 of the Act.

goods vehicle means a motor vehicle constructed primarily for the carriage of goods, but does not include a special purpose motor vehicle.

manufacturer's gross vehicle mass, in relation to a vehicle, means the maximum loaded mass of the vehicle—

- (a) specified by the manufacturer, or
- (b) specified by the Roads and Traffic Authority in circumstances in which—
 - (i) the manufacturer is unknown, or
 - (ii) the manufacturer has failed to specify a maximum loaded mass for the vehicle, or
 - (iii) the manufacturer has specified a maximum loaded mass for the vehicle, but the vehicle has been modified to the extent that the manufacturer's specification is no longer appropriate for the vehicle.

motor bus means a passenger vehicle that seats more than 9 adult persons, including the driver.

motor cycle includes a motor tricycle and a motor cycle combination.

passenger vehicle means a motor vehicle constructed primarily for the carriage of persons, but does not include a motor cycle.

petrol has the same meaning as it has in Part 5.8 of the Act.

prescribed anti-pollution device has the same meaning as it has in Part 5.8 of the Act.

refine, in relation to petrol, includes refine crude petroleum or shale oil.

registered, in relation to a motor vehicle, means registered under the *Road Transport Act 2013*.

spark-ignition engine means an engine that is designed to operate on petrol, liquefied petroleum gas or compressed natural gas, being an engine that has its air-fuel mixture ignited by way of an electrical spark.

special purpose motor vehicle means a fork lift truck or motor vehicle constructed principally for off-road agricultural use or for use in road or building site construction work, and includes—

- (a) a tractor, harvester, header, thresher, swather, baler, cuber, loader, digger, bulldozer, excavator, grader, scraper and roller, and
- (b) a mobile crane the engine of which is used for the purpose of both lifting loads and propelling the vehicle,

but does not include any vehicle constructed on a chassis of a type normally used in the construction of a goods vehicle.

supply includes—

- (a) sell by wholesale, retail, auction or tender, and
- (b) offer to supply, and

- (c) barter or exchange, and
- (d) supply for profit, and
- (e) consign or deliver for sale, and
- (f) cause or permit anything referred to above.

use, in relation to a motor vehicle, has the same meaning as in the *Road Transport Act 2013*.

Division 2 Air impurities

15 Excessive air impurities

- (1) This clause applies to motor vehicles propelled by a spark-ignition or diesel engine.
- (2) For the purposes of section 154(2)(a) of the Act, a motor vehicle emits excessive air impurities if, when in operation, it emits air impurities in excess of such a standard of concentration that air impurities are visible for a continuous period of more than 10 seconds when determined in accordance with TM-31.
- (3) For the purposes of section 154(2)(b) of the Act, a motor vehicle emits excessive air impurities if, when tested in accordance with TM-31, it emits air impurities in excess of an amount per test that results in air impurities being visible for a continuous period of more than 10 seconds.

16 Motor vehicles emitting excessive air impurities

- (1) An owner of a motor vehicle is guilty of an offence if the vehicle emits excessive air impurities while being used.
Maximum penalty—400 penalty units, in the case of a corporation, or 200 penalty units, in the case of an individual.
- (2) It is a defence to a prosecution for an offence under this clause if the owner proves that the motor vehicle was at the time of the commission of the offence a stolen motor vehicle or a motor vehicle illegally taken or used.
- (3) It is a defence to a prosecution for an offence under this clause if the defendant proves that the motor vehicle—
 - (a) was constructed or has been modified solely for use in motor racing or off-road motor sport, and
 - (b) was not capable of being registered at all or, as a result of that construction or modification, was only capable of being registered conditionally, and
 - (c) was only used in, or en route to or from, a motor racing or off-road motor sporting competition.

Division 3 Prescribed anti-pollution devices

17 Prescribed anti-pollution devices

For the purposes of the definition of *prescribed anti-pollution device* in section 154(1) of the Act, each of the following devices is prescribed as a device that is designed or intended to minimise air pollution caused by motor vehicles—

- (a) an evaporative emission control system—being a system of devices and equipment that is designed to trap the evaporative emissions from a motor vehicle's fuel tank and fuel supply system and so restrict their release to the atmosphere,
- (b) a fuel supply system—being a system of devices and equipment that is designed—

- (i) to convey fuel to a direct injection engine, or
- (ii) to convey fuel to an engine's air intake system, to mix the fuel with air and to convey the mixture of fuel and air into the engine,
- (c) an engine ignition system—being a system of devices and equipment that is designed to ignite the fuel, or the mixture of fuel and air, in a motor vehicle's engine,
- (d) an engine management system—being a system of devices and equipment that is designed to control the operation of a motor vehicle's fuel supply system and engine ignition system,
- (e) a smoke-limiting throttle control system—being a system of devices and equipment that is designed to limit the maximum rate at which fuel can go into a diesel-engined motor vehicle and so reduce the amount of smoke emitted by the motor vehicle while it is being accelerated,
- (f) an exhaust gas recirculation system—being a system of devices and equipment that is designed to convey exhaust gases from a spark ignition engine to the engine's air intake system for the purpose of reducing the amount of oxygen in the mixture of air and fuel going into the engine and so reducing the amount of oxides of nitrogen emitted by the engine,
- (g) a catalytic converter system—being a system of devices and equipment that is designed to induce a catalytic reaction between the various exhaust gases that are emitted from a motor vehicle's engine and so reduce the emission of air impurities by the motor vehicle,
- (h) a complying exhaust pipe.

18 Fitting of certain anti-pollution devices to be compulsory

A motor vehicle that is propelled by a diesel engine and that has a manufacturer's gross vehicle mass of more than 4.5 tonnes must be fitted with a ***complying exhaust pipe*** which means, for the purposes of this Regulation—

- (a) in the case of a motor vehicle for which, as at the date of its manufacture, an Australian Design Rule prescribed requirements with respect to the exhaust pipe to be fitted to it, a vertical exhaust pipe that complies with those requirements, or
- (b) in any other case, an exhaust pipe—
 - (i) that terminates 150 millimetres or more above the highest part of the vehicle's cab, and
 - (ii) whose exhaust vent is directed upwards, within 30 degrees of the vertical, and away from the nearside of the vehicle.

19 Complying exhaust pipe not required for certain vehicles

The following motor vehicles are not required to have a complying exhaust pipe—

- (a) a motor vehicle that was manufactured before 1 January 1976,
- (b) a motor vehicle that was ordered from the manufacturer before 1 July 1974,
- (c) a motor bus that was manufactured before 1 January 1977,
- (d) a special purpose motor vehicle,
- (e) a motor vehicle used exclusively for the control of bush fires,
- (f) a motor vehicle fitted with hydraulically operated elevating work platforms,
- (g) a motor vehicle used exclusively to fuel aircraft,
- (h) a motor vehicle having a diesel engine of a type certified in writing by the EPA as not requiring a complying exhaust pipe,

- (i) a motor vehicle manufactured in compliance with ADR 80/01, ADR 80/02 or any subsequent ADR that imposes emission limits no less stringent than ADR 80/02,
- (j) a motor vehicle that—
 - (i) is a rigid table-top truck, and
 - (ii) is used predominantly to transport hay or other flammable farm produce, and
 - (iii) is usually garaged on a farm,
- (k) a motor vehicle that is registered outside New South Wales,
- (l) a motor vehicle that is sold in New South Wales for delivery outside New South Wales.

20 Exemption from offence relating to sale of motor vehicles

A person who sells a motor vehicle is exempt from section 155 of the Act if the motor vehicle—

- (a) is constructed or has been modified solely for use in motor racing or off-road motor sport, and
- (b) as a result of that construction or modification, is only capable of being registered conditionally.

Note— Section 160(6) of the Act provides for a defence to a prosecution for the offence under section 155 where the motor vehicle concerned is a motor racing or off-road motor sporting vehicle that is not registrable under the *Road Transport Act 2013*.

Division 4 Use and maintenance of motor vehicles

21 Maintenance of vehicles

For the purposes of section 159 of the Act, a motor vehicle that is required to have a complying exhaust pipe must be maintained so that the exhaust pipe is free of holes, other than holes necessary for the effective operation of the exhaust system.

22 Use of motor vehicle requires anti-pollution device

- (1) An owner of a motor vehicle who uses the motor vehicle, or causes or allows it to be used, must ensure that each anti-pollution device that is required by this Regulation to be fitted to the motor vehicle is fitted to the motor vehicle in the required manner.
Maximum penalty—400 penalty units, in the case of a corporation, or 200 penalty units, in the case of an individual.
- (2) It is a defence to a prosecution for an offence under this clause if the defendant proves that, at the time the offence was committed—
 - (a) the defendant had reasonable grounds to believe, and did believe, that the motor vehicle was fitted with every prescribed anti-pollution device required by this Regulation to be fitted to the motor vehicle, and
 - (b) the defendant took all reasonable steps to ensure that every such device was fitted in the required manner.

23 Maintenance, service and adjustment of motor vehicles

- (1) An owner of a motor vehicle who uses the motor vehicle, or causes or allows it to be used, must ensure that the motor vehicle is serviced, maintained or adjusted as required by this Regulation.
Maximum penalty—400 penalty units, in the case of a corporation, or 200 penalty units, in the case of an individual.

- (2) It is a defence to a prosecution for an offence under this clause if the defendant proves that the defendant took all reasonable steps to ensure that the motor vehicle was serviced, maintained or adjusted as required by this Regulation.

24 Removal or adjustment of anti-pollution devices

- (1) The owner of a motor vehicle who uses the motor vehicle, or causes or allows it to be used, must ensure that at the time of that use, any anti-pollution device that has been fitted to the motor vehicle has not been—
- (a) removed, disconnected or impaired, or
 - (b) adjusted, or modified, in such a way as to result in the emission of excessive air impurities by the motor vehicle.

Maximum penalty—400 penalty units, in the case of a corporation, or 200 penalty units, in the case of an individual.

- (2) It is a defence to a prosecution for an offence under this clause if the defendant proves—
- (a) that the removal, disconnection, impairment, adjustment or modification was done in order to service, repair or replace the anti-pollution device or to improve its efficiency with respect to minimising air pollution, or
 - (b) that the removal, disconnection, impairment, adjustment or modification was done in order to facilitate the use of a motor vehicle for motor racing or off-road motor sport and the vehicle—
 - (i) immediately before that removal or other action, was either not capable of being registered at all or, as a result of its construction or prior modification for use in motor racing or off-road motor sport, was only capable of being registered conditionally, and
 - (ii) is to be used in that condition only in a competition, or en route to or from, a motor racing or off-road motor sporting competition, or
 - (c) that, at the time the offence was committed—
 - (i) the defendant had reasonable grounds to believe, and did believe, that any anti-pollution device that had been fitted to the motor vehicle continued to be fitted to the motor vehicle, and
 - (ii) the defendant took all reasonable steps to ensure that the device was properly maintained.
- (3) In this clause, *anti-pollution device* means a prescribed anti-pollution device or any other device that is designed to minimise air pollution.

25 Exemption from offence against section 157

A person is exempt from section 157 of the Act if—

- (a) the removal, disconnection, impairment, adjustment or modification of the motor vehicle concerned is done in order to facilitate the use of the vehicle for motor racing or off-road motor sport, and
- (b) immediately before the removal or other action, and as a result of its construction, or prior modification, for use in motor racing or off-road motor sport, the vehicle is only capable of being registered conditionally, and
- (c) the vehicle is to be used in that condition only in a competition, or en route to or from, a motor racing or off-road motor sporting competition.

Note— Section 160(3)(c) of the Act provides for a defence to a prosecution for the offence under section 157 where the motor vehicle concerned is a motor racing or off-road motor sporting vehicle that is not registrable under the *Road Transport Act 2013*.

Division 5 Transfer of petrol

26 Transfer of petrol into fuel tanks of motor vehicles

- (1) This clause applies to all premises from which petrol is sold to the public.
- (2) The occupier of premises to which this clause applies must not, at those premises, transfer, or allow the transfer of, any petrol into a motor vehicle's fuel tank except by way of a petrol delivery hose whose nozzle is fitted with an automatic over-fill protection device.
Maximum penalty—40 penalty units.
- (3) A person must not, at premises to which this clause applies, transfer petrol into the fuel tank of a motor vehicle by way of a petrol delivery hose unless the nozzle of the hose is inserted as far as it will go into the fuel tank's fill-pipe.
Maximum penalty—8 penalty units.
- (4) In this clause, *automatic over-fill protection device* means a device—
 - (a) that immediately cuts off the flow of petrol into the fuel tank when the tip of the nozzle becomes immersed in petrol, and
 - (b) that is properly installed and efficiently maintained.

Division 6 Petrol volatility

27 Definitions

In this Division—

base petrol means petrol that does not contain ethanol.

blend, in relation to petrol, means combine petroleum-based products with ethanol.

high ethanol blended petrol means petrol containing 60% or more of ethanol by volume.

low volatility zone means the area consisting of the following local government areas—

Bayside, Blacktown City, City of Blue Mountains, Municipality of Burwood, Camden, City of Campbelltown, City of Canada Bay, City of Canterbury-Bankstown, Central Coast, City of Cessnock, City of Fairfield, Georges River, City of Hawkesbury, Hornsby, Municipality of Hunter's Hill, Inner West, Municipality of Kiama, Ku-ring-gai, City of Lake Macquarie, Lane Cove, City of Lithgow, City of Liverpool, City of Maitland, Mosman, Muswellbrook, City of Newcastle, North Sydney, Northern Beaches, City of Parramatta, City of Penrith, Port Stephens, City of Randwick, City of Ryde, City of Shellharbour, City of Shoalhaven, Singleton, Municipality of Strathfield, Sutherland Shire, City of Sydney, The Hills Shire, Municipality of Waverley, City of Willoughby, Wingecarribee, Wollondilly, City of Wollongong, Municipality of Woollahra.

month, in relation to summer, includes each of the periods from 15 November to 30 November, inclusive, and 1 March to 15 March, inclusive.

monthly volumetric average vapour pressure of petrol means the monthly volumetric average vapour pressure of the petrol as calculated in accordance with clause 28.

petrol supplier means a person who imports petrol into this State for supply by the person, whether the petrol was obtained from another State or Territory or from another country, or refines or blends petrol in this State.

prescribed blended petrol means petrol containing—

- (a) 4 per cent or more of ethanol by volume but not more than 10 per cent of ethanol by volume, or
- (b) high ethanol blended petrol.

summer of a particular year means the period commencing on 15 November in that year and ending on 15 March, inclusive, in the following year.

vapour pressure of petrol means the volatility of the petrol at 37.8 degrees Celsius measured—

- (a) in accordance with ASTM D4953-06 *Standard Test Method for Vapor Pressure of Gasoline and Gasoline-Oxygenate Blends (Dry Method)* as in force from time to time and as published by ATSM International, or
- (b) in accordance with such other method as the EPA may approve in writing in respect of petrol supplied by a particular petrol supplier, such approval may be made on application by the petrol supplier and the EPA may, by notice in writing given to the petrol supplier, revoke or vary any such approval.

28 Monthly volumetric average vapour pressure

- (1) For the purposes of this Division, **monthly volumetric average vapour pressure** of petrol supplied in a particular month of summer by a petrol supplier is to be calculated as follows—
 - (a) a sample is to be taken from each batch of the petrol supplied in the month by the petrol supplier,
 - (b) the vapour pressure of each sample taken is to be multiplied by a fraction that equals the volume of the petrol in the batch from which the sample was taken divided by the total volume of the petrol supplied in the relevant month,
 - (c) the figures calculated in accordance with paragraph (b) for each sample of petrol are to be added together and the resulting figure is the monthly volumetric average vapour pressure.
- (2) One test method only is to be used in measuring vapour pressure to calculate the monthly volumetric average vapour pressure for a particular month.

29 Vapour pressure of petrol

- (1) A petrol supplier must not supply petrol in the low volatility zone in any summer if the vapour pressure of the petrol is more than—
 - (a) in the case of prescribed blended petrol, other than high ethanol blended petrol—71 kPa, or
 - (b) in the case of any other petrol—64 kPa.Maximum penalty—400 penalty units, in the case of a corporation, or 200 penalty units, in the case of an individual.
- (2) A petrol supplier who imports petrol into this State, or refines petrol in this State, must ensure that the monthly volumetric average vapour pressure of so much of that petrol, other than blended petrol, as is supplied by the petrol supplier in the low volatility zone in a summer is not more than 62 kPa.
Maximum penalty—400 penalty units, in the case of a corporation, or 200 penalty units, in the case of an individual.
- (3) It is a defence to any proceedings against a person for an offence under subclause (1) if the defendant establishes that—
 - (a) the petrol concerned was prescribed blended petrol, and
 - (b) the defendant had reasonable grounds to believe, and did believe, that the vapour pressure of the base petrol used in the blended petrol complied with

- subclause (1)(b) based on documentation supplied to the defendant by the supplier of the base petrol, and
- (c) the defendant did not know, and had no reasonable grounds to suspect, that the documentation was false or misleading in a material respect.
- (4) It is a defence to any proceedings against a person for an offence under this clause if the defendant establishes that the petrol concerned—
- (a) was supplied by way of retail sale by the defendant from a petrol service station, and
- (b) was stored, immediately before the commencement of the summer in which it was supplied, at the petrol service station.
- (5) It is a defence to any proceedings against a person for an offence under this clause if the defendant establishes that the petrol concerned was supplied solely for one of the following purposes and the defendant believed on reasonable grounds that the petrol would be used solely for that purpose—
- (a) use in a motor vehicle in a motor racing event conducted on a motor vehicle racing ground in respect of which a licence is in force under the *Motor Vehicle Sports (Public Safety) Act 1985* or in a test of a motor vehicle for any such event,
- (b) use in a motor vehicle in a motor race authorised to be conducted under the *Motor Racing (Sydney and Newcastle) Act 2008* or in a test of a motor vehicle for any such event,
- (c) the purpose of testing to determine the composition, quality or characteristics of the petrol.
- (6) A person is not guilty of an offence against subclause (1) or (2) in respect of any act or omission that was authorised or required by an order, proclamation, regulation or direction made or given under Part 6 of the *Energy and Utilities Administration Act 1987*.
- (7) If such an order, proclamation, regulation or direction is in force for part of a month in summer, it is taken, for the purposes of subclause (6), in so far as it relates to an offence against subclause (2), to have been in force for the whole of the month.
- (8) In this clause, ***petrol service station*** has the same meaning as it has in Part 6.

