

C9.0 Attenuation Code

C9.1 Code Purpose

The purpose of the Attenuation Code is:

- C9.1.1 To minimise adverse impacts on the health, safety and amenity of sensitive use from activities which have the potential to cause emissions.
- C9.1.2 To minimise the likelihood for sensitive use to conflict with, interfere with, or constrain, activities which have the potential to cause emissions.

C9.2 Application of this Code

- C9.2.1 This code applies to:
- (a) activities listed in Tables C9.1 and C9.2;
 - (b) sensitive uses; and
 - (c) subdivision if it creates a lot where a sensitive use could be established, within an attenuation area.
- C9.2.2 The code does not apply to attenuation areas between the activities listed in Tables C9.1 and C9.2 where those activities occur within the Light Industrial Zone, General Industrial Zone, Port and Marine Zone, and Utilities Zone.
- C9.2.3 The code does not apply to sensitive uses occurring within the Light Industrial Zone, General Industrial Zone, Port and Marine Zone, and Utilities Zone.
- C9.2.4 The code does not apply to a plant nursery or controlled environment agriculture activities occurring within the Rural Zone and Agriculture Zone.

C9.3 Definition of Terms

- C9.3.1 In this code, unless the contrary intention appears:

Term	Definition
aerated lagoon	means a lagoon with mechanical aerators sufficient to transfer the oxygen required for biological treatment of sewage and to maintain solids in suspension to undergo aerobic decomposition.
aerobic lagoon	means a lagoon where the water column is characterised by aerobic conditions, being where oxygen is freely available for biological purposes.
anaerobic lagoon	means a lagoon where the water column is characterised by anaerobic conditions, being where oxygen is totally depleted and oxidised nitrogen is absent.

Term	Definition
attenuation area	<p>means land that is:</p> <ul style="list-style-type: none"> (a) within the boundary of an attenuation area shown on an overlay map in the relevant Local Provisions Schedule; or (b) within the relevant attenuation distance from an activity listed in Table C9.1 or C9.2, which is an existing activity or an activity for which a planning permit is in force. <p>If an inconsistency exists between the relevant attenuation distance in Tables C9.1 or C9.2, and an attenuation area shown on an overlay map in the relevant Local Provisions Schedule, the distance shown on the overlay map applies.</p>
attenuation distance	<p>means the distance listed in Tables C9.1 and C9.2 for the relevant activity measured as the shortest distance from the boundary of the site on which the activity is located.</p>
facultative lagoon	<p>means a lagoon similar to an aerobic lagoon, but with lower energy input, sufficient to transfer the oxygen required to biological treatment of sewage but not to maintain solids in suspension which settle onto the lagoon floor and undergo anaerobic decomposition.</p>
level 1 activity	<p>means as defined in the <i>Environmental Management and Pollution Control Act 1994</i>.</p>

C9.4 Use or Development Exempt from this Code

C9.4.1 The following use or development is exempt from this code:

- (a) use or development assessed as a level 2 activity; and
- (b) additions or alterations to an existing building used for sensitive use, provided that the gross floor area does not increase by more than 50% or 100m², whichever is the greater, from that existing at the effective date.