30 Record keeping

- (1) A petrol supplier who supplies petrol in the low volatility zone during summer must keep records in relation to that petrol, in accordance with this clause, for a period of at least 2 years.
- Maximum penalty—100 penalty units, in the case of a corporation, or 50 penalty units, in the case of an individual.
- (2) The following records are to be kept in relation to petrol that is prescribed blended petrol—
- (a) if the petrol was blended in a tanker truck—
- (i) the volume of prescribed blended petrol contained in each tanker truck, and
- (ii) the ethanol content by volume of the petrol in each tanker truck,
- (b) if the petrol was blended otherwise than in a tanker truck—
- (i) the volume of prescribed blended petrol in each batch, and
- (ii) the ethanol content by volume of each batch.

- (3) The following records are to be kept in relation to blended petrol that is not prescribed blended petrol—
- (a) if the petrol was blended in a tanker truck—
 - (i) the vapour pressure of at least 4 samples of blended petrol taken each month from different tanker trucks on separate days and at regular intervals, and
 - (ii) the date or dates on which the vapour pressure of the samples was tested, and
 - (iii) the test method used to determine the vapour pressure of the blended petrol, and
 - (iv) the volume of blended petrol contained in each tanker truck from which the samples of petrol were taken for testing, and
 - (v) the volume of blended petrol contained in each tanker truck from which a sample was not taken for testing, and
 - (vi) the ethanol content by volume of each tanker truck of petrol from which the samples were taken for testing,
 - (b) if the petrol was blended otherwise than in a tanker truck—
 - (i) the vapour pressure of a sample of blended petrol taken from each batch, and
 - (ii) the date or dates on which the vapour pressure of the samples was tested, and
 - (iii) the test method used to determine the vapour pressure of the blended petrol, and
 - (iv) the volume of blended petrol in each batch, and
 - (v) the ethanol content by volume of each batch.
- (4) The following records are to be kept in relation to petrol that is not blended—
- (a) the monthly volumetric average vapour pressure of the petrol,
 - (b) the vapour pressure of each sample of petrol from each batch tested to calculate the monthly volumetric average vapour pressure of the petrol,
 - (c) the date or dates on which the vapour pressure of the samples was tested,
 - (d) the test method used to determine the vapour pressure of the petrol,
 - (e) the volume of petrol in each batch.
- (5) A petrol supplier who blends petrol, but does not import petrol into this State or refine petrol in this State, is not required to keep the records referred to in subclause (4).

31 Reporting

- (1) A petrol supplier who supplies petrol in the low volatility zone during any month in summer must, within 14 days after the end of the month, provide a report to the EPA in a form approved by the EPA and containing the following information in relation to that petrol—
- (a) the monthly volumetric average vapour pressure of any petrol supplied in that month that was not blended petrol,
 - (b) the maximum vapour pressure of any blended petrol that was not prescribed blended petrol, that was supplied in that month and from which samples were taken for the purposes of this Division,

- (c) the maximum vapour pressure of any petrol that was not blended petrol, that was supplied in that month and from which samples were taken under this Division,
 - (d) the total volume of prescribed blended petrol, other than high ethanol blended petrol, supplied in that month,
 - (e) the total volume of high ethanol blended petrol supplied in that month,
 - (f) the total volume of other blended petrol supplied in that month,
 - (g) the total volume of petrol supplied in that month that was not blended petrol.
- Maximum penalty—100 penalty units, in the case of a corporation, or 50 penalty units, in the case of an individual.
- (2) A petrol supplier who blends petrol, but does not import petrol into this State or refine petrol in this State, is not required to provide the information referred to in subclause (1)(a) and (f).

Part 5 Air impurities emitted from activities and plant

Division 1 Preliminary

32 Definitions

- (1) In this Part, and in Schedules 2–7—

approved circumstances are defined by clause 42, in relation to scheduled premises, and clause 47, in relation to non-scheduled premises.

development application has the same meaning as it has in the *Environmental Planning and Assessment Act 1979*.

development consent has the same meaning as it has in the *Environmental Planning and Assessment Act 1979*.

dioxin means any of the following—

- (a) 2,3,7,8 tetrachlorodibenzodioxin (TCDD),
- (b) 1,2,3,7,8 pentachlorodibenzodioxin (PeCDD),
- (c) 1,2,3,4,7,8 hexachlorodibenzodioxin (HxCDD),
- (d) 1,2,3,6,7,8 hexachlorodibenzodioxin (HxCDD),
- (e) 1,2,3,7,8,9 hexachlorodibenzodioxin (HxCDD),
- (f) 1,2,3,4,6,7,8 heptachlorodibenzodioxin (HpCDD),
- (g) octachlorodibenzodioxin (OCDD).

emission unit means an item of plant that forms part of, or is attached to, some larger plant, being an item of plant that emits, treats or processes air impurities or controls the discharge of air impurities into the atmosphere.

furan means any of the following—

- (a) 2,3,7,8 tetrachlorodibenzofuran (TCDF),
- (b) 2,3,4,7,8 pentachlorodibenzofuran (PeCDF),
- (c) 1,2,3,7,8 pentachlorodibenzofuran (PeCDF),
- (d) 1,2,3,4,7,8 hexachlorodibenzofuran (HxCDF),
- (e) 1,2,3,6,7,8 hexachlorodibenzofuran (HxCDF),
- (f) 1,2,3,7,8,9 hexachlorodibenzofuran (HxCDF),
- (g) 2,3,4,6,7,8 hexachlorodibenzofuran (HxCDF),
- (h) 1,2,3,4,6,7,8 heptachlorodibenzofuran (HpCDF),
- (i) 1,2,3,4,7,8,9 heptachlorodibenzofuran (HpCDF),
- (j) octachlorodibenzofuran (OCDF).

Group, in relation to any activity or plant, means the Group to which the activity or plant belongs pursuant to its classification—

- (a) in relation to any activity or plant carried out or operated on scheduled premises, under Division 2, or
- (b) in relation to any activity or plant carried out or operated on non-scheduled premises, under Division 3.

non-scheduled premises means premises, other than scheduled premises, at which an activity is carried on or plant is operated.

non-standard fuel means any fuel other than a standard fuel.

principal toxic air pollutant means any one or more of the following elements, compounds or classes of compounds—

- (a) acrolein,
- (b) acrylonitrile,
- (c) alpha chlorinated toluenes and benzoyl chloride,
- (d) arsenic and arsenic compounds,
- (e) benzene,
- (f) beryllium and beryllium compounds,
- (g) 1,3-butadiene,
- (h) cadmium and cadmium compounds,
- (i) chromium VI compounds,
- (j) 1,2-dichloroethane (ethylene dichloride),
- (k) dioxins or furans,
- (l) epichlorohydrin,
- (m) ethylene oxide,
- (n) formaldehyde,
- (o) hydrogen cyanide,
- (p) MDI (diphenylmethane diisocyanate),
- (q) nickel and nickel compounds,
- (r) PAH, as benzo[a]pyrene equivalent,
- (s) pentachlorophenol,
- (t) phosgene,
- (u) propylene oxide,
- (v) TDI (toluene-2,4-diisocyanate and toluene-2, 6-diisocyanate),
- (w) trichloroethylene,
- (x) vinyl chloride.

scheduled premises means premises at which a scheduled activity is carried on.

standard fuel means any unused and uncontaminated solid, liquid or gaseous fuel that is—

- (a) a coal or coal-derived fuel, other than any tar or tar residues, or
- (b) a liquid or gaseous petroleum-derived fuel, or
- (c) a wood or wood-derived fuel, or
- (d) bagasse.

Type 1 substance means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements.

Type 2 substance means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements.

volatile organic compound (VOC) means any chemical compound that—

- (a) is based on carbon chains or rings, and
- (b) contains hydrogen, and
- (c) has a vapour pressure greater than 2mm of mercury (0.27 kPa) at 25°C and 101.3 kPa,

and includes any such compound containing oxygen, nitrogen or other elements, but does not include methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides and carbonate salts.

- (2) For the purposes of this Part, plant is in **normal operation** if it is operating at a constant rate, whether or not it is operating at full capacity.
- (3) Subject to clause 34(4), any activity or plant that belongs to both Group 6 and another group is taken to belong to Group 6.

Division 2 Standards for scheduled premises

33 General grouping of activities and plant

- (1) Subject to this Division, an activity carried out, or plant operated, on scheduled premises—
 - (a) belongs to **Group 1** if—
 - (i) it commenced to be carried on, or to operate, before 1 January 1972, or
 - (ii) it commenced to be carried on, or to operate, on or after 1 January 1972 as a result of a pollution control approval granted under the *Pollution Control Act 1970* pursuant to an application made before 1 January 1972, or
 - (b) belongs to **Group 2** if it commenced to be carried on, or to operate, on or after 1 January 1972 as a result of a pollution control approval granted under the *Pollution Control Act 1970* pursuant to an application made on or after 1 January 1972 and before 1 July 1979, or
 - (c) belongs to **Group 3** if it commenced to be carried on, or to operate, on or after 1 July 1979 as a result of a pollution control approval granted under the *Pollution Control Act 1970* pursuant to an application made on or after 1 July 1979 and before 1 July 1986, or
 - (d) belongs to **Group 4** if it commenced to be carried on, or to operate, on or after 1 July 1986 as a result of a pollution control approval granted under the *Pollution Control Act 1970* pursuant to an application made on or after 1 July 1986 and before 1 August 1997, or
 - (e) belongs to **Group 5** if it commenced to be carried on, or to operate, on or after 1 August 1997 as a result of—
 - (i) a pollution control approval granted under the *Pollution Control Act 1970* pursuant to an application made on or after 1 August 1997 and before 1 July 1999, or
 - (ii) an environment protection licence granted under the *Protection of the Environment Operations Act 1997* pursuant to an application made on or after 1 July 1999 and before 1 September 2005, or
 - (f) belongs to **Group 6** if it commenced to be carried on, or to operate, on or after 1 September 2005, as a result of an environment protection licence granted under the *Protection of the Environment Operations Act 1997* pursuant to an application made on or after 1 September 2005.
- (2) Any activity or plant that would, but for this subclause, belong to Group 6 is taken to belong to Group 5 if it is the subject of a development consent in respect of which the EPA had given general terms of approval, within the meaning of section 4.50 of the *Environmental Planning and Assessment Act 1979*, before 1 September 2005.

34 Emission units taken to be in Group 6

- (1) An emission unit is taken to belong to Group 6 if—
 - (a) the emission unit is in Group 1, 2, 3, 4 or 5 and is altered as a result of—

- (i) the modification of development consent under section 4.55(2) of the *Environmental Planning and Assessment Act 1979* pursuant to an application made on or after 1 September 2005, or
 - (ii) the variation of the licence for the plant, and
 - (b) the effect of the alteration is that there is an increase in the emission of air impurities, or a change in the nature of the air impurities emitted or the intensity with which air impurities are emitted, from the plant of which the emission unit forms part, or to which it is attached.
- (2) If, in relation to plant operated in the Greater Metropolitan Area, an emission unit in Group 1, 2, 3, 4 or 5 is replaced, the replacement emission unit is taken to belong to Group 6.
 - (3) An emission unit is not taken to belong to Group 6 by virtue of subclause (1) or (2) if the conditions of the licence for the activity or plant of which it forms part, or to which it is attached, state that it is taken to belong to Group 1, 2, 3, 4 or 5.
 - (4) Plant that belongs to Group 1, 2, 3, 4 or 5 remains in that Group despite any alteration or replacement, as referred to in subclause (1) or (2), of an emission unit that forms part of, or is attached to, that plant.

35 Phasing out of Group 1

- (1) Any activity or plant that, immediately prior to 1 January 2008 belonged to Group 1 is taken to belong to Group 2.
- (2) An activity or plant is not taken to belong to Group 2 by virtue of subclause (1) if the conditions of the licence for the activity or plant state that it is taken to belong to Group 1.
- (3) An application for the variation of the conditions of a licence for the purpose of including a statement referred to in subclause (2)—
 - (a) in the case of an application for the first such variation, must have been made on or before 1 January 2007, and
 - (b) in the case of an application for any subsequent variation, must be made no later than 12 months before the date on which the current variation expires pursuant to subclause (4).
- (4) A variation of the conditions of a licence under this clause expires at the end of 5 years after the date on which notice of the variation is given to the holder of the licence under section 58 of the Act.

36 Phasing out of Group 2

- (1) On and from 1 January 2012, any activity or plant that, immediately prior to that date, belonged to Group 2, including any activity or plant previously in Group 1, is taken to belong to Group 5.
- (2) An activity or plant is not taken to belong to Group 5 by virtue of subclause (1) if the conditions of the licence for the activity or plant state that it is taken to belong to Group 1 or 2.
- (3) An application for the variation of the conditions of a licence for the purpose of including a statement referred to in subclause (2) must be made—
 - (a) in the case of an application for the first such variation, on or before 1 January 2011, and
 - (b) in the case of an application for any subsequent variation, no later than 12 months before the date on which the current variation expires pursuant to subclause (4).

- (4) A variation of the conditions of a licence under this clause expires at the end of 5 years after the date on which notice of the variation is given to the holder of the licence under section 58 of the Act.

37 Alternative standards imposed by licence conditions

An application for the variation of the conditions of a licence for any activity, plant or emission unit for the purpose of including a statement referred to in clause 34(3), 35(2) or 36(2) is to be accompanied by a report containing each of the following—

- (a) particulars of the concentration or rates at which air impurities are emitted as a result of the carrying out of the activity or operation of the plant, based on sampling, analysis and monitoring carried out in accordance with the Approved Methods (Sampling and Analysis) Publication,
- (b) the results of an air pollutant impact assessment, conducted in accordance with the Approved Methods (Modelling and Assessment) Publication, in relation to—
 - (i) the activity, plant or emission unit concerned, and
 - (ii) any other activity carried on, or plant or emission unit operated, at the scheduled premises concerned,
- (c) details of any pollution reduction programs that have been established in relation to the activity, plant or emission unit,
- (d) details of any control equipment that has been installed in relation to the activity, plant or emission unit,
- (e) such other information as may be relevant to demonstrate the acceptability of impacts associated with the alternative standards arising from the proposed variation of conditions.

38 Determination of application for variation of licence

- (1) In determining an application to vary the conditions of a licence for any activity or plant for the purposes of clause 34, 35 or 36, the EPA must consider the impact on local and regional air quality and amenity of a decision to grant the application, having regard to—
 - (a) any pollution reduction programs that have been established, or that the holder of the licence has agreed to establish, in relation to the activity or plant, and
 - (b) any control equipment that has been installed, or that the holder of the licence has agreed to install, in relation to the activity or plant, and
 - (c) any load reduction agreement that has been entered into between the EPA and the applicant under Division 4 of Part 1 of Chapter 2 of the *Protection of the Environment Operations (General) Regulation 2021*, and
 - (d) the principles of ecologically sustainable development set out in section 6(2) of the *Protection of the Environment Administration Act 1991*, and
 - (e) such other matters as are relevant.
- (2) A statement referred to in clause 34(3), 35(2) or 36(2) that is included in the conditions of the licence for any activity, plant or emission unit pursuant to an application made in accordance with clause 37 may not state that the activity or plant belongs to a Group with a lower number than that of the Group to which the activity or plant previously belonged.
- (3) Nothing in this clause prevents the EPA, when granting an application to vary the conditions of a licence under this clause, from including other conditions in the licence, including conditions imposing more stringent standards of concentration

than those applicable to the Group to which the activity or plant will belong as a consequence of the variation.

Note— Refusal of an application to vary the conditions of a licence may be appealed under section 287 of the Act. In this regard, an application is taken to have been refused if it is not granted within 60 days after it is duly made.

39 Prescribed standards of concentration for air impurities

- (1) For the purposes of section 128(1) of the Act, the prescribed standards of concentration for emissions of air impurities are—
 - (a) in relation to any plant referred to in Schedule 2, the standards of concentration specified in that Schedule in relation to that plant, and
 - (b) in relation to any activity or plant specified in Schedule 3 in respect of a particular purpose, the standards of concentration specified in Schedule 3 in relation to that activity or plant and that purpose, and
 - (c) in relation to any activity or plant specified in Schedule 4, other than those covered by Schedule 2 or 3, the standards of concentration specified in Schedule 4 in relation to that activity or plant.
- (2) For the purposes of this clause, a requirement in Schedule 2, 3 or 4 that a standard of concentration for volatile organic compounds or carbon monoxide be met is satisfied if either of those standards is met.

40 Determining whether standards have been exceeded

- (1) For the purpose of determining whether or not a standard of concentration prescribed by Schedule 2, 3 or 4 for an air impurity has been exceeded, the following procedures are to be applied—
 - (a) a sampling or monitoring position is to be selected in accordance with—
 - (i) TM-1, if the concentration is to be determined in accordance with the relevant test method, or
 - (ii) CEM-1, if measuring opacity, or CEM-2, in any other case, if the concentration is to be determined in accordance with the relevant monitoring method,
 - (b) the concentration of the air impurity is to be determined in accordance with the relevant test method, or relevant monitoring method, for the air impurity, using the relevant averaging period,
 - (c) the concentration determined under paragraph (b), otherwise than for smoke, is to be expressed by reference to the relevant reference conditions for the standard of concentration after determining the following—
 - (i) the moisture content of the sample, determined in accordance with TM-22,
 - (ii) the temperature and pressure at the sampling position, determined in accordance with TM-2,
 - (iii) if a relevant reference condition is a specified percentage of carbon dioxide—the concentration of carbon dioxide emitted, determined in accordance with TM-24 or CEM-3,
 - (iv) if a relevant reference condition is a specified percentage of oxygen—the concentration of oxygen emitted, determined in accordance with TM-25 or CEM-3,
 - (d) the concentration determined under paragraph (b) for smoke, if determined as opacity, is to be expressed by reference to the relevant reference conditions for the standard of concentration.

- (2) For the purposes of this clause—
- (a) a reference to the *relevant test method* or *relevant monitoring method*, in relation to an air impurity, is a reference to the test method or monitoring method specified in Part 1 of Schedule 5 in relation to that air impurity, and
 - (b) a reference to the *relevant averaging period*, in relation to an air impurity, is a reference to—
 - (i) the averaging period specified in Part 2 of Schedule 5 in relation to that air impurity, or
 - (ii) such other averaging period as may be specified in the conditions of the relevant licence, and
 - (c) a reference to the *relevant reference conditions*, in relation to any air impurity emitted from an activity or plant, is a reference to—
 - (i) the reference conditions specified in Part 3 of Schedule 5 in relation to that air impurity and that activity or plant, or
 - (ii) such other reference conditions as may be specified in the conditions of the relevant licence.

41 Dioxins and furans

- (1) For the purpose of determining whether or not a standard of concentration prescribed by Schedule 2, 3 or 4 for dioxins or furans has been exceeded, the following procedures are to be applied in addition to the procedures set out in clause 40—
- (a) the unweighted concentration of each dioxin or furan is to be determined in accordance with TM-18, using the measuring period specified in that test method,
 - (b) the unweighted concentration of each dioxin or furan so determined is to be multiplied by the toxic equivalence factor set out in the Table to this clause in respect of that dioxin or furan.
- (2) For the purposes of clause 39, the concentration of dioxins and furans is taken to be the sum of the amounts calculated under subclause (1)(b).

Table

Substance	Toxic Equivalence Factor
Dioxins	
2,3,7,8 tetrachlorodibenzodioxin (TCDD)	1.0
1,2,3,7,8 pentachlorodibenzodioxin (PeCDD)	1.0
1,2,3,4,7,8 hexachlorodibenzodioxin (HxCDD)	0.1
1,2,3,6,7,8 hexachlorodibenzodioxin (HxCDD)	0.1
1,2,3,7,8,9 hexachlorodibenzodioxin (HxCDD)	0.1
1,2,3,4,6,7,8 heptachlorodibenzodioxin (HpCDD)	0.01
octachlorodibenzodioxin (OCDD)	0.0001
Furans	
2,3,7,8 tetrachlorodibenzofuran (TCDF)	0.1

Substance	Toxic Equivalence Factor
1,2,3,7,8 pentachlorodibenzofuran (PeCDF)	0.05
2,3,4,7,8 pentachlorodibenzofuran (PeCDF)	0.5
1,2,3,4,7,8 hexachlorodibenzofuran (HxCDF)	0.1
1,2,3,6,7,8 hexachlorodibenzofuran (HxCDF)	0.1
1,2,3,7,8,9 hexachlorodibenzofuran (HxCDF)	0.1
2,3,4,6,7,8 hexachlorodibenzofuran (HxCDF)	0.1
1,2,3,4,6,7,8 heptachlorodibenzofuran (HpCDF)	0.01
1,2,3,4,7,8,9 heptachlorodibenzofuran (HpCDF)	0.01
octachlorodibenzofuran (OCDF)	0.0001

42 Approved circumstances in relation to smoke emissions

- (1) For the purposes of Schedules 2, 3 and 4, otherwise than in relation to ceramic works referred to in Schedule 3, the *approved circumstances*, in relation to the emission of smoke from any activity or plant in Group 1, are—
 - (a) that the smoke is emitted—
 - (i) for a period of no more than 20 minutes per 24 hours, after lighting a boiler or incinerator from cold, being the period during which the boiler or incinerator is brought up to normal operation, or
 - (ii) in the case of a boiler burning up to 1 tonne of fuel per hour, unless subparagraph (i) applies—for a period of no more than 10 minutes per 8 hours, or
 - (iii) in the case of a boiler burning more than 1 tonne but less than 5 tonnes of fuel per hour, unless subparagraph (i) applies—for a period of no more than 20 minutes per 8 hours, and
 - (b) that all practicable means are employed to prevent or minimise the emission of smoke during that period.
- (2) For the purposes of Schedule 3, in relation to ceramic works referred to in that Schedule, the *approved circumstances*, in relation to the emission of smoke from any activity or plant in Group 1, are—
 - (a) that the smoke is emitted for a period of no more than 10 minutes per hour, and
 - (b) that all practicable means are employed to prevent or minimise the emission of smoke during that period.
- (3) For the purposes of Schedules 2, 3 and 4, the *approved circumstances*, in relation to the emission of smoke from any activity or plant in Group 2, 3, 4, 5 or 6, are—
 - (a) that smoke is emitted, as a result of blowing soot from a boiler, for a period of no more than 10 minutes per 8 hours, and
 - (b) that all practicable means are employed to prevent or minimise the emission of smoke during that period.

43 Alternative standard for hydrogen sulfide emissions

- (1) The EPA may grant an approval to an occupier of scheduled premises for an alternative standard of concentration for hydrogen sulfide emissions.
- (2) If an occupier has been granted such an approval, and the occupier complies with the alternative standard of concentration and any other conditions specified in the approval, the occupier is exempt from the operation of section 128 of the Act, in so far as that section relates to the emission of hydrogen sulfide.
- (3) Before granting an approval under this clause the EPA—
 - (a) must take into consideration the impact of the approval on local and regional air quality and amenity, and
 - (b) must be satisfied that it is not practicable for the occupier to comply with the standards prescribed by clause 39 by implementing operational changes to plant or practices, and
 - (c) must be satisfied that the alternative standard of concentration for hydrogen sulfide emissions has been calculated in accordance with the Approved Methods (Modelling and Assessment) Publication.
- (4) The EPA is to grant an approval under this clause by written notice given to the occupier.
- (5) An approval under this clause—
 - (a) is subject to any conditions that may be specified in the approval, including the method of measuring the concentration of hydrogen sulfide emissions, and
 - (b) may be amended or revoked by the EPA by written notice given to the occupier.

Division 3 Standards for non-scheduled premises

44 Grouping of activities and plant

- (1) Subject to subclause (2), an activity carried out, or plant operated, on non-scheduled premises—
 - (a) belongs to **Group A** if—
 - (i) it commenced to be carried on, or to operate, before 1 August 1997, or
 - (ii) it commenced to be carried on, or to operate, on or after 1 August 1997 as a result of development consent granted pursuant to a development application made before 1 August 1997, or
 - (b) belongs to **Group B** if it commenced to be carried on, or to operate, on or after 1 August 1997 as a result of development consent granted pursuant to a development application made on or after 1 August 1997 and before 1 September 2005, or
 - (c) belongs to **Group C** if it commenced to be carried on, or to operate, on or after 1 September 2005 as a result of development consent granted pursuant to a development application made on or after 1 September 2005.
- (2) If, in relation to plant operated in the Greater Metropolitan Area, an emission unit in Group A or B is replaced, the replacement emission unit is taken to belong to Group C.

45 Prescribed standards of concentration for air impurities

For the purposes of section 128(1) of the Act, the prescribed standards of concentration for the emission of air impurities in relation to any activity carried on, or plant operated, at non-scheduled premises are as set out in Schedule 6.

46 Determining if standards have been exceeded

- (1) For the purpose of determining whether or not a standard of concentration prescribed by Schedule 6 for an air impurity has been exceeded, the following procedures are to be applied—
 - (a) a sampling or monitoring position is to be selected in accordance with—
 - (i) TM-1, if the concentration is to be determined in accordance with the relevant test method, or
 - (ii) CEM-1, if measuring opacity, or CEM-2, in any other case, if the concentration is to be determined in accordance with the relevant monitoring method,
 - (b) the concentration of the air impurity is to be determined in accordance with the relevant test method, or relevant monitoring method, for the air impurity, using the relevant averaging period,
 - (c) the concentration determined under paragraph (b), otherwise than for smoke, is to be expressed by reference to the relevant reference conditions for the standard of concentration after determining the following—
 - (i) the moisture content of the sample, determined in accordance with TM-22,
 - (ii) the temperature and pressure at the sampling position, determined in accordance with TM-2,
 - (iii) if a relevant reference condition is a specified percentage of carbon dioxide—the concentration of carbon dioxide emitted, determined in accordance with TM-24 or CEM-3,
 - (iv) if a relevant reference condition is a specified percentage of oxygen—the concentration of oxygen emitted, determined in accordance with TM-25 or CEM-3,
 - (d) the concentration determined under paragraph (b) for smoke, if determined as opacity, is to be expressed by reference to the relevant reference conditions for the standard of concentration.
- (2) For the purposes of this clause—
 - (a) a reference to the *relevant test method* or *relevant monitoring method*, in relation to an air impurity, is a reference to the test method or monitoring method specified in Part 1 of Schedule 6 in relation to that air impurity, and
 - (b) a reference to the *relevant averaging period*, in relation to an air impurity, is a reference to the averaging period specified in Part 2 of Schedule 6 in relation to that air impurity, and
 - (c) a reference to the *relevant reference conditions*, in relation to any air impurity emitted from an activity or plant, is a reference to the reference conditions specified in Part 3 of Schedule 6 in relation to that air impurity and that activity or plant.

47 Approved circumstances in relation to smoke emissions

- (1) For the purposes of Schedule 6, the *approved circumstances* for marine vessels are—
 - (a) that the smoke is emitted from a marine vessel—
 - (i) for the period the vessel is approaching, leaving or manoeuvring at a berth, or
 - (ii) for a period of no more than 30 minutes per 24 hours, after lighting a boiler, being the period during which the boiler is brought up to normal operation, and

- (b) that all practicable means are employed to prevent or minimise the emission of smoke during that period.
- (2) For the purposes of Schedule 6, the *approved circumstances* for premises other than marine vessels are—
 - (a) that the smoke is emitted from the premises—
 - (i) for a period of no more than 20 minutes per 24 hours, after lighting a boiler or incinerator from cold, being the period during which the boiler or incinerator is brought up to normal operation, or
 - (ii) for a period of no more than 10 minutes per 8 hours, as a result of blowing soot from a boiler, and
 - (b) that all practicable means are employed to prevent or minimise the emission of smoke during that period.

Division 4 Group 6 treatment plants

48 Definition

In this Division, *Group 6 treatment plant* means afterburners and other thermal treatment plant, flares and vapour recovery units and other non-thermal treatment plant that are in Group 6.

49 Application of Division

This Division applies only in respect of Group 6 treatment plant.

50 Operation of Group 6 treatment plant

An occupier of premises on which any Group 6 treatment plant is operated must ensure that—

- (a) any flare operated for the treatment of air impurities is operated in such a way that a flame is present at all times while air impurities are required to be treated, and
- (b) either or both of the following requirements relating to the operation of any such plant are complied with—
 - (i) the requirements in clauses 51 and 52,
 - (ii) the requirements in clause 53.

Maximum penalty—400 penalty units, in the case of a corporation, or 200 penalty units, in the case of an individual.

51 Residence time

- (1) An afterburner, other than one that employs a catalytic control system, must be operated in such a way that the time between an air impurity entering and exiting the afterburner is—
 - (a) more than 2 seconds if the air impurity originates from material containing any principal toxic air pollutant, or
 - (b) more than 0.3 seconds in any other case.
- (2) An enclosed ground-level flare for the treatment of landfill gas must be operated in such a way that the time between landfill gas entering and exiting the flare is more than 0.6 seconds.
- (3) For the purposes of this clause, the time elapsing between an air impurity, including landfill gas, entering and exiting an afterburner or flare is to be calculated—

- (a) using the volumetric flow rate for the air impurity, as determined in accordance with TM-2 or CEM-6, and
- (b) using a 1 hour rolling averaging period.

52 Combustion temperature

- (1) An afterburner, other than one that employs a catalytic control system, must be operated in such a way that the temperature for the combustion of an air impurity by the afterburner is—
 - (a) more than 980°C if the air impurity originates from material containing any principal toxic air pollutant, or
 - (b) more than 760°C in any other case.
- (2) An enclosed ground-level flare for the treatment of landfill gas must be operated in such a way that the temperature for the combustion of landfill gas by the flare is more than 760°C.
- (3) A reference in this clause to the temperature for the combustion of an air impurity, including landfill gas, is a reference to that temperature as determined in accordance with TM-2, using a 1 hour rolling averaging period.

53 Destruction efficiency

- (1) Group 6 treatment plant, other than flares, must be operated in such a way that the destruction efficiency of the plant, in relation to an air impurity entering the plant, is—
 - (a) if the air impurity originates from material containing any principal toxic air pollutant—more than 99.9999%, or
 - (b) in any other case—more than 99.99%.
- (2) An enclosed ground-level flare for the treatment of landfill gas must be operated in such a way that the destruction efficiency of the flare, in relation to landfill gas entering the flare, is more than 98%.
- (3) A reference in this clause to the destruction efficiency of Group 6 treatment plant in relation to an air impurity, including landfill gas, is a reference to the destruction efficiency of the plant, in relation to the air impurity, calculated by using the following equation—

$$DE = [1 - (MW_{out}/MW_{in})] \times 100$$

where—

DE is the destruction efficiency, expressed as a percentage.

MW_{out} is the mass emission rate of the air impurity in exhaust emissions prior to its release to the atmosphere using a 1 hour rolling averaging period.

MW_{in} is the mass feed rate of the air impurity in a waste feedstream using a 1 hour rolling averaging period.

Division 5 Miscellaneous

54 Emission points

- (1) For the purposes of section 128(1) of the Act, the point at which the standard of concentration, or rate of emission, of air impurities resulting from the carrying on of any activity, or the operation of any plant, on any premises is not to be exceeded is a point between—
 - (a) the point of origin of the air impurities, that is—

- (i) the point where the air impurities originate, or
 - (ii) if the air impurities subsequently pass through any control equipment—the point where the air impurities emerge from that equipment, and
- (b) the point of release of the air impurities, that is—
 - (i) the point where the air impurities pass into the atmosphere, or
 - (ii) if air, gas or vapour is added to the air impurities before that point after passing through any control equipment, the point immediately before the point where the air, gas or vapour is added.
- (2) In any case where there is more than one point of release applying in relation to any activity or plant, a reference in subclause (1) to the point of release is a reference to all of the points of release applying in relation to the activity or plant.

55 Combination of air impurities from 2 or more sources

- (1) This clause applies to an air impurity that is combined with any air impurity of the same kind, or with any other air, gas or vapour, from any other source on scheduled premises before being emitted.
- (2) For the purposes of section 128(1) of the Act, the prescribed standard of concentration for the emission of an air impurity to which this clause applies is to be determined in accordance with TM-38.
- (3) Nothing in this clause authorises the emission of an air impurity in excess of the standard of concentration prescribed for the emission of the air impurity by Divisions 2 and 3.
- (4) A reference in this clause to a source is a reference to an activity or item of plant.

56 Standards of concentration not to affect other controls

For the avoidance of doubt, this Part does not authorise the occupier of premises to carry on an activity, or operate any plant, in or on the premises in such a manner as to cause or permit the emission of air impurities in excess of those allowed by any other controls that apply in respect of the activity or plant, such as a licence or a development consent granted under the *Environmental Planning and Assessment Act 1979*).

57 Exemptions relating to start-up and shutdown periods

The standards of concentration prescribed by this Part do not apply to or in relation to any plant during the following periods—

- (a) a **start-up** period—that is, while the plant is being brought up to normal operation following a period of inactivity,
- (b) a **shutdown** period—that is, while the plant is being taken out of service from normal operation to inactivity.

Note— While the standards prescribed by this Part do not apply, the occupier of the premises concerned will be subject to the requirements of section 128(2) of the Act in relation to the prevention and minimisation of air pollution.

58 Exemption relating to emission of smoke

- (1) The EPA may, by written notice given to a public authority, exempt the public authority from the operation of section 128 of the Act and Divisions 2 and 3, in so far as those provisions relate to the emission of smoke.
- (2) The EPA may only grant such an exemption in relation to smoke emitted in the course of the following activities—

- (a) research to improve safety in relation to the flammability of materials and smoke reduction, including the development of testing procedures,
 - (b) training of fire-fighters,
 - (c) rating of the effectiveness of fire extinguishers and fire suppression systems,
 - (d) testing undertaken to certify that manufactured or imported products comply with Australian Standards or International Standards or meet any legislative requirements placed on them.
- (3) Before granting an exemption under this clause, the EPA—
- (a) must take into consideration the impact of the exemption on local and regional air quality and amenity, and
 - (b) must be satisfied that it is not practicable for the public authority to comply with the provisions referred to in subclause (1), in relation to the emission of smoke, by implementing operational changes to plant or practices.
- (4) An exemption under this clause—
- (a) is subject to any conditions that may be specified in the written notice by which it is granted, and
 - (b) may be amended or revoked by a further written notice given to the public authority, and
 - (c) unless sooner revoked by the EPA, remains in force—
 - (i) for a period of 12 months from the date it is granted, or
 - (ii) for any other period specified in the written notice by which it is granted, and
 - (d) extends to apply to any person acting at the direction of the public authority to which it is granted.