C9.5 Use Standards

C9.5.1 Activities with potential to cause emissions

Objective:	That an activity with potential to cause emissions is located so that it does not cause an unreasonable impact on an existing sensitive use.
Acceptable Solutions	Performance Criteria
<p>A1</p> <p>The attenuation area of an activity listed in Tables C9.1 or C9.2 must not include:</p> <ul style="list-style-type: none"> (a) a site used for a sensitive use which is existing; (b) a site that has a planning permit for a sensitive use; or (c) land within the General Residential Zone, Inner Residential Zone, Low Density Residential Zone, Rural Living Zone A, Rural Living Zone B, Village Zone or Urban Mixed Use Zone. 	<p>P1</p> <p>An activity listed in Tables C9.1 or C9.2 must not cause:</p> <ul style="list-style-type: none"> (a) an unreasonable loss of amenity or unreasonable impacts on health and safety of a sensitive use which is existing, or has a planning permit; or (b) unreasonable impacts on land within the relevant attenuation area that is in the General Residential Zone, Inner Residential Zone, Low Density Residential Zone, Rural Living Zone A, Rural Living Zone B, Village Zone or Urban Mixed Use Zone, having regard to: <ul style="list-style-type: none"> (i) operational characteristics of the activity; (ii) scale and intensity of the activity; (iii) degree of hazard or pollution that may be emitted from the activity; (iv) hours of operation of the activity; (v) nature of likely emissions such as noise, odour, gases, dust, particulates, radiation, vibrations or waste; (vi) existing emissions such as noise, odour, gases, dust, particulates, radiation, vibrations or waste; and (vii) measures to eliminate, mitigate or manage emissions from the activity.

C9.5.2 Sensitive use within an attenuation area

Objective:	That sensitive use located within an attenuation area does not interfere with or constrain the operation of an existing activity listed in Tables C9.1 or C9.2.
Acceptable Solutions	Performance Criteria
<p>A1</p> <p>No Acceptable Solution.</p>	<p>P1</p> <p>Sensitive use within an attenuation area, must not interfere with or constrain an existing activity listed in Tables C9.1 or C9.2, having regard to:</p> <ul style="list-style-type: none"> (a) the nature of the activity with potential to cause emissions including: <ul style="list-style-type: none"> (i) operational characteristics of the activity; (ii) scale and intensity of the activity; and (iii) degree of hazard or pollution that may be emitted from the activity; (b) the nature of the sensitive use; (c) the extent of encroachment by the sensitive use into the attenuation area; (d) measures in the design, layout and construction of the development for the sensitive use to eliminate, mitigate or manage effects of emissions of the activity; (e) any advice from the Director, Environment Protection Authority; and (f) any advice from the Director of Mines.

C9.6 Development Standards for Subdivision

C9.6.1 Lot design

Objective:	<p>To provide for subdivision so that a lot intended for a sensitive use:</p> <ul style="list-style-type: none"> (a) is located to avoid an activity with potential to cause emissions and enable appropriate levels of amenity; and (b) does not conflict with, interfere with or constrain an existing activity with potential to cause emissions.
Acceptable Solutions	Performance Criteria
<p>A1</p> <p>Each lot, or a lot proposed in a plan of subdivision, within an attenuation area must:</p> <ul style="list-style-type: none"> (a) be for the creation of separate lots for existing buildings; (b) be for the creation of a lot where a building for a sensitive use can be located entirely outside the attenuation area; or (c) not be for the creation of a lot intended for a sensitive use. 	<p>P1</p> <p>Each lot, or a lot proposed in a plan of subdivision, within an attenuation area must not result in the potential for a sensitive use to be impacted by emissions, having regard to:</p> <ul style="list-style-type: none"> (a) the nature of the activity with the potential to cause emissions, including: <ul style="list-style-type: none"> (i) operational characteristics of the activity; (ii) scale and intensity of the activity; and (iii) degree of emissions from the activity; and (b) the intended use of the lot.