59 Exemption relating to emergency electricity generation

Emergency standby plant comprising a stationary reciprocating internal combustion engine for generating electricity is exempt from the air impurities standard for nitrogen dioxide and nitric oxide specified in Schedule 4 in relation to that plant if the plant is used for a total of not more than 200 hours per year.

60 Limits on sulfur content of liquid fuel

- (1) A person must not, anywhere in the Sydney, Wollongong, Newcastle or Central Coast Metropolitan Area, operate any fuel burning equipment with liquid fuel having a sulfur content of more than 0.5 per cent by weight, as measured in accordance with TM-6.
- (2) A person must not, anywhere outside the Sydney, Wollongong, Newcastle or Central Coast Metropolitan Area, operate any fuel burning equipment with liquid fuel having a sulfur content of more than 2.5 per cent by weight, as measured in accordance with TM-6.
- (3) This clause does not prevent a person from operating fuel burning equipment with liquid fuel having a sulfur content in excess of a limit imposed by subclause (1) or (2) in the following circumstances—
 - (a) circumstances in which the emissions of sulfur compounds to the atmosphere arising from the operation of the equipment are restricted, by way of control equipment or otherwise, in such a manner that they are no greater than they would be if the equipment were operated, in the absence of any such restriction, with fuel having a sulfur content within the relevant limit,

- (b) circumstances in which the liquid fuel is used for the lighting-up or flame-stabilising of fuel burning equipment designed primarily to burn solid fuel and the sulfur content of the liquid fuel is no more than 2.5 per cent by weight,
 - (c) circumstances in respect of which the person operating the fuel burning equipment holds a written exemption issued by the EPA, being circumstances that, in the opinion of the EPA, are special circumstances in respect of the fuel burning equipment or the premises in which the fuel burning equipment is installed,
 - (d) circumstances in which—
 - (i) the emissions of sulfur compounds to the atmosphere arising from the operation of the fuel burning equipment are restricted, by way of control equipment or otherwise, in accordance with the requirements of a licence, and
 - (ii) the fuel has a sulfur content within the limits imposed by that licence.
- (4) It is a defence to a prosecution for an offence arising under this clause if the defendant establishes that—
- (a) the fuel burning equipment was being operated with liquid fuel supplied under an order placed by the defendant for liquid fuel conforming to the relevant requirements of this clause, and
 - (b) the defendant had reasonable grounds to believe, and did in fact believe, that the sulfur content of the liquid fuel conformed to those requirements.

Maximum penalty—200 penalty units, in the case of a corporation, or 40 penalty units, in the case of an individual.

Part 6 Control of volatile organic liquids

Division 1 Preliminary

61 Definitions

(1) In this Part—

commission a storage tank, petrol dispenser or any control equipment means to bring it into operation for the first time following installation or modification.

decommission a storage tank, petrol dispenser or any control equipment means to permanently abandon its operation or render it permanently inoperable.

delivery tank means a tank mounted on a tank vehicle, not being the fuel tank of the vehicle.

duly qualified person, in relation to any activity, means a person who has such competence and experience in relation to that activity as is recognised in the relevant industry as appropriate to carry out that activity.

existing petrol service station means any petrol service station—

- (a) for which development consent was obtained under the *Environmental Planning and Assessment Act 1979* before 13 November 2009, or
- (b) the installation of which was lawfully commenced before 13 November 2009, or
- (c) from which petrol had been dispensed before 13 November 2009.

Illawarra Region means—

- (a) the Wollongong Metropolitan Area, and
- (b) the local government areas of Municipality of Kiama and City of Shoalhaven.

installation of a storage tank or petrol dispenser on a petrol service station means the original installation of the storage tank or petrol dispenser and includes any work in the vicinity of the petrol service station necessary for the installation, and anything done to the storage tank or petrol dispenser before it is commissioned.

large loading plant means industrial plant that is used for loading volatile organic liquid, at a rate of more than 30 megalitres per year, into the delivery tanks of large tank vehicles.

large storage tank means a storage tank having a capacity of 150 kilolitres or more.

large tank vehicle means a tank vehicle having one or more delivery tanks with a total capacity of more than 12 kilolitres.

log book means the log book required to be kept under clause 79.

Lower Hunter Region means—

- (a) the Newcastle Metropolitan Area, and
- (b) the local government areas of City of Cessnock, City of Maitland and Port Stephens.

modification of a storage tank or a petrol dispenser on a petrol service station includes any upgrade, extension, alteration or replacement of the storage tank or petrol dispenser, or any component of the storage tank or petrol dispenser, including required control equipment, but does not include—

- (a) anything done to the storage tank or petrol dispenser before it is first commissioned or after it is decommissioned, or
- (b) anything done to the storage tank or petrol dispenser as part of routine maintenance that does not involve the removal or replacement of any component essential to petrol containment, or

- (c) anything done to the storage tank or petrol dispenser before 13 November 2009.

modified petrol service station means an existing petrol service station from which petrol was dispensed before 13 November 2009 and on which works are carried out on or after that date that—

- (a) involve the breaking up of any forecourt of the petrol service station, and
(b) involve the opening up of petrol product lines and the modification of the storage tanks, tank vents, petrol dispensers, petrol product lines or tanker connection points of the service station, and
(c) require development consent under the *Environmental Planning and Assessment Act 1979*.

new petrol service station means any petrol service station that is not an existing petrol service station.

operate means—

- (a) in relation to a storage tank, to allow petrol to remain in the storage tank, or
(b) in relation to a petrol dispenser, to pass fuel from the storage tank, through the petrol dispenser, to the tank of a vehicle.

petrol has the same meaning as it has in section 154(1) of the Act.

Note— This definition does not include automotive diesel fuel, marine diesel fuel, aviation fuel or liquid petroleum gas (LPG).

petrol dispenser means a dispenser fitted to a pump that is operated to dispense petrol into the fuel tank of a vehicle.

petrol service station means premises from which petrol is dispensed, using a petrol dispenser, from a storage tank.

petrol vapour means any gaseous compound that evaporates from petrol.

prescribed storage tank—see Division 5.

routine maintenance includes any repairs that are done in the course of routine maintenance.

small storage tank means a storage tank having a capacity of 8 kilolitres or more but less than 150 kilolitres.

stage one zone means—

- (a) the Central Coast Metropolitan Area, and
(b) the Illawarra Region, and
(c) the Lower Hunter Region, and
(d) the Sydney Metropolitan Area—B.

stage two zone means—

- (a) the Central Coast Metropolitan Area, and
(b) the Newcastle Metropolitan Area, and
(c) the Sydney Metropolitan Area—B, and
(d) the Wollongong Metropolitan Area.

standards and guidelines means the *Standards and best practice guidelines for vapour recovery at petrol service stations* published in the Gazette and as in force from time to time.

storage tank means a tank situated on any premises, other than a vehicle or vessel.

tank means a container, or an isolated section of a container, that is used or designed to be used for the storage of volatile organic liquid, but does not include anything that

is designed to hold volatile organic liquid under pressure and to prevent the emission of any volatile organic liquid or volatile organic liquid vapour.

tank vehicle means a vehicle used or designed to be used for the transport of volatile organic liquid from one tank to another, whether or not the vehicle is moveable under its own power, but does not include a railway vehicle.

throughput means—

- (a) for a petrol service station that is not yet operating or has been operating for less than one year, the amount of petrol the occupier of the petrol service station estimates will be unloaded from large tank vehicles to storage tanks situated on the service station in the service station's first year of operation, or
- (b) for any other petrol service station, the greatest amount of petrol unloaded, on or after 1 January 2007, from large tank vehicles to storage tanks situated on the petrol service station in any year commencing on 1 January.

vapour system recovery performance means the ratio of the volume of re-circulated vapour and air mixture to the volume of liquid dispensed into the tank of a vehicle.

volatile organic liquid means any organic compound that exists as a liquid at actual conditions of use or storage, unless it has a true vapour pressure of less than or equal to 25.8mm Hg (0.5 psia).

- (2) In this Part—
 - (a) a reference to industrial plant includes plant operated on a petrol service station to store or dispense petrol, and
 - (b) a reference to premises includes a petrol service station.

Division 2 Requirements to fit control equipment

62 Equipment and plant to be fitted with control equipment

- (1) The occupier of any premises must not use or operate, or cause or allow to be used or operated, any fuel burning equipment or industrial plant in or on those premises unless that equipment or plant is fitted with the control equipment required by this Part and that complies with any specifications prescribed by this Part relating to installation.
- (2) The occupier of any premises in or on which is installed any fuel burning equipment or industrial plant fitted with control equipment required by this Part must, if specifications for the commissioning, operation, maintenance or decommissioning of that fuel burning equipment, industrial plant or control equipment are prescribed by this Part, ensure that those specifications are complied with.

Maximum penalty—400 penalty units, in the case of a corporation, or 200 penalty units, in the case of an individual.

63 Exemptions from requirement for control equipment

- (1) The occupier of any premises does not commit an offence under this Division in relation to any industrial plant if—
 - (a) the plant is fitted with control equipment that is approved by the EPA by notice in writing to the occupier, and
 - (b) the plant and control equipment are commissioned, operated, maintained or decommissioned in such manner as the EPA specifies in that notice of approval.
- (2) The occupier of any premises does not commit an offence under this Division in relation to small storage tanks if—

- (a) the EPA is satisfied that the volume of volatile organic liquid loaded into the storage tanks on those premises per year does not usually exceed 600 kilolitres, and
 - (b) the EPA grants an exemption from the operation of this Division by notice in writing to the occupier, and
 - (c) the occupier complies with such conditions as the EPA specifies in the exemption.
- (3) The EPA may vary or revoke an approval or exemption under this clause at any time by notice in writing served on the holder of the approval or exemption.

Division 3 Storage tanks and loading plants

64 Application

This Division does not apply to any prescribed storage tank.

65 Control equipment for large storage tanks

- (1) This clause applies to any large storage tank situated anywhere within the Sydney, Newcastle or Wollongong Metropolitan Area.
- (2) The following control equipment is required to be fitted to any large storage tank to which this clause applies—
 - (a) a drainage system comprising a small sump or tundish fitted under each water draw-off valve and connected to a totally enclosed drain,
 - (b) if the volatile organic liquid stored in the tank has a vapour pressure of or below 75 kilopascals—
 - (i) a floating metal roof that, under normal operating conditions, floats on the surface of the liquid, or
 - (ii) a floating cover constructed of material impervious to vapour that, under normal operating conditions, floats on the surface of the liquid inside a fixed roof, or
 - (iii) a vapour disposal or recovery system of the kind referred to in subclause (6),
 - (c) if the volatile organic liquid stored in the tank has a vapour pressure above 75 kilopascals, a vapour disposal or recovery system of the kind referred to in subclause (6).
- (3) Subclause (2)(a) does not apply in the case of tanks used for the storage of volatile organic liquid, other than crude petroleum, received by tank-to-tank transfer from other storage tanks.
- (4) A floating roof or cover referred to in subclause (2)(b) must be constructed so as to prevent the escape of vapour through the roof or cover and so that—
 - (a) vapour beneath the floating roof or cover is contained by skirt plates situated near the edges of the roof or cover and surrounding any openings in the roof or cover or by similar means, and
 - (b) the roof or cover is equipped with one or more closure seals to close the spaces between the roof or cover and the tank walls and between any openings in the roof or cover and any equipment passing through those openings, and
 - (c) seals on floating roofs are shielded from the weather, and
 - (d) weather-shields are moveable to permit proper inspection of seals.

- (5) The level of volatile organic liquid in a large storage tank that is fitted with a floating roof or cover referred to in subclause (2)(b) must be maintained, during normal operating conditions, at a depth sufficient to prevent the supports of the floating roof or cover from resting on the floor of the tank.
- (6) A vapour disposal or recovery system referred to in subclause (2)(b) or (c) must be constructed so that the vapour emitted from the tank—
 - (a) is incinerated, so that the total concentration of unburnt vapour emitted to the atmosphere does not exceed 1.5 grams per cubic metre of the gases resulting from the incineration process, or
 - (b) is recovered, so that the total concentration of unrecovered vapour emitted to the atmosphere during any period of 4 hours does not exceed 110 milligrams per litre of volatile organic liquid passing into the tank during that period.
- (7) The total concentration of unburnt vapour referred to in subclause (6)(a) is to be determined as set out in TM-19, the total concentration of unrecovered vapour referred to in subclause (6)(b) is to be determined as set out in TM-20 and the calculation of the vapour pressure of volatile organic liquid stored in tanks is to be carried out in accordance with TM-21.
- (8) Subclauses (6) and (7) do not apply to large storage tanks on scheduled premises, within the meaning of Part 5, that belong to Group 6, within the meaning of that Part.

66 Control equipment for large loading plant

- (1) This clause applies to any large loading plant situated anywhere within the Sydney Metropolitan Area.
- (2) The following control equipment is required to be fitted to any large loading plant to which this clause applies—
 - (a) a vapour collection system by which all vapour displaced from tanks during loading operations is collected and conveyed to a vapour recovery or disposal system through vapour lines having an internal diameter of not less than 65 per cent of the largest fill-line used for connection to the delivery tank,
 - (b) an interlock system that prevents the loading of a delivery tank unless—
 - (i) the vapour collection system is first connected to that tank, or
 - (ii) the interlock system forms part of industrial plant used only for loading delivery tanks that are themselves fitted with such an interlock system,
 - (c) fittings on all liquid and vapour lines that make vapour-tight connections with the respective mating fittings on the delivery tank and that close automatically when disconnected,
 - (d) a vapour recovery or disposal system constructed so that the vapour resulting from loading operations—
 - (i) is incinerated, so that the total concentration of unburnt vapour emitted to the atmosphere does not exceed 1.5 grams per cubic metre of the gases resulting from the incineration process, or
 - (ii) is recovered, so that the total concentration of unrecovered vapour emitted to the atmosphere during any period of 4 hours does not exceed 110 milligrams per litre of volatile organic liquid passing out of the plant during that period.
- (3) The total concentration of unburnt vapour referred to in subclause (2)(d)(i) is to be determined as set out in TM-19 and the total concentration of unrecovered vapour referred to in subclause (2)(d)(ii) is to be determined as set out in TM-20.

- (4) Subclause (2)(d) does not apply to large loading plants on scheduled premises, within the meaning of Part 5, that belong to Group 6, within the meaning of that Part.

67 Control equipment for small storage tanks

- (1) This clause applies to any small storage tank situated anywhere within the Sydney Metropolitan Area other than the local government area of City of Hawkesbury.
- (2) The following control equipment is required to be fitted to a small storage tank to which this clause applies—
- (a) a vapour transfer system by which all vapour displaced by the transfer of volatile organic liquid into the storage tank is returned to the delivery tank being unloaded by way of a vapour return line,
 - (b) a coupling on the vapour return line that makes a vapour-tight connection with the vapour return hose on the delivery tank and that closes automatically when disconnected,
 - (c) in the case of a tank that is filled by the operation of gravity, an overflow protection system designed to stop the flow of volatile organic liquid into the storage tank before there is insufficient space in that tank to receive the contents of the tank vehicle's transfer hose,
 - (d) a coupling on the storage tank's fill-pipe that makes a liquid-tight connection with the delivery tank's liquid transfer hose,
 - (e) in the case of a storage tank located above the ground, pressure vacuum valves on all atmospheric vents.
- (3) The vapour transfer system referred to in subclause (2) (a) may be used to serve more than one storage tank on the same premises.
- (4) A vapour return line referred to in subclause (2)(a) must be of vapour-tight construction and must have an internal diameter—
- (a) in the case of such part of the vapour return line as is upstream of the first fitting or change in direction from the tank—
 - (i) not less than 50 per cent of the internal diameter of the fill-pipe, or
 - (ii) in the case of a tank installed before 1 May 1982 and in which the vapour return line is taken from the atmospheric vent, as large as practicable having regard to the internal diameter of the existing vent connection, and
 - (b) in the case of such part of the vapour return line as is downstream of the first fitting or change in direction from the tank, not less than 65 per cent of the internal diameter of the fill-pipe.
- (5) The pressure vacuum valves referred to in subclause (2)(e)—
- (a) except as provided in paragraph (b), must be set to be closed when the pressure in the tank is between 15 kilopascals above, and 0.5 kilopascals below, ambient pressure, or
 - (b) in the case of tanks installed before 1 May 1982, may be set to be closed when the pressure in the tank is between the design operating maximum pressure and the design operating maximum vacuum.
- (6) A hatch, manhole or other cover on or associated with a storage tank to which this clause applies must not be opened if, in so doing, vapour would be likely to be emitted to the atmosphere, except—
- (a) in an emergency, or

- (b) for the purpose of tank gauging or sampling through a dip hatch, when no liquid transfer hoses are connected to the tank or when any connected hoses are closed, or
- (c) for the purpose of reasonable maintenance.