Table C9.1 Attenuation Distances

Activity		Attenuation Distance	
		Level 1 Activity	Level 2 Activity
Abattoir or slaughterhouse (primary) The conduct of meat processing within the meaning of the <i>Primary Produce Safety Act 2011</i> , excluding rendering or fat extraction works – emissions such as odour, noise, dust and light pollution		500m	1,000m
Abrasive blasting The cleaning of materials by the abrasive action of any metal shot or mineral particulate propelled in a gaseous or liquid medium.	Blasting in cabinets less than 5 cubic metres in volume or totally enclosed automatic blast cleaning units – emissions such as noise and dust.	100m	–
	All other types of operation – emissions such as noise and dust.	300m	–
Agricultural produce processing works The conduct of works for the processing of vegetables, seed, grain, or any other agricultural crop by deep fat frying or roasting or boiling or drying through application of heat – emissions such as odour and noise.		100m	300m
Animal saleyard Yards for the holding of live animals pending sale, shipment or slaughter–emissions such as odour, noise and dust.		500m	–
Aquaculture operation	Marine or estuarine operations - emissions such as odour and noise.	300m	–
	Land operations - emissions such as odour and noise.	100m	–
Bakery Excluding a bakery primarily selling produce directly to the public - emissions such as noise.		200m	–
Beverage production (non-alcoholic) Beverage production plants with the capacity to produce more than 2000L per day - emissions such as odour and noise.		300m	–

Activity		Attenuation Distance	
		Level 1 Activity	Level 2 Activity
Biosolids application to land Class 2 biosolids as classified in accordance with the requirement of Sections 4 and 5 of the <i>Tasmanian Biosolids Reuse Guidelines 1999</i> – emissions such as odour, noise and disease vectors.		100m	100m
Brewery or distillery The conduct of works for the production of beer by infusion, boiling or fermentation, or spirits by distillation with the capacity to produce more than 2000L per day - emissions such as odour and noise.		200m	500m
Cement works The conduct of works as described in Schedule 2 clause 2(a) of the <i>Environmental Management and Pollution Control Act 1994</i> - emissions such as noise and dust.		–	2,000m
Ceramic works The conduct of works for the production of any products such as bricks, tiles, pipes, pottery goods, refractories or glass that are manufactured or are capable of being manufactured in furnaces or kilns fired by fuel – emissions such as noise and dust.		200m	500m
Chemical works	The manufacture (through chemical reaction) of any inorganic chemical, including sulphuric acid, inorganic fertilisers, sodium silicate, lime or other calcium compound - emissions such as odour, noise and gases.	300m	1,000m
	The manufacture (through chemical reaction) or processing of any organic chemicals or chemical product or petrochemical - emissions such as odour, noise and gases.	500m	1,500m
Cidery	Bottling facilities only – emissions such as odour and noise.	300m	–
	Cider production facilities– emissions such as odour and noise.	500m	–

Activity		Attenuation Distance	
		Level 1 Activity	Level 2 Activity
Composting works Excluding backyard composting for domestic use, on-farm composting for use on agricultural land having the same owner as the land on which the compost is produced, and works in respect of silage for use on agricultural land.	Vegetation only - emissions such as odour and noise.	250m	500m
	Human or animal wastes - emissions such as odour and noise.	500m	1,000m
Concrete batching plants The conduct of works for the production of concrete by the mixing of cement, sand, rock, aggregate or other similar materials, excluding the manufacture of concrete products - emissions such as noise and dust.		200m	–
Concrete or stone product manufacture The conduct of works to manufacture concrete or stone products, excluding concrete batching plants - emissions such as odour, noise and dust.		300m	–
Crematoria Emissions such as odour and gases.		300m	–
Dog kennels Commercial operations only – emissions such as odour and noise.		300m	–
Effluent irrigation scheme Irrigation of land by treated sewage effluent.	Spray irrigation	200m	–
	Flood irrigation	50m	–
	Drip irrigation	20m	–
	Storage lagoon/holding dams	250m	–
	Effluent transfer/irrigation pumps	50m	–
Feedlot Intensive animal husbandry (excluding piggeries, poultry farms, horse stables, and any such operation carried out at an abattoir, slaughterhouse or saleyard or for the purpose only of drought or other emergency feeding) – emissions such as odour, noise and dust.		3,000m	–
Fibreglass manufacture Manufacture of fibre-reinforced plastic products - emissions such as odour and noise.		300m	–