Division 4 Tank vehicles

68 Control equipment for large tank vehicles

- (1) This clause applies to—
 - (a) the loading of a large tank vehicle from large loading plant anywhere within the Sydney Metropolitan Area, and
 - (b) the unloading of a large tank vehicle into a small storage tank anywhere within the Sydney Metropolitan Area—B, and
 - (c) the unloading of a large tank vehicle into any prescribed storage tank.
- (2) The owner of a tank vehicle must not use the tank vehicle, or allow the tank vehicle to be used, to load or unload volatile organic liquid unless the tank vehicle is fitted with the following control equipment and the equipment is maintained in an efficient condition—
 - (a) a vapour handling system for the transfer between delivery tanks of vapour displaced during loading or unloading operations,
 - (b) an overfill protection device, located in the delivery tank, that is designed to stop the flow of volatile organic liquid into the tank as near as practicable to the level of minimum ullage,
 - (c) couplings on liquid transfer pipes and hoses on the tank vehicle that make a liquid-tight connection with the respective mating fittings and that, in the case of liquid transfer pipes, close automatically when disconnected,
 - (d) hatch covers on any openings that are required to be vapour-tight when closed,
 - (e) pressure vacuum valves on all atmospheric vents, except emergency vents, that are set to be closed when the pressure in the tank is between 15 kilopascals above, and 3 kilopascals below, ambient pressure, being valves that may be fitted with a vent by-pass or pilot-bleed system if the maximum area for free venting is limited to 15 square millimetres.

Maximum penalty—200 penalty units, in the case of a corporation, or 40 penalty units, in the case of an individual.

- (3) The vapour handling system referred to in subclause (2)(a) must comply with the following requirements—
 - (a) the delivery tank must be fitted with a vapour transfer valve connecting the tank, through a manifold if desired, to a vapour line coupling or permanently connected vapour hose,
 - (b) the vapour transfer valve—
 - (i) must be interlocked with the delivery valve, so as to be open whenever volatile organic liquid is being transferred to or from the tank, and
 - (ii) if the vapour return hose is not permanently connected to the delivery tank, must be interlocked with the vapour line coupling on the delivery tank, so as to be closed unless the vapour return hose is attached to that coupling,
 - (c) unless the delivery tank is fitted with a permanently connected vapour hose, the tank vehicle must carry a vapour return hose of vapour-tight construction, fitted to connect—

- (i) at one end, to the vapour line coupling on the vehicle, and
 - (ii) at the other end, to a vapour return coupling at the liquid loading or unloading plant,
- (d) the vapour line, including any vapour hose carried by the vehicle, must have an internal diameter of not less than 65 per cent of the internal diameter of the largest liquid transfer hose carried by the vehicle,
- (e) couplings on vapour transfer hoses on the tank vehicle must make vapour-tight connections with the respective fittings on the vehicle.
- (4) A person is exempt from the operation of this clause if—
 - (a) the vehicle is fitted with control equipment that is approved by the EPA by notice in writing to the owner of the vehicle, and
 - (b) the vehicle and control equipment are maintained and operated in such manner as the EPA specifies in that notice of approval.
- (5) The EPA may vary or revoke an approval or exemption under this clause at any time by notice in writing served on the holder of the approval or exemption.

69 Loading and unloading large tank vehicles

- (1) This clause applies to—
 - (a) the loading of a large tank vehicle from large loading plant anywhere within the Sydney Metropolitan Area, and
 - (b) the unloading of a large tank vehicle into a small storage tank anywhere within the Sydney Metropolitan Area—B, and
 - (c) the unloading of a large tank vehicle into any prescribed storage tank.
- (2) While a tank vehicle is being loaded with volatile organic liquid from large loading plant, the person in charge of the vehicle must ensure that the delivery tank mounted on the vehicle is properly connected to the vapour collection system of that plant.
- (3) While a tank vehicle is being used to load volatile organic liquid into a small storage tank, the person in charge of the vehicle must ensure that—
 - (a) before any such loading takes place, the vapour return hose is connected to the appropriate vapour line coupling on the tank vehicle, except in the case of a permanently connected hose, and to the appropriate vapour return coupling on or associated with the storage tank, and
 - (b) the vapour return hose is not disconnected while volatile organic liquid is being loaded into the storage tank, and
 - (c) the connection or disconnection of any hose is done in such a manner as to avoid or minimise spillage, and
 - (d) the liquid transfer hose is not disconnected from the storage tank until the hose is empty of liquid.

- (4) The person in charge of a tank vehicle must not, without reasonable excuse, leave open a hatch, manhole or other cover on any delivery tank mounted on the vehicle if to do so would be likely to result in vapour being emitted to the atmosphere.

Maximum penalty—200 penalty units, in the case of a corporation, or 40 penalty units, in the case of an individual.

Division 5 Petrol service stations

Subdivision 1 Preliminary

70 Definitions

In this Division—

prescribed petrol dispenser means—

- (a) from 1 July 2010—a petrol dispenser on a new petrol service station or modified petrol service station within the stage two zone, but only from the first time the petrol service station has a throughput of more than 0.5 million litres of petrol, and
- (b) from 1 January 2014—a petrol dispenser on an existing petrol service station, other than a modified petrol service station, within the stage two zone, but only from the first time the petrol service station has a throughput of more than 12 million litres of petrol, and
- (c) from 1 January 2017—a petrol dispenser on an existing petrol service station, other than a modified petrol service station, within the Sydney Metropolitan Area—B, but only from the first time the petrol service station has a throughput of more than 3.5 million litres of petrol.

prescribed storage tank means—

- (a) from 1 July 2010—a storage tank operated for storing petrol on a new or modified petrol service station within the stage one zone, but only from the first time the petrol service station has a throughput of more than 0.5 million litres of petrol, and
- (b) from 1 January 2015—a storage tank operated for storing petrol on an existing petrol service station, other than a modified petrol service station, within the stage one zone, but only from the first time the petrol service station has a throughput of more than 0.5 million litres of petrol.

Subdivision 2 Stage one vapour recovery

71 Control equipment for storage tanks on petrol service stations

- (1) The following control equipment is required to be fitted to a prescribed storage tank—
 - (a) a vapour transfer system by which all vapour displaced by the transfer of petrol into the storage tank is returned to the delivery tank being unloaded by way of a vapour return line,
 - (b) a coupling on the vapour return line that makes a vapour-tight connection with the vapour return hose on the delivery tank and that closes automatically when disconnected,
 - (c) a submerged fill pipe that terminates below the lowest point of any suction inlet used for the pumping of petrol out of the storage tank,
 - (d) for a new petrol service station, an overfill prevention device installed in the tank fill piping or a supply system—
 - (i) that slows delivery of petrol into the storage tank to prevent overfilling, and
 - (ii) if electrically powered or containing electronic components, that meets the standards specified in the standards and guidelines for the purposes of this subclause,
 - (e) storage tank overfill protection, comprising a float vent valve positioned—

- (i) above the highest point of any overflow prevention device when in the closed position, and
 - (ii) so that the valve shuts off the flow into the storage tank at the level advised by the manufacturer of the storage tank or, if no level is advised, at 95% of the storage tank's capacity,
 - (f) spill containment enclosures for all storage tank fill connection points,
 - (g) a coupling on the storage tank's fill pipe that makes a liquid-tight connection with the delivery tank's liquid transfer hose,
 - (h) secure seals on connection points of tank filling pipes and vapour return pipes that minimise vapour leaks when those pipes are not in active use,
 - (i) secure seals for the apertures for the use of a dipstick, if dip hatches are provided on the storage tank,
 - (j) fittings on the petrol delivery lines and hoses that are incompatible with the fittings on the vapour return lines and hoses so as to prevent misconnection or the accidental discharge of liquid petrol into the vapour return lines or pipes,
 - (k) a storage tank vent pipe that is fitted with—
 - (i) a pressure vacuum valve, or other similar device, that—
 - (A) meets the pressure vacuum settings criteria specified in the standards and guidelines for the purposes of this subclause, and
 - (B) on the advice of a duly qualified person, is of a suitable size and type and possesses suitable safety features, and
 - (C) has been installed as advised by a duly qualified person, and
 - (ii) a 10 millimetre orifice that is arranged so that the pressure vacuum valve or other similar device would continue to operate if the orifice were to become blocked,
 - (l) in the case of a storage tank fitted with a vapour processing unit, a unit that, before commissioning, has been certified by the manufacturer or supplier as being of a type that is specified in the standards and guidelines as meeting the hydrocarbon capture efficiency criteria specified in the standards and guidelines for the purposes of this subclause.
- (2) The occupier of a petrol service station must ensure that a storage tank is tested in the manner specified in the standards and guidelines for the purposes of this subclause before any required control equipment is fitted.
- (3) The occupier of a petrol service station must ensure that a storage tank fitted with required control equipment is tested before commissioning in the manner specified in the standards and guidelines for the purposes of this subclause.
- Maximum penalty—subclauses (2) and (3)—100 penalty units, in the case of a corporation, or 50 penalty units, in the case of an individual.

72 Specifications regarding covers

A person must not operate a prescribed storage tank while a hatch, manhole or other cover on or associated with the storage tank is open if, in so doing, petrol vapour would be likely to be emitted to the atmosphere, other than—

- (a) during an emergency, or
- (b) while tank gauging or sampling by way of the relevant opening, when no liquid transfer hoses are connected to the storage tank or when any connected hoses are closed, is being carried out, or
- (c) while routine maintenance is being carried out.

Maximum penalty—100 penalty units, in the case of a corporation, or 50 penalty units, in the case of an individual.

73 Specifications regarding periodic testing

- (1) The occupier of a petrol service station must ensure that a prescribed storage tank and any control equipment required to be fitted to the tank are tested at the times and in the manner set out in the standards and guidelines.
- (2) A prescribed storage tank and any control equipment required to be fitted to the tank must not be operated unless the most recent results of tests under subclause (1) meet the standards specified in the standards and guidelines for the purposes of this clause.
Maximum penalty—100 penalty units, in the case of a corporation, or 50 penalty units, in the case of an individual.

Subdivision 3 Stage two vapour recovery

74 Control equipment for petrol dispensers

The control equipment required to be fitted to a prescribed petrol dispenser is a vapour recovery system that—

- (a) before commissioning, has been certified by the manufacturer or supplier as being of a type that is specified in the standards and guidelines as meeting the hydrocarbon capture efficiency criteria specified in the standards and guidelines for the purposes of this clause, and
- (b) is installed in accordance with the manufacturer's specifications by a duly qualified person, and
- (c) before commissioning, is tested by a duly qualified person in the manner specified in the standards and guidelines for the purposes of this clause.

75 Specifications regarding testing

- (1) The occupier of a petrol service station must ensure that the control equipment required to be fitted to a prescribed petrol dispenser is tested for vapour containment integrity and vapour system recovery performance at the times and in the manner set out in the standards and guidelines.
- (2) The occupier of a petrol service station must ensure that a prescribed petrol dispenser is not operated unless the most recent results of tests under subclause (1) meet the standards specified in the standards and guidelines for the purposes of this clause.
Maximum penalty—100 penalty units, in the case of a corporation, or 50 penalty units, in the case of an individual.

76 Specifications regarding monitoring

- (1) The occupier of a petrol service station must ensure that a prescribed petrol dispenser is not operated unless it is also fitted with an automatic monitoring system that—
 - (a) is capable of detecting faults in the functioning of the required control equipment, and
 - (b) is capable of detecting faults in its own functioning, and
 - (c) provides a warning or alarm when a fault is detected, and
 - (d) automatically cuts off the flow of fuel from the petrol dispenser if the fault which is the subject of a warning or alarm is not rectified within 7 days, and
 - (e) is capable of recording the last—
 - (i) 1 year of data, and

- (ii) 100 faults in the functioning of the required control equipment, and
 - (f) has been certified in the manner specified in the standards and guidelines as meeting the criteria set out in paragraphs (a)–(e).
- (2) Subclause (1) does not apply to a petrol dispenser at a petrol service station that has not had a throughput of 7 million litres or more of petrol at any time since being required to fit the required control equipment, if an adequately trained person on a weekly basis—
 - (a) carries out a manual test of the functionality of the required control equipment in the manner specified in the standards and guidelines for the purposes of this subclause, and
 - (b) inspects the vapour return lines for any torn, flattened or kinked hoses or any damaged seals, and
 - (c) records the test and the inspection in a log book.
- (3) A petrol dispenser must not be operated after 7 days after a fault in the required control equipment or in the automatic monitoring system is identified until the fault has been rectified by a duly qualified person.
- (4) For the purposes of subclause (3), a fault exists—
 - (a) in the functioning of the required control equipment if it ceases to meet the test of functionality specified in the standards and guidelines for the purposes of this clause, and
 - (b) in the automatic monitoring system if it fails to detect a fault in required control equipment that it is monitoring.
- (5) In this clause—

adequately trained person means a person who has been trained to perform the check of the relevant required control equipment—

 - (a) in accordance with the instructions of the manufacturer or supplier of that equipment, or
 - (b) in a manner specified in the standards and guidelines for the purposes of this subclause.

Subdivision 4 Miscellaneous

77 Reporting to EPA

- (1) The occupier of a petrol service station must give the EPA, in the form and within the period set out in the standards and guidelines, notice of the commissioning of any prescribed storage tank or prescribed petrol dispenser.
- (2) The occupier of a petrol service station must give the EPA, in the form and within the period set out in the standards and guidelines, a report for the year ending on 30 June each year, if during that period there was a significant failure in any required control equipment at a petrol service station.
- (3) For the purposes of subclause (2), a significant failure is any one or more of the following occurrences—
 - (a) a failure of the vapour containment system that requires the opening of the forecourt to repair the system,
 - (b) a test result of below 85% for vapour system recovery performance of a manually monitored petrol dispenser and required control equipment, or

- (c) a number of warnings by an automatic monitoring system fitted to a petrol dispenser and prescribed control equipment that is greater than the number specified in the standards and guidelines for the purposes of this subclause.

Maximum penalty—100 penalty units, in the case of a corporation, or 50 penalty units, in the case of an individual.

78 Compliance notification

- (1) The occupier of a petrol service station must display, or cause to be displayed, a sign, sticker or other notification—
 - (a) on each prescribed petrol dispenser fitted with the required control equipment to the effect that the petrol dispenser is fitted with stage two vapour recovery equipment, and
 - (b) on the petrol service station premises to the effect that the petrol service station is fitted with stage two vapour recovery equipment, if all of the petrol dispensers situated on the petrol service station are prescribed petrol dispensers fitted with the required control equipment.
- (2) The occupier of a petrol service station must not display, or cause to be displayed, a sign, sticker or other notification referred to in subclause (1) except in accordance with that subclause.
- (3) The EPA may, by order in writing, exempt a person or a class of persons specified in the order from the operation of this clause.

Maximum penalty—300 penalty units, in the case of a corporation, or 150 penalty units, in the case of an individual.

79 Log books

- (1) The occupier of a petrol service station that has a prescribed storage tank or a prescribed petrol dispenser must keep a log book in accordance with this clause.
Maximum penalty—400 penalty units, in the case of a corporation, or 200 penalty units, in the case of an individual.
- (2) A log book may include information kept in compliance with other requirements imposed by or under the Act.
Note— For example, an incident log kept in accordance with clause 25 of the *Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2019* could also include the information required to be kept under this Regulation.
- (3) The following must be entered in a log book in relation to control equipment required to be fitted to a prescribed storage tank or a prescribed petrol dispenser—
 - (a) the type of control equipment installed, the serial number, if any, of the control equipment, or any part of the control equipment, and the name and address of—
 - (i) the manufacturer of the control equipment, and
 - (ii) the supplier of the control equipment, and
 - (iii) the person or body that carried out the installation of the control equipment or any part of the control equipment,
 - (b) a description of any modification carried out on the control equipment, including the type of any part of the control equipment replaced, removed or added, the serial number, if any, of any such part and the name and address of the person or body that carried out the modification work,
 - (c) a description of any routine maintenance carried out on the control equipment,
 - (d) details of any rectification work carried out on the control equipment and the name and address of the person or body that carried out the rectification work,

- (e) details of any manual monitoring of control equipment undertaken,
 - (f) a description of any testing of the operation of the control equipment, whether carried out in compliance with this Regulation or otherwise, including the type of test carried out, the results of the test and the name and address of the person or body that carried out the test,
 - (g) a description of any incident, including a reportable significant failure under this Subdivision, that indicated that the control equipment was not, or may not have been, operating in a proper and efficient manner and the measures taken to investigate and respond to the incident.
- (4) A record required to be kept in a log book must be retained for 3 years from the date of creation of the record.
 - (5) A certificate from a supplier or manufacturer that is required by clause 71(1)(l) or 74(a) must be retained with the log book for 3 years or until the prescribed control equipment to which it relates is decommissioned, whichever is the longer.
 - (6) The log book must be kept at the petrol service station at which the prescribed control equipment is being operated.
 - (7) If the petrol service station permanently ceases to operate during the 3-year period referred to in subclause (4) or (5), the record or certificate must be kept at the principal place of business of the person who, immediately before the petrol service station ceased to operate, was the occupier of the petrol service station.
 - (8) This clause does not require the recording of anything done before 13 November 2009.
 - (9) The EPA may, by order in writing, exempt a person or a class of persons specified in the order from the operation of subclause (4) or (5).

80 Exemptions

- (1) The EPA may grant an exemption under this Subdivision by order in writing on application or of its own motion.
- (2) An application for an exemption must be accompanied by such fee, if any, as the EPA may determine.
- (3) An order—
 - (a) has effect in such circumstances, if any, and subject to such conditions, if any, as are specified in the order, and
 - (b) must specify a person to be served with the order and must be served on that person, and
 - (c) has effect on and from service of the order or such later date as may be specified in the order, and
 - (d) is subject to the condition that the exempted person complies with all of the provisions of the Act and the other provisions of this Regulation that apply to the person, and
 - (e) may be revoked by the EPA at any time by order in writing served on the person referred to in paragraph (b).

Part 7 Miscellaneous

81 Savings

Any act, matter or thing that, immediately before the repeal of the *Protection of the Environment Operations (Clean Air) Regulation 2010*, had effect under that Regulation continues to have effect under this Regulation.

82 Repeal

This regulation is repealed on 1 September 2022.