Activity		Attenuation Distance	
		Level 1 Activity	Level 2 Activity
Fish processing The conduct of works for scaling, gilling, gutting, filleting, smoking, drying or otherwise processing fish for sale, other than by freezing, chilling or packing, excluding the processing of fish only in the course of a business selling fish directly to the public - emissions such as odour and noise.		250m	500m
Flour mill Grain or seed milling works, excluding non-commercial processing for on farm use - emissions such as noise and dust.		300m	–
Frost fan Emissions such as noise.		2,000m	–
Fuel burning Excluding fuel burning associated with a domestic or on-farm use.	Waste incinerator: Wood waste - emissions such as odour, particles and gases.	100m	300m
	Waste incinerator: Plastic or rubber waste - emissions such as odour, particles and gases.	500m	1,000m
	Waste incinerator: Chemical, biomedical or organic waste - emissions such as odour, particles and gases.	500m	1,000m
	All other types of operation - emissions such as odour, particles and gases.	100m	300m
Gas pressure reduction facility A facility for altering the pressure between a gas transmission pipeline and a gas distribution system - emissions such as odour, noise and gases.		300m	–
Horse stables Commercial operations only – emissions such as odour, noise and dust.		500m	–
Joinery Production of wooden furniture and household items such as doors, kitchen fittings, flooring and mouldings - emissions such as noise and dust		200m	–
Liquid waste spray application to land Spray application of liquid fruit or vegetable wastes, excluding spray application of treated sewage effluent	Primary treated	500m	–
	Secondary treated	200m	–

Activity		Attenuation Distance	
		Level 1 Activity	Level 2 Activity
Liquid waste treatment Lagoons for the treatment of wastewater, such as treatment of wastewater for wineries and cider production, excluding sewage treatment plants ¹ and organic waste treatment – emissions such as odour.		300m	–
Marinas Excluding maritime construction and maintenance works - emissions such as noise.		200m	–
Maritime construction and maintenance works The conduct of works for the construction, maintenance or repair of ships, vessels or floating platforms or structures, being works with the capacity to construct or repair ships, vessels or floating platforms or structures.	Organotin compounds used or removed from ships, vessels, or floating platforms or structures – emissions such as odour, noise, dust and gases.	500m	–
	All other types of operation – emissions such as odour, noise, dust and gases.	300m	–
Materials handling Processing of chemicals, rubber, rock, ores and minerals by crushing, grinding, milling or separating into different sizes by sieving, air elutriation or in any other manner – emissions such as noise and dust.	Crushing or grinding.	750m	750m
	Other methods.	500m	500m
Metal fabrication The fabrication of sheet metal, structural metal and other iron and steel products, excluding metallurgical works, and ferrous and non-ferrous metal melting - emissions such as noise and particles.		500m	–
Metal melting (ferrous and non-ferrous) The melting of ferrous or non-ferrous metal in a furnace – emissions such as odour and noise.		300m	1,000m
Metallurgical works The conduct of metallurgical works as described in Schedule 2, clause 2(d) of the <i>Environmental Management and Pollution Control Act 1994</i> - emissions such as odour, noise, dust and gases.		–	2,000m
Milk processing works The conduct of works at which milk is evaporated or otherwise processed for the manufacture of milk powder, cheese, butter, ice cream or other similar dairy products – emissions such as odour and noise.		100m	500m

¹ For sewage treatment plants, refer to Table C9.2.