Schedule 1 Local government areas in which burning is prohibited

clauses 12 and 13(2)

Part 1 Areas in which all burning, including burning of vegetation and domestic waste, is prohibited except with approval

Bayside	Georges River	City of Randwick
Blacktown City	Municipality of Hunter's Hill	City of Ryde
City of Broken Hill	Inner West	City of Shellharbour
Municipality of Burwood	Lane Cove	Municipality of Strathfield
Camden	City of Liverpool	Sutherland Shire
City of Campbelltown	Mosman	City of Sydney
City of Canada Bay	City of Newcastle	Municipality of Waverley
City of Canterbury-Bankstown	North Sydney	City of Willoughby
Cumberland City	Northern Beaches	Municipality of Woollahra
City of Fairfield	City of Parramatta	City of Wollongong

Part 2 Areas in which burning of vegetation is prohibited except with approval

City of Albury	Goulburn Mulwaree	Narromine
Armidale Regional	Gunnedah	City of Orange
Ballina	Gwydir	City of Penrith
Balranald	City of Hawkesbury	Port Macquarie-Hastings
Bathurst Regional	Hay	Port Stephens
Bega Valley	Hornsby	Queanbeyan-Palerang Regional
Bellingen	Junee	Richmond Valley
Bland	Municipality of Kiama	Snowy Monaro Regional
City of Blue Mountains	Ku-ring-gai	Snowy Valleys
Bourke	City of Lake Macquarie	Tamworth Regional
Brewarrina	Leeton	The Hills
Central Coast	City of Lismore	Tweed
City of Cessnock	City of Lithgow	Upper Lachlan
Clarence Valley	Liverpool Plains	Uralla
City of Coffs Harbour	City of Maitland	City of Wagga Wagga
Coonamble	Mid-Coast	Warrumbungle Shire
Dubbo Regional	Mid-Western Regional	Wentworth
Dungog	Muswellbrook	Wingecarribee

Eurobodalla
Forbes

Nambucca Valley
Narrabri

Wollondilly

Part 3 Areas in which all burning, other than burning of vegetation, is prohibited except with approval or in relation to certain domestic waste

City of Albury	Gwydir	Oberon
Armidale Regional	City of Hawkesbury	City of Orange
Ballina	Hay	City of Penrith
Balranald	Hilltops	Port Macquarie-Hastings
Bathurst Regional	Hornsby	Port Stephens
Bega Valley	Inverell	Queanbeyan-Palerang Regional
Bland	Junee	Richmond Valley
City of Blue Mountains	Kempsey	City of Shoalhaven
Bourke	Municipality of Kiama	Snowy Monaro Regional
Brewarrina	Ku-ring-gai	Snowy Valleys
Central Coast	Kyogle	Tamworth Regional
City of Cessnock	City of Lake Macquarie	Temora
Clarence Valley	Leeton	The Hills
City of Coffs Harbour	City of Lismore	Tweed
Coolamon	City of Lithgow	Upper Hunter Shire
Coonamble	Lockhart	Upper Lachlan Shire
Dubbo Regional	City of Maitland	Uralla
Dungog	Mid-Coast	City of Wagga Wagga
Eurobodalla	Mid-Western Regional	Walcha
Federation	Murray River	Warren
Forbes	Muswellbrook	Warrumbungle Shire
Glen Innes Severn	Nambucca Valley	Wentworth
Goulburn Mulwaree	Narrabri	Wingecarribee
Greater Hume Shire	Narrandera	Wollondilly
Gunnedah	Narromine	Yass Valley

Schedule 2 Standards of concentration for scheduled premises—afterburners, flares and vapour recovery units

clause 39

Afterburners and other thermal treatment plant (excluding flares)

Air impurity	Plant	Standard of concentration	
Solid particles (Total)	Any afterburner or other thermal treatment plant treating air impurities that originate from material containing any principal toxic air pollutant	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	50 mg/m ³
Nitrogen dioxide (NO ₂) or nitric oxide (NO) or both, as NO ₂ equivalent	Any afterburner or other thermal treatment plant	Group 1, 2, 3 or 4	2,500 mg/m ³
		Group 5	2,000 mg/m ³
		Group 6	350 mg/m ³
Volatile organic compounds (VOCs), as n-propane equivalent	Any afterburner or other thermal treatment plant treating air impurities that originate from material containing any principal toxic air pollutant	Group 1, 2, 3, 4 or 5	—
		Group 6	20 mg/m ³ VOCs or 125 mg/m ³ CO
	Any afterburner or other thermal treatment plant treating air impurities that originate from material not containing any principal toxic air pollutant	Group 1, 2, 3, 4 or 5	—
		Group 6	40 mg/m ³ VOCs or 125 mg/m ³ CO
Hydrogen chloride (HCl)	Any afterburner or other thermal treatment plant treating air impurities that originate from material containing any principal toxic air pollutant	Group 1, 2, 3 or 4	400 mg/m ³
		Group 5 or 6	100 mg/m ³
Type 1 substances (in aggregate)	Any afterburner or other thermal treatment plant treating air impurities that originate from material containing any principal toxic air pollutant	Group 1, 2 or 3	20 mg/m ³
		Group 4	10 mg/m ³
		Group 5 or 6	—
Type 1 substances and Type 2 substances (in aggregate)	Any afterburner or other thermal treatment plant treating air impurities that originate from material containing any principal toxic air pollutant	Group 1, 2, 3 or 4	—
		Group 5	5 mg/m ³
		Group 6	1 mg/m ³
Cadmium (Cd) or mercury (Hg) individually	Any afterburner or other thermal treatment plant treating air impurities that originate from material containing any principal toxic air pollutant	Group 1, 2 or 3	—
		Group 4	3 mg/m ³
		Group 5	1 mg/m ³
		Group 6	0.2 mg/m ³

Afterburners and other thermal treatment plant (excluding flares)

Air impurity	Plant	Standard of concentration	
Dioxins or furans	Any afterburner or other thermal treatment plant treating air impurities that originate from material containing any principal toxic air pollutant	Group 1, 2, 3, 4 or 5	—
		Group 6	0.1 ng/m ³
Smoke	Any afterburner or other thermal treatment plant treating air impurities that originate from material containing any principal toxic air pollutant	Group 1, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 1, in other circumstances	Ringelmann 2 or 40% opacity
		Group 2, 3, 4, 5 or 6	Ringelmann 1 or 20% opacity

Flares

Air impurity	Plant	Standard of concentration	
Volatile organic compounds (VOCs), as n-propane equivalent	Any enclosed ground-level flare treating landfill gas	Group 1, 2, 3, 4 or 5	—
		Group 6	40 mg/m ³ VOCs
Smoke	Any flare	Group 1, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 1, in other circumstances	Ringelmann 2 or 40% opacity
		Group 2, 3, 4 or 5	Ringelmann 1 or 20% opacity
		Group 6	No visible emission other than for a total period of no more than 5 minutes in any 2 hours

Vapour recovery units and other non-thermal treatment plant

Air impurity	Plant	Standard of concentration	
Volatile organic compounds (VOCs), as n-propane equivalent	Any vapour recovery unit treating air impurities that originate from material containing any principal toxic air pollutant	Group 1, 2, 3, 4 or 5	—
		Group 6	20 mg/m ³ VOCs
	Any vapour recovery unit treating air impurities that originate from material not containing any principal toxic air pollutant	Group 1, 2, 3, 4 or 5	—
		Group 6	40 mg/m ³ VOCs

Schedule 3 Standards of concentration for scheduled premises—activities and plant used for specific purposes

clause 39

Agricultural fertiliser or ammonium nitrate production

Air impurity	Activity or plant	Standard of concentration	
Solid particles (Total)	Any crushing, grinding, separating or materials handling activity	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	20 mg/m ³
Sulfur dioxide (SO ₂)	Acid production	Group 1	5,600 mg/m ³
		Group 2, 3, 4 or 5	2,800 mg/m ³
		Group 6	1,000 mg/m ³
Sulfuric acid mist (H ₂ SO ₄) or sulfur trioxide (SO ₃) or both, as SO ₃ equivalent	Acid production	Group 1	200 mg/m ³
		Group 2, 3, 4, 5 or 6	100 mg/m ³
Nitrogen dioxide (NO ₂) or nitric oxide (NO) or both, as NO ₂ equivalent	Acid production	Group 1, 2, 3 or 4	2,500 mg/m ³
		Group 5	2,000 mg/m ³
		Group 6	350 mg/m ³
Smoke	Acid production	Group 1, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 1, in other circumstances	Ringelmann 2 or 40% opacity
		Group 2, 3, 4, 5 or 6, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 2, 3, 4, 5 or 6, in other circumstances	Ringelmann 1 or 20% opacity

Aluminium—primary production

Air impurity	Activity or plant	Standard of concentration	
Solid particles (Total)	Any activity or plant, except as listed below	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	50 mg/m ³
	Any crushing, grinding, separating or materials handling activity	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	20 mg/m ³
Nitrogen dioxide (NO ₂) or nitric oxide (NO) or both, as NO ₂ equivalent	Pre-baked anode production	Group 1, 2, 3 or 4	2,500 mg/m ³
		Group 5	2,000 mg/m ³
		Group 6	300 mg/m ³
Fluorine (F ₂) and any compound containing fluorine, as total fluoride (HF equivalent)	Production of aluminium from alumina	Group 1	40 mg/m ³
		Group 2	20 mg/m ³
		Group 3 or 4	1.0 kg/t Al
		Group 5	0.8 kg/t Al
		Group 6	0.6 kg/t Al
Dioxins or furans	Pre-baked anode production	Group 1, 2, 3, 4 or 5	—
		Group 6	0.1 ng/m ³
Volatile organic compounds (VOCs), as n-propane equivalent	Pre-baked anode production	Group 1	—
		Group 2, 3 or 4	—
		Group 5	—
		Group 6	40 mg/m ³ VOCs or 125 mg/m ³ CO
Smoke	Pre-baked anode production	Group 1, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 1, in other circumstances	Ringelmann 2 or 40% opacity
		Group 2, 3, 4, 5 or 6, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 2, 3, 4, 5 or 6, in other circumstances	Ringelmann 1 or 20% opacity

Aluminium—secondary production

Air impurity	Activity or plant	Standard of concentration	
Solid particles (Total)	Any activity or plant, including any smelting, refining or holding furnace, except as listed below	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	50 mg/m ³
	Any crushing, grinding, separating or materials handling activity	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	20 mg/m ³
Nitrogen dioxide (NO ₂) or nitric oxide (NO) or both, as NO ₂ equivalent	Any activity or plant, including any smelting, refining or holding furnace	Group 1	2,500 mg/m ³
		Group 2, 3 or 4	2,500 mg/m ³
		Group 5	2,000 mg/m ³
		Group 6	300 mg/m ³
Fluorine (F ₂) or any compound containing fluorine, as total fluoride (HF equivalent)	Any smelting or refining furnace	Group 1	100 mg/m ³
		Group 2, 3, 4, 5 or 6	50 mg/m ³
Type 1 substances (in aggregate)	Any smelting or refining furnace	Group 1, 2 or 3	20 mg/m ³
		Group 4	10 mg/m ³
		Group 5 or 6	—
Type 1 substances and Type 2 substances (in aggregate)	Any smelting or refining furnace	Group 1, 2, 3 or 4	—
		Group 5	5 mg/m ³
		Group 6	1 mg/m ³
Cadmium (Cd) or mercury (Hg) individually	Any smelting or refining furnace	Group 1, 2 or 3	—
		Group 4	3 mg/m ³
		Group 5	1 mg/m ³
		Group 6	0.2 mg/m ³
Dioxins or furans	Any smelting or refining furnace	Group 1, 2, 3, 4 or 5	—
		Group 6	0.1 ng/m ³
Volatile organic compounds (VOCs), as n-propane equivalent	Any smelting or refining furnace	Group 1, 2, 3, 4 or 5	—
		Group 6	40 mg/m ³ VOCs or 125 mg/m ³ CO

Aluminium—secondary production

Air impurity	Activity or plant	Standard of concentration	
Smoke	Any activity or plant	Group 1, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 1, in other circumstances	Ringelmann 2 or 40% opacity
		Group 2, 3, 4, 5 or 6, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 2, 3, 4, 5 or 6, in other circumstances	Ringelmann 1 or 20% opacity

Cement or lime production or cement or lime handling

Air impurity	Activity or plant	Standard of concentration	
Solid particles (Total)	Any kiln	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	50 mg/m ³
	Any crushing, grinding, separating or materials handling activity	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	20 mg/m ³
Nitrogen dioxide (NO ₂) or nitric oxide (NO) or both, as NO ₂ equivalent	Any kiln other than a lime kiln	Group 1, 2, 3 or 4	2,500 mg/m ³
		Group 5	2,000 mg/m ³
		Group 6	500 mg/m ³
	Any lime kiln	Group 1, 2, 3 or 4	2,500 mg/m ³
		Group 5	2,000 mg/m ³
		Group 6	400 mg/m ³
Fluorine (F ₂), or any compound containing fluorine, as total fluoride (HF equivalent)	Any kiln fired on a liquid or solid standard fuel or a non-standard fuel	Group 1	100 mg/m ³
		Group 2, 3, 4, 5 or 6	50 mg/m ³
Type 1 substances (in aggregate)	Any kiln fired on a non-standard fuel	Group 1, 2 or 3	20 mg/m ³
		Group 4	10 mg/m ³
		Group 5 or 6	—

Cement or lime production or cement or lime handling

Air impurity	Activity or plant	Standard of concentration	
Type 1 substances and Type 2 substances (in aggregate)	Any kiln fired on a non-standard fuel	Group 1, 2, 3 or 4	—
		Group 5	5 mg/m ³
		Group 6	1 mg/m ³
Cadmium (Cd) or mercury (Hg) individually	Any kiln fired on a non-standard fuel	Group 1, 2 or 3	—
		Group 4	3 mg/m ³
		Group 5	1 mg/m ³
		Group 6	0.2 mg/m ³
Dioxins or furans	Any kiln fired on a non-standard fuel that contains precursors of dioxin or furan formation	Group 1, 2, 3, 4 or 5	—
		Group 6	0.1 ng/m ³
Volatile organic compounds (VOCs), as n-propane equivalent	Any kiln fired on a non-standard fuel	Group 1, 2, 3, 4 or 5	—
		Group 6	40 mg/m ³ VOCs or 125 mg/m ³ CO
Smoke	Any kiln	Group 1, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 1, in other circumstances	Ringelmann 2 or 40% opacity
		Group 2, 3, 4, 5 or 6, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 2, 3, 4, 5 or 6, in other circumstances	Ringelmann 1 or 20% opacity

Ceramic works

Air impurity	Activity or plant	Standard of concentration	
Solid particles (Total)	Any kiln or dryer	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	50 mg/m ³
	Any crushing, grinding, separating or materials handling activity	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	20 mg/m ³

Ceramic works

Air impurity	Activity or plant	Standard of concentration	
Nitrogen dioxide (NO ₂) or nitric oxide (NO) or both, as NO ₂ equivalent	Any kiln or dryer	Group 1, 2, 3 or 4	2,500 mg/m ³
		Group 5	2,000 mg/m ³
		Group 6	500 mg/m ³
Fluorine (F ₂), or any compound containing fluorine, as total fluoride (HF equivalent)	Any kiln or dryer	Group 1	100 mg/m ³
		Group 2, 3, 4, 5 or 6	50 mg/m ³
Hydrogen chloride (HCl)	Any activity, other than the manufacture of glazed terracotta roofing tiles	Group 1, 2, 3 or 4	400 mg/m ³
		Group 5 or 6	100 mg/m ³
	Manufacture of glazed terracotta roofing tiles	Group 1, 2, 3 or 4	—
		Group 5 or 6	100 mg/m ³
Type 1 substances (in aggregate)	Any kiln or dryer fired on a non-standard fuel	Group 1, 2 or 3	20 mg/m ³
		Group 4	10 mg/m ³
		Group 5 or 6	—
Type 1 substances and Type 2 substances (in aggregate)	Any kiln or dryer fired on a non-standard fuel	Group 1, 2, 3 or 4	—
		Group 5	5 mg/m ³
		Group 6	1 mg/m ³
Cadmium (Cd) or mercury (Hg) individually	Any kiln or dryer fired on a non-standard fuel	Group 1, 2 or 3	—
		Group 4	3 mg/m ³
		Group 5	1 mg/m ³
		Group 6	0.2 mg/m ³
Dioxins or furans	Any kiln or dryer fired on a non-standard fuel that contains precursors of dioxin or furan formation	Group 1, 2, 3, 4 or 5	—
		Group 6	0.1 ng/m ³
Volatile organic compounds (VOCs), as n-propane equivalent	Any kiln or dryer fired on a non-standard fuel	Group 1, 2, 3, 4 or 5	—
		Group 6	40 mg/m ³ VOCs or 125 mg/m ³ CO

Ceramic works

Air impurity	Activity or plant	Standard of concentration	
Smoke	Any kiln, other than those used for firing dark red or dark brown face bricks formed by dry press brick machines Any dryer	Group 1, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 1, in other circumstances	Ringelmann 2 or 40% opacity
		Group 2, 3, 4, 5 or 6, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 2, 3, 4, 5 or 6, in other circumstances	Ringelmann 1 or 20% opacity
	Any kiln used for firing dark red or dark brown face bricks formed by dry press brick machines	Group 1	Ringelmann 3 or 60% opacity
		Group 2, 3, 4, 5 or 6, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 2, 3, 4, 5 or 6, in other circumstances	Ringelmann 1 or 20% opacity

Electricity generation

Air impurity	Activity or plant	Standard of concentration	
Solid particles (Total)	Any activity or plant using a liquid or solid standard fuel or a non-standard fuel	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	50 mg/m ³
	Any crushing, grinding, separating or materials handling activity	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	20 mg/m ³

Electricity generation

Air impurity	Activity or plant	Standard of concentration	
Nitrogen dioxide (NO ₂) or nitric oxide (NO) or both, as NO ₂ equivalent	Any boiler operating on a fuel other than gas, including a boiler used in connection with an electricity generator that forms part of an electricity generating system with a capacity of 30 MW or more	Group 1, 2, 3 or 4	2,500 mg/m ³
		Group 5	800 mg/m ³
		Group 6	500 mg/m ³
	Any turbine operating on gas, being a turbine used in connection with an electricity generating system with a capacity of 30 MW or more	Group 1, 2, 3 or 4	2,500 mg/m ³
		Group 5 or 6	70 mg/m ³
	Any turbine operating on a fuel other than gas, being a turbine used in connection with an electricity generating system with a capacity of 30 MW or more	Group 1, 2, 3 or 4	2,500 mg/m ³
Group 5		150 mg/m ³	
Group 6		90 mg/m ³	
Fluorine (F ₂) and any compound containing fluorine, as total fluoride (HF equivalent)	Any activity or plant using a liquid or solid standard fuel or a non-standard fuel	Group 1	100 mg/m ³
		Group 2, 3, 4, 5 or 6	50 mg/m ³
Type 1 substances (in aggregate)	Any activity or plant using a non-standard fuel	Group 1, 2 or 3	20 mg/m ³
		Group 4	10 mg/m ³
		Group 5 or 6	—
Type 1 substances and Type 2 substances (in aggregate)	Any activity or plant using a non-standard fuel	Group 1, 2, 3 or 4	—
		Group 5	5 mg/m ³
		Group 6	1 mg/m ³
Cadmium (Cd) or mercury (Hg) individually	Any activity or plant using a non-standard fuel	Group 1, 2 or 3	—
		Group 4	3 mg/m ³
		Group 5	1 mg/m ³
		Group 6	0.2 mg/m ³
Dioxins or furans	Any activity or plant using a non-standard fuel that contains precursors of dioxin or furan formation	Group 1, 2, 3, 4 or 5	—
		Group 6	0.1 ng/m ³
Volatile organic compounds (VOCs), as n-propane equivalent	Any activity or plant using a non-standard fuel	Group 1, 2, 3, 4 or 5	—
		Group 6	40 mg/m ³ VOCs or 125 mg/m ³ CO

Electricity generation

Air impurity	Activity or plant	Standard of concentration	
Smoke	Any activity or plant using a liquid or solid standard fuel or a non-standard fuel	Group 1, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 1, in other circumstances	Ringelmann 2 or 40% opacity
		Group 2, 3, 4, 5 or 6, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 2, 3, 4, 5 or 6, in other circumstances	Ringelmann 1 or 20% opacity

Glass production

Air impurity	Activity or plant	Standard of concentration	
Solid particles (Total)	Any melting furnace	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	50 mg/m ³
	Any crushing, grinding, separating or materials handling activity	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	20 mg/m ³
Nitrogen dioxide (NO ₂) or nitric oxide (NO) or both, as NO ₂ equivalent	Any melting furnace except manufacture of glass using sodium nitrate (NaNO ₃)	Group 1, 2, 3 or 4	2,500 mg/m ³
		Group 5	2,000 mg/m ³
		Group 6	700 mg/m ³
	Any melting furnace for manufacture of glass using sodium nitrate (NaNO ₃).	Group 1, 2, 3, 4 or 5	4,000 mg/m ³
		Group 6	1,500 mg/m ³
Type 1 substances (in aggregate)	Any melting furnace	Group 1, 2 or 3	20 mg/m ³
		Group 4	10 mg/m ³
		Group 5 or 6	—
Type 1 substances and Type 2 substances (in aggregate)	Any melting furnace	Group 1, 2, 3 or 4	—
		Group 5	5 mg/m ³
		Group 6	1 mg/m ³

Glass production

Air impurity	Activity or plant	Standard of concentration	
Cadmium (Cd) or mercury (Hg) individually	Any melting furnace	Group 1, 2 or 3	—
		Group 4	3 mg/m ³
		Group 5	1 mg/m ³
		Group 6	0.2 mg/m ³
Smoke	Any melting furnace	Group 1, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 1, in other circumstances	Ringelmann 2 or 40% opacity
		Group 2, 3, 4, 5 or 6, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 2, 3, 4, 5 or 6, in other circumstances	Ringelmann 1 or 20% opacity

Iron and steel—primary production

Air impurity	Activity or plant	Standard of concentration	
Solid particles (Total)	Any fuel burning equipment	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
	Any sinter plant	Group 5	100 mg/m ³
		Group 6	50 mg/m ³
	Any kiln	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	20 mg/m ³
Any power-generating plant	Any fuel burning equipment	Group 1, 2, 3 or 4	2,500 mg/m ³
		Group 5	2,000 mg/m ³
	Any sinter plant	Group 6	500 mg/m ³
		Group 1, 2, 3 or 4	2,500 mg/m ³
		Group 5	2,000 mg/m ³
Any furnace	Any fuel burning equipment	Group 1, 2, 3 or 4	2,500 mg/m ³
		Group 5	2,000 mg/m ³
	Any sinter plant	Group 6	500 mg/m ³
		Group 1, 2, 3 or 4	2,500 mg/m ³
		Group 5	2,000 mg/m ³
Any crushing, grinding, separating or materials handling activity	Any fuel burning equipment	Group 1, 2, 3, 4, 5 or 6	5 mg/m ³
		Group 6	50 mg/m ³
	Any sinter plant	Group 5	2,000 mg/m ³
		Group 6	500 mg/m ³
		Group 1, 2, 3 or 4	2,500 mg/m ³
Any kiln	Any fuel burning equipment	Group 1, 2, 3 or 4	2,500 mg/m ³
		Group 5	2,000 mg/m ³
	Any sinter plant	Group 6	500 mg/m ³
		Group 1, 2, 3 or 4	2,500 mg/m ³
		Group 5	2,000 mg/m ³
Any power-generating plant	Any fuel burning equipment	Group 1, 2, 3, 4, 5 or 6	5 mg/m ³
		Group 6	50 mg/m ³
	Any sinter plant	Group 5	2,000 mg/m ³
		Group 6	500 mg/m ³
		Group 1, 2, 3 or 4	2,500 mg/m ³
Any furnace	Any fuel burning equipment	Group 1, 2, 3, 4, 5 or 6	5 mg/m ³
		Group 6	50 mg/m ³
	Any sinter plant	Group 5	2,000 mg/m ³
		Group 6	500 mg/m ³
		Group 1, 2, 3 or 4	2,500 mg/m ³
Any reduction control system not followed by combustion	Any fuel burning equipment	Group 1, 2, 3, 4, 5 or 6	5 mg/m ³
		Group 6	50 mg/m ³
	Any sinter plant	Group 5	2,000 mg/m ³
		Group 6	500 mg/m ³
		Group 1, 2, 3 or 4	2,500 mg/m ³

Iron and steel—primary production

Air impurity	Activity or plant	Standard of concentration	
Volatile organic compounds (VOCs), as n-propane equivalent	Any activity or plant using a non-standard fuel	Group 1, 2, 3, 4 or 5	—
		Group 6	40 mg/m ³ VOCs or 125 mg/m ³ CO
Type 1 substances (in aggregate)	Any activity or plant	Group 1, 2 or 3	20 mg/m ³
		Group 4	10 mg/m ³
		Group 5 or 6	—
Type 1 substances and Type 2 substances (in aggregate)	Any activity or plant	Group 1, 2, 3 or 4	—
		Group 5	5 mg/m ³
		Group 6	1 mg/m ³
Cadmium (Cd) or mercury (Hg) individually	Any activity or plant	Group 1	—
		Group 2, 3 or 4	3 mg/m ³
		Group 5	1 mg/m ³
		Group 6	0.2 mg/m ³
Dioxins or furans	Any sinter plant	Group 1, 2, 3, 4 or 5	—
		Group 6	0.1 ng/m ³
Smoke	Any fuel burning equipment Any sinter plant Any kiln Any power-generating plant Any furnace	Group 1, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 1, in other circumstances	Ringelmann 2 or 40% opacity
		Group 2, 3, 4, 5 or 6, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 2, 3, 4, 5 or 6, in other circumstances	Ringelmann 1 or 20% opacity

Iron and steel—secondary production

Air impurity	Activity or plant	Standard of concentration	
Solid particles (Total)	Any fuel burning equipment	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	50 mg/m ³
	Any crushing, grinding, separating or materials handling activity Any electric arc furnace	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	20 mg/m ³
Nitrogen dioxide (NO ₂) or nitric oxide (NO) or both, as NO ₂ equivalent	Any activity or plant except any electric arc furnace	Group 1, 2, 3 or 4	2,500 mg/m ³
		Group 5	2,000 mg/m ³
		Group 6	350 mg/m ³
Type 1 substances (in aggregate)	Any steelmaking furnace	Group 1, 2 or 3	20 mg/m ³
		Group 4	10 mg/m ³
		Group 5 or 6	—
Type 1 substances and Type 2 substances (in aggregate)	Any steelmaking furnace	Group 1, 2, 3 or 4	—
		Group 5	5 mg/m ³
		Group 6	1 mg/m ³
Cadmium (Cd) or mercury (Hg) individually	Any steelmaking furnace	Group 1	—
		Group 2, 3 or 4	3 mg/m ³
		Group 5	1 mg/m ³
		Group 6	0.2 mg/m ³
Dioxins or furans	Any steelmaking furnace	Group 1, 2, 3, 4 or 5	—
		Group 6	0.1 ng/m ³
Volatile organic compounds (VOCs), as n-propane equivalent	Any steelmaking furnace	Group 1, 2, 3, 4 or 5	—
		Group 6	40 mg/m ³ VOCs or 125 mg/m ³ CO

Iron and steel—secondary production

Air impurity	Activity or plant	Standard of concentration	
Smoke	Any steelmaking furnace	Group 1, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 1, in other circumstances	Ringelmann 2 or 40% opacity
		Group 2, 3, 4, 5 or 6, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 2, 3, 4, 5 or 6, in other circumstances	Ringelmann 1 or 20% opacity

Non-ferrous metals (excluding aluminium)—primary production

Air impurity	Activity or plant	Standard of concentration	
Solid particles (Total)	Any sinter plant	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
	Any smelting or refining process	Group 5	100 mg/m ³
		Group 6	50 mg/m ³
	Any alloying or casting process	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	20 mg/m ³
Any fuel burning equipment	Any crushing, grinding, separating or materials handling activity	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	20 mg/m ³
Nitrogen dioxide (NO ₂) or nitric oxide (NO) or both, as NO ₂ equivalent	Any smelting or refining process	Group 1, 2, 3 or 4	2,500 mg/m ³
		Group 5	2,000 mg/m ³
	Any alloying or casting process	Group 5	2,000 mg/m ³
		Group 6	350 mg/m ³
Any sinter plant	Any fuel burning equipment	Group 6	350 mg/m ³
		Group 6	350 mg/m ³
Volatile organic compounds (VOCs), as n-propane equivalent	Any activity or plant using a non-standard fuel	Group 1, 2, 3, 4 or 5	—
		Group 6	40 mg/m ³ VOCs or 125 mg/m ³ CO
Type 1 substances (in aggregate)	Any smelting or refining process	Group 1, 2 or 3	20 mg/m ³
		Group 4	10 mg/m ³
	Any alloying or casting process	Group 5 or 6	—
Any sinter plant		Group 5 or 6	—
Type 1 substances and Type 2 substances (in aggregate)	Any smelting or refining process	Group 1, 2, 3 or 4	—
		Group 5	5 mg/m ³
	Any alloying or casting process	Group 5	5 mg/m ³
Any sinter plant		Group 6	1 mg/m ³

Non-ferrous metals (excluding aluminium)—primary production

Air impurity	Activity or plant	Standard of concentration	
Cadmium (Cd) or mercury (Hg) individually	Any smelting or refining process	Group 1, 2 or 3	—
		Group 4	3 mg/m ³
	Any alloying or casting process Any sinter plant	Group 5	1 mg/m ³
		Group 6	0.2 mg/m ³
Dioxins or furans	Any sinter plant	Group 1, 2, 3, 4 or 5	—
		Group 6	0.1 ng/m ³
Smoke	Any sinter plant	Group 1, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 1, in other circumstances	Ringelmann 2 or 40% opacity
	Any smelting or refining process Any alloying or casting process Any fuel burning equipment	Group 2, 3, 4, 5 or 6, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 2, 3, 4, 5 or 6, in other circumstances	Ringelmann 1 or 20% opacity

Non-ferrous metals (excluding aluminium)—secondary production

Air impurity	Activity or plant	Standard of concentration	
Solid particles (Total)	Any activity or plant, except as listed below	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	50 mg/m ³
	Any crushing, grinding, separating or materials handling activity	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	20 mg/m ³
Nitrogen dioxide (NO ₂) or nitric oxide (NO) or both, as NO ₂ equivalent	Any activity or plant	Group 1, 2, 3 or 4	2,500 mg/m ³
		Group 5	2,000 mg/m ³
		Group 6	300 mg/m ³
Type 1 substances (in aggregate)	Any smelting or refining process	Group 1, 2 or 3	20 mg/m ³
		Group 4	10 mg/m ³
		Group 5 or 6	—

Non-ferrous metals (excluding aluminium)—secondary production

Air impurity	Activity or plant	Standard of concentration	
Type 1 substances and Type 2 substances (in aggregate)	Any smelting or refining process	Group 1, 2, 3 or 4	—
		Group 5	5 mg/m ³
		Group 6	1 mg/m ³
Cadmium (Cd) or mercury (Hg) individually	Any smelting or refining process	Group 1, 2 or 3	—
		Group 4	3 mg/m ³
		Group 5	1 mg/m ³
		Group 6	0.2 mg/m ³
Dioxins or furans	Any smelting or refining process	Group 1, 2, 3, 4 or 5	—
		Group 6	0.1 ng/m ³
Volatile organic compounds (VOCs), as n-propane equivalent	Any smelting or refining process	Group 1, 2, 3, 4 or 5	—
		Group 6	40 mg/m ³ VOCs or 125 mg/m ³ CO
Smoke	Any activity or plant	Group 1, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 1, in other circumstances	Ringelmann 2 or 40% opacity
		Group 2, 3, 4, 5 or 6, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 2, 3, 4, 5 or 6, in other circumstances	Ringelmann 1 or 20% opacity

Paper, paper pulp or pulp products industries

Air impurity	Activity or plant	Standard of concentration	
Solid particles (Total)	Any boiler used in connection with power generation	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	50 mg/m ³
	Any crushing, grinding, separating or materials handling activity	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	20 mg/m ³

Paper, paper pulp or pulp products industries

Air impurity	Activity or plant	Standard of concentration	
Nitrogen dioxide (NO ₂) or nitric oxide (NO) or both, as NO ₂ equivalent	Any boiler used in connection with power generation	Group 1, 2, 3 or 4	2,500 mg/m ³
	Any kraft recovery boiler	Group 5	2,000 mg/m ³
		Group 6	300 mg/m ³
	Any lime kiln	Group 1, 2, 3 or 4	2,500 mg/m ³
		Group 5	2,000 mg/m ³
		Group 6	400 mg/m ³
Hydrogen sulfide (H ₂ S) (see also clause 43)	Any kraft recovery boiler	Group 1, 2, 3, 4, 5 or 6	5 mg/m ³
	Any lime kiln		
	Any digester system, if not followed by combustion		
	Any brown stock washer system, if not followed by combustion		
Total reduced sulfides (TRS), as H ₂ S equivalent	Any kraft recovery boiler	Group 1, 2, 3, 4 or 5	—
	Any lime kiln		
	Any digester system, if not followed by combustion	Group 6	4 mg/m ³
	Any brown stock washer system, if not followed by combustion		
Type 1 substances (in aggregate)	Any boiler used in connection with power generation using a non-standard fuel	Group 1, 2 or 3	20 mg/m ³
		Group 4	10 mg/m ³
	Any lime kiln using a non-standard fuel	Group 5 or 6	—
Type 1 substances and Type 2 substances (in aggregate)	Any boiler used in connection with power generation using a non-standard fuel	Group 1, 2, 3 or 4	—
	Any lime kiln using a non-standard fuel	Group 5	5 mg/m ³
Cadmium (Cd) or mercury (Hg) individually	Any boiler used in connection with power generation using a non-standard fuel	Group 1, 2 or 3	—
		Group 4	3 mg/m ³
	Any lime kiln using a non-standard fuel	Group 5	1 mg/m ³
		Group 6	0.2 mg/m ³

Paper, paper pulp or pulp products industries

Air impurity	Activity or plant	Standard of concentration	
Dioxins or furans	Any kraft recovery boiler	Group 1, 2, 3, 4 or 5	—
	Any boiler used in connection with power generation using a non-standard fuel that contains precursors of dioxin or furan formation	Group 6	0.1 ng/m ³
	Any lime kiln using a non-standard fuel that contains precursors of dioxin or furan formation		
Volatile organic compounds (VOCs), as n-propane equivalent	Any boiler used in connection with power generation using a non-standard fuel	Group 1, 2, 3, 4 or 5	—
	Any lime kiln using a non-standard fuel	Group 6	40 mg/m ³ VOCs or 125 mg/m ³ CO
Methanol	Any kraft recovery boiler	Group 1, 2, 3, 4 or 5	—
		Group 6	0.012 kg/t of black liquor solids fired
Smoke	Any lime kiln	Group 1, in approved circumstances	Ringelmann 3 or 60% opacity
	Any kraft recovery boiler	Group 1, in other circumstances	Ringelmann 2 or 40% opacity
	Any boiler used in connection with power generation	Group 2, 3, 4, 5 or 6, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 2, 3, 4, 5 or 6, in other circumstances	Ringelmann 1 or 20% opacity

Petrochemical production

Air impurity	Activity or plant	Standard of concentration	
Solid particles (Total)	Any activity or plant, except as listed below	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	50 mg/m ³
	Any crushing, grinding, separating or materials handling activity	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	20 mg/m ³

Petrochemical production

Air impurity	Activity or plant	Standard of concentration	
Nitrogen dioxide (NO ₂) or nitric oxide (NO) or both, as NO ₂ equivalent	Any fuel burning equipment	Group 1, 2, 3 or 4	2,500 mg/m ³
		Group 5	2,000 mg/m ³
		Group 6	350 mg/m ³
Hydrogen sulfide (H ₂ S) (see also clause 43)	Any reduction control system not followed by combustion	Group 1, 2, 3, 4, 5 or 6	5 mg/m ³
	Any sulfur recovery plant		
Volatile organic compounds (VOCs), as n-propane equivalent	Any thermal oxidation process	Group 1, 2, 3, 4 or 5	—
	Any catalytic oxidation process		
	Any vapour incineration	Group 6	40 mg/m ³ VOCs or 125 mg/m ³ CO
	Any vapour recovery unit	Group 1, 2, 3, 4 or 5	—
Smoke	Any activity or plant using a liquid or solid standard fuel or a non-standard fuel	Group 6	40 mg/m ³
		Group 1, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 1, in other circumstances	Ringelmann 2 or 40% opacity
		Group 2, 3, 4, 5 or 6, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 2, 3, 4, 5 or 6, in other circumstances	Ringelmann 1 or 20% opacity

Petroleum refining

Air impurity	Activity or plant	Standard of concentration	
Solid particles (Total)	Any fuel burning equipment Any fluidised bed catalytic cracking unit regenerator	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	50 mg/m ³
Nitrogen dioxide (NO ₂) or nitric oxide (NO) or both, as NO ₂ equivalent	Any fuel burning equipment Any fluidised bed catalytic cracking unit regenerator	Group 1, 2, 3 or 4	2,500 mg/m ³
		Group 5	2,000 mg/m ³
		Group 6	350 mg/m ³
Hydrogen sulfide (H ₂ S) (see also clause 43)	Any reduction control system not followed by combustion	Group 1, 2, 3, 4, 5 or 6	5 mg/m ³
	Any sulfur recovery plant		

Petroleum refining

Air impurity	Activity or plant	Standard of concentration	
Volatile organic compounds (VOCs), as n-propane equivalent	Any thermal oxidation process	Group 1, 2, 3, 4 or 5	—
	Any catalytic oxidation process	Group 6	40 mg/m ³ VOCs or 125 mg/m ³ CO
	Any vapour incineration	Group 1, 2, 3, 4 or 5	—
	Any vapour recovery unit	Group 6	40 mg/m ³ VOCs
Smoke	Any distillation process	Group 1, in approved circumstances	Ringelmann 3 or 60% opacity
	Any fuel burning equipment using a liquid or solid standard fuel or a non-standard fuel	Group 1, in other circumstances	Ringelmann 2 or 40% opacity
	Fluidised bed catalytic cracking unit regenerator	Group 2, 3, 4, 5 or 6, in approved circumstances	Ringelmann 3 or 60% opacity
	Any boiler used in connection with power generation	Group 2, 3, 4, 5 or 6, in other circumstances	Ringelmann 1 or 20% opacity

Schedule 4 Standards of concentration for scheduled premises—general activities and plant

clause 39

General standards of concentration

Air impurity	Activity or plant	Standard of concentration	
Solid particles (Total)	Any activity or plant, except as listed below	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	50 mg/m ³
	Any plant used for heating metals	Group 1	250 mg/m ³
		Group 2, 3 or 4	200 mg/m ³
		Group 5	100 mg/m ³
		Group 6	50 mg/m ³
	Any crushing, grinding, separating or materials handling activity	Group 1	400 mg/m ³
		Group 2, 3 or 4	250 mg/m ³
		Group 5	100 mg/m ³
		Group 6	20 mg/m ³

General standards of concentration

Air impurity	Activity or plant	Standard of concentration
Nitrogen dioxide (NO ₂) or Nitric oxide (NO) or both, as NO ₂ equivalent	Any activity or plant, except boilers, gas turbines and stationary reciprocating internal combustion engines listed below	Group 1, 2, 3 or 4 2,500 mg/m ³
		Group 5 2,000 mg/m ³
		Group 6 350 mg/m ³
	Any boiler operating on gas	Group 1, 2, 3 or 4 2,500 mg/m ³
		Group 5 or 6 350 mg/m ³
	Any boiler operating on a fuel other than gas, including a boiler used in connection with an electricity generator that forms part of an electricity generating system with a capacity of less than 30 MW	Group 1, 2, 3 or 4 2,500 mg/m ³
		Group 5 or 6 500 mg/m ³
	Any turbine operating on gas, being a turbine used in connection with an electricity generating system with a capacity of less than 10 MW	Group 1, 2, 3 or 4 2,500 mg/m ³
		Group 5 90 mg/m ³
		Group 6 70 mg/m ³
	Any turbine operating on gas, being a turbine used in connection with an electricity generating system with a capacity of 10 MW or greater but less than 30 MW	Group 1, 2, 3 or 4 2,500 mg/m ³
		Group 5 or 6 70 mg/m ³
	Any turbine operating on a fuel other than gas, being a turbine used in connection with an electricity generating system with a capacity of less than 10 MW	Group 1, 2, 3 or 4 2,500 mg/m ³
		Group 5 or 6 90 mg/m ³
Any turbine operating on a fuel other than gas, being a turbine used in connection with an electricity generating system with a capacity of 10 MW or greater but less than 30 MW	Group 1, 2, 3 or 4 2,500 mg/m ³	
	Group 5 150 mg/m ³	
	Group 6 90 mg/m ³	
Stationary reciprocating internal combustion engines	Group 1, 2, 3, 4 or 5 —	
	Group 6 450 mg/m ³	
	Group 1 5,600 mg/m ³	
Sulfur dioxide (SO ₂)	Sulfuric acid manufacture using elemental sulfur	Group 2, 3, 4 or 5 2,800 mg/m ³
		Group 6 1,000 mg/m ³
		Group 1, 2, 3, 4 or 5 7,200 mg/m ³
	Sulfuric acid manufacture using other than elemental sulfur	Group 6 1,000 mg/m ³

General standards of concentration

Air impurity	Activity or plant	Standard of concentration	
Sulfuric acid mist (H ₂ SO ₄) or sulfur trioxide (SO ₃) or both, as SO ₃ equivalent	Any activity or plant	Group 1	200 mg/m ³
		Group 2, 3, 4, 5 or 6	100 mg/m ³
Hydrogen sulfide (H ₂ S) (see also clause 43)	Any activity or plant	Group 1, 2, 3, 4, 5 or 6	5 mg/m ³
Fluorine (F ₂) and any compound containing fluorine, as total fluoride (HF equivalent)	Any activity or plant, other than the manufacture of aluminium from alumina	Group 1	100 mg/m ³
		Group 2, 3, 4, 5 or 6	50 mg/m ³
Chlorine (Cl ₂)	Any activity or plant	Group 1, 2, 3, 4, 5 or 6	200 mg/m ³
Hydrogen chloride (HCl)	Any activity, other than the manufacture of glazed terracotta roofing tiles	Group 1, 2, 3 or 4	400 mg/m ³
		Group 5 or 6	100 mg/m ³
	Manufacture of glazed terracotta roofing tiles	Group 1, 2, 3 or 4	—
		Group 5 or 6	100 mg/m ³
Type 1 substances (in aggregate)	Any activity or plant	Group 1, 2 or 3	20 mg/m ³
		Group 4	10 mg/m ³
		Group 5 or 6	—
Type 1 substances and Type 2 substances (in aggregate)	Any activity or plant	Group 1, 2, 3 or 4	—
		Group 5	5 mg/m ³
		Group 6	1 mg/m ³
Cadmium (Cd) or mercury (Hg) individually	Any activity or plant	Group 1, 2 or 3	—
		Group 4	3 mg/m ³
		Group 5	1 mg/m ³
		Group 6	0.2 mg/m ³
Dioxins or furans	Any activity or plant using a non-standard fuel that contains precursors of dioxin or furan formation	Group 1, 2, 3, 4 or 5	—
		Group 6	0.1 ng/m ³
	Incinerator that processes waste	Group 1, 2, 3 or 4	—
		Group 5 or 6	0.1 ng/m ³

General standards of concentration

Air impurity	Activity or plant	Standard of concentration	
Volatile organic compounds (VOCs), as n-propane	Any activity or plant involving combustion, except as listed below	Group 1, 2, 3, 4 or 5	—
		Group 6	40 mg/m ³ VOCs or 125 mg/m ³ CO
	Any stationary reciprocating internal combustion engine using a gaseous fuel	Group 1, 2, 3, 4 or 5	—
		Group 6	40 mg/m ³ VOCs or 125 mg/m ³ CO
	Any stationary reciprocating internal combustion engine using a liquid fuel	Group 1, 2, 3, 4 or 5	—
		Group 6	1140 mg/m ³ VOCs or 5880 mg/m ³ CO
Smoke	Any activity or plant in connection with which solid fuel is burnt	Group 1, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 1, in other circumstances	Ringelmann 2 or 40% opacity
		Group 2, 3, 4, 5 or 6, in approved circumstances	Ringelmann 3 or 60% opacity
		Group 2, 3, 4, 5 or 6, in other circumstances	Ringelmann 1 or 20% opacity
	An activity or plant in connection with which liquid or gaseous fuel is burnt	Group 1, 2, 3, 4, 5 or 6	Ringelmann 1 or 20% opacity

Schedule 5 Test methods, averaging periods and reference conditions for scheduled premises

clause 39

Part 1 Test methods

Test methods and monitoring methods

Air impurity	Test method	Monitoring method
Solid particles (Total)	TM-15	Not applicable
Nitrogen dioxide (NO ₂) or nitric oxide (NO) or both, as NO ₂ equivalent	TM-11	CEM-2
Sulfur dioxide (SO ₂)	TM-4	CEM-2
Hydrogen sulfide (H ₂ S)	TM-5	CEM-7
Total reduced sulfides (TRS)	TM-33	CEM-5
Sulfuric acid mist (H ₂ SO ₄) or sulfur trioxide (SO ₃) or both, as SO ₃ equivalent	TM-3	Not applicable
Chlorine (Cl ₂)	TM-7	Not applicable
Hydrogen chloride (HCl)	TM-8	Not applicable
Fluorine (F ₂) or any compound containing fluorine, as total fluoride (HF equivalent), except where emitted from pot line roof vents at a primary aluminium smelter while manufacturing aluminium from alumina	TM-9	Not applicable
Hydrogen fluoride (HF) emitted from pot line roof vents at a primary aluminium smelter while manufacturing aluminium from alumina	TM-10	Not applicable
Type 1 substances and Type 2 substances	TM-12, TM-13 and TM-14	Not applicable
Cadmium (Cd) or mercury	TM-12, TM-13 and TM-14	Not applicable
Dioxins or furans	TM-18	Not applicable
Carbon monoxide (CO)	TM-32	CEM-4
Volatile organic compounds, as n-propane equivalent	TM-34	CEM-8, CEM-9, CEM-10
Methanol	TM-35	CEM-8, CEM-9, CEM-10
Smoke, if determining whether a specified standard of concentration of opacity has been exceeded	Not applicable	CEM-1
Smoke, if determining whether a specified Ringelmann standard has been exceeded	TM-16	Not applicable
Smoke, if determining whether standard for emission of smoke from flares has been exceeded	TM-37	Not applicable

Part 2 Averaging periods

Averaging periods

Air impurity	Averaging period	
Sulfuric acid mist (H ₂ SO ₄) or sulfur trioxide (SO ₃) or both, as SO ₃ equivalent	1 hour, or the minimum sampling period specified in the relevant test method referred to in Part 1, whichever is the greater	
Fluorine (F ₂), or any compound containing fluorine, as total fluoride (HF equivalent), except where emitted by a primary aluminium smelter while manufacturing aluminium from alumina		
Hydrogen Chloride (HCl)		
Cadmium (Cd)		
Dioxins or furans		
Mercury (Hg)		
Type 1 or Type 2 substances		
Solid particles (Total)		
Nitrogen dioxide (NO ₂) or nitric oxide (NO) or both, as NO ₂ equivalent		1 hour block
Sulfur dioxide (SO ₂)		
Hydrogen sulfide (H ₂ S)		
Total reduced sulfides (TRS)		
Chlorine (Cl ₂)		
Volatile organic compounds (VOCs), as n-propane equivalent	1 hour rolling	
Carbon monoxide (CO)		
Hydrogen fluoride (HF) emitted by a primary aluminium smelter while manufacturing aluminium from alumina	24 hours	
Methanol		
Smoke (if determining whether a specified standard of concentration of opacity has been exceeded)	6 minutes rolling	

Part 3 Reference conditions

Reference conditions relating to Group 1, 2, 3 or 4

Air impurity	Activity or plant	Reference conditions
All air impurities, except as listed below	Any activity or plant	Dry, 273 K, 101.3 kPa
Smoke, if determining whether a specified standard of concentration of opacity has been exceeded	Any activity or plant	Gas stream temperature above dew point. Path length corrected to stack exit diameter as per CEM-1.
Solid particles (Total)	Boilers or incinerators	Dry, 273 K, 101.3 kPa, 12% CO ₂

Reference conditions relating to Group 5 or 6

Air impurity	Activity or plant	Reference conditions
All air impurities, except as listed below	Any activity or plant, except as listed below)	Dry, 273 K, 101.3 kPa
	Any fuel burning equipment using solid fuel	Dry, 273 K, 101.3 kPa, 7% O ₂
	Any fuel burning equipment using gas or liquid fuel	Dry, 273 K, 101.3 kPa, 3% O ₂
	Gas turbines	Dry, 273 K, 101.3 kPa, 15% O ₂
Smoke, if determining whether a specified standard of concentration of opacity has been exceeded	Any activity or plant	Gas stream temperature above dew point. Path length corrected to stack exit diameter as per CEM-1.
Dioxins or furans	Incinerators that process waste	Dry, 273 K, 101.3kPa, 11% O ₂

Schedule 6 Standards of concentration for non-scheduled premises

clause 39

Air impurity	Activity or plant	Group	Concentration
Solid particles	Any activity or plant, except as listed below)	Group A	400 mg/m ³
		Group B	250 mg/m ³
		Group C	100 mg/m ³
Smoke	Any activity or plant in which, or in connection with which, solid fuel is burnt	Group A	Ringelmann 2 or 40% opacity
		Group B or C	Ringelmann 1 or 20% opacity
	Any activity or plant in connection with which liquid or gaseous fuel is burnt	Group A, B or C	Ringelmann 1 or 20% opacity
		Any activity or plant in connection with which solid fuel is burnt	Group A, in relation to marine vessels or premises, in approved circumstances
	Group A, in relation to marine vessels or premises, in other circumstances		Ringelmann 2 or 40% opacity
	Group B or C, in relation to marine vessels or premises, in approved circumstances		Ringelmann 3 or 60% opacity, or
	Group B or C, in relation to marine vessels or premises, in other circumstances		Ringelmann 1 or 20% opacity
	Any activity or plant in connection with which liquid or gaseous fuel is burnt	Group A, B or C in relation to marine vessels or premises, in approved circumstances	Ringelmann 3 or 60% opacity
Group A, B or C, in relation to marine vessels or premises, in other circumstances		Ringelmann 1 or 20% opacity	

Schedule 7 Test methods, averaging periods and reference conditions for non-scheduled premises

clause 46

Part 1 Test methods

Test methods and monitoring methods

Air impurity	Test method	Monitoring method
Solid particles (Total)	TM-15	Not applicable
Smoke, if determining whether a specified standard of concentration of opacity has been exceeded	Not applicable	CEM-1
Smoke, if determining whether a specified Ringelmann standard has been exceeded	TM-16	Not applicable

Part 2 Averaging periods

Averaging periods

Air impurity	Averaging period
Solid particles (Total)	1 hour, or the minimum sampling period specified in the relevant test method referred to in Part 1, whichever is the greater
Smoke, if determining whether a specified standard of concentration of opacity has been exceeded	6 minutes rolling

Part 3 Reference conditions

Reference conditions relating to Group A

Air impurity	Activity or plant	Reference conditions
Solid particles (Total)	Any activity or plant, except as listed below	Dry, 273 K, 101.3 kPa
	Boilers or incinerators	Dry, 273 K, 101.3 kPa, 12% CO ₂
Smoke, if determining whether a specified standard of concentration of opacity has been exceeded	Any activity or plant	Gas stream temperature above dew point. Path length corrected to stack exit diameter as per CEM-1.

Reference conditions relating to Group B or C

Air impurity	Activity or plant	Reference conditions
Solid particles (Total)	Any activity or plant, except as listed below	Dry, 273 K, 101.3 kPa
	Fuel burning equipment using solid fuel	Dry, 273 K, 101.3 kPa, 7% O ₂
	Fuel burning equipment using liquid or gaseous fuel	Dry, 273 K, 101.3 kPa, 3% O ₂
Smoke, if determining whether a specified standard of concentration of opacity has been exceeded	Any activity or plant	Gas stream temperature above dew point. Path length corrected to stack exit diameter as per CEM-1.