Activity		Attenuation Distance	
		Level 1 Activity	Level 2 Activity
Milking shed (dairy) Milk shed operations on dairy farms – emissions such as odour, noise and dust.		300m	–
Mine The extraction of any minerals, excluding a quarry or extractive pit - emissions such as noise, dust, ground vibration and shock waves.	Open cut.	1,000m	2,000m
	Underground.	1,000m	1,000m
Motor bodyworks Panel beating, spray painting, and the like – emissions such as odour and noise.		100m	–
Motor racing or performance trials The conduct of facilities designed for motor vehicles or motor-driven boat racing competitions, or speed or performance trials – emissions such as odour, noise and dust.		3,000m	–
Oil and gas extraction and production Land or offshore, excluding gas extraction from landfill sites – emissions such as odour, noise and gases.		2,000m	–
Oil refinery The conduct of oil refinery works as described in Schedule 2, clause 1(c) of the <i>Environmental Management and Pollution Control Act 1994</i> .	Refining of recycled oil – emissions such as odour, noise and gases.	–	500m
	All other refining – emissions such as odour, noise and gases.	–	2,000m
Organic waste treatment The treatment of organic waste such as animal manures, and solid waste from fruit or vegetable processing, excluding sewage treatment plants ² and liquid waste treatment – emissions such as odour, gases and disease vectors.		500m	–
Piggery Intensive animal husbandry.	Less than 50 pigs – emissions such as odour and noise.	500m	–
	50 or more pigs – emissions such as odour and noise.	2,000m	–
Plant nurseries and controlled environment agriculture Excluding operations primarily selling directly to the public.	With manure or refuse use – emissions such as odour.	300m	–
	All other types of operation use – emissions such as odour.	100m	–

² For sewage treatment plants, refer to Table C9.2.

Activity		Attenuation Distance	
		Level 1 Activity	Level 2 Activity
Poultry farm Intensive animal husbandry – emissions such as odour, dust and noise.		500m	–
Pre-mix bitumen plant Works in which crushed or ground rock aggregates are mixed with bituminous or asphaltic materials for the purpose of producing road-building mixtures– emissions such as odour and noise.		500m	1,000m
Pulp and paper works The conduct of pulp and paper works as described in Schedule 2, clause 2(f) of the <i>Environmental Management and Pollution Control Act 1994</i> .	Process involving combustion of sulphur or sulphur-containing materials - emissions such as odour, noise, particles and gases.	–	5,000m
	All other processes - emissions such as odour, noise, particles and gases.	–	1,000m
Quarry or extractive pit Extraction of rock, gravel, sand or clay, excluding a mine – emissions such as noise, dust, ground vibration and shock waves.	No blasting, crushing or vibratory screening – emissions such as noise, dust, ground vibration and shock waves.	300m	300m
	Vibratory screening – emissions such as noise, dust, ground vibration and shock waves.	500m	500m
	Crushing or grinding – emissions such as noise, dust, ground vibration and shock waves.	750m	750m
	Blasting – emissions such as noise, dust, ground vibration and shock waves.	1,000m	1,000m
Rendering or fat extraction works The conduct of works at which animal, fish or grease trap wastes or other matter is processed or is capable of being processed by rendering or extraction or by some other means to produce tallow or fat or their derivatives or proteinaceous matter.	Processing of fish – emissions such as odour and noise.	500m	1,000m
	Processing of other matter – emissions such as odour and noise.	1,000m	1,500m

Activity		Attenuation Distance	
		Level 1 Activity	Level 2 Activity
Scrap metal recovery The conduct of works at which scrap metals are treated in any type of fuel burning equipment or electrically heated furnaces or are disintegrated by mechanical means for recovery of metal, excluding commercial printing establishments at which type metal is melted or re-melted in thermostatically controlled pots for the purpose of type casting – emissions such as noise, dust and light pollution.		500m	–
Shooting range The conduct of facilities for outdoor shooting competitions, practice or instruction - emissions such as noise.		2,000m	–
Smallgoods manufacture	Smoking, drying and curing - emissions such as odour, noise and smoke particles.	250m	–
	All other types of operation - emissions such as odour, noise and smoke particles.	100m	–
Storage	Petroleum products and crude oil with fixed roofs - emissions such as odour and noise.	500m	–
	Petroleum products and crude oil with floating roofs - emissions such as odour and noise.	200m	–
	Wet salted or unprocessed hides - emissions such as odour and noise.	300m	–
	Chemicals - emissions such as odour and noise.	500m	–
Surface coating The conduct of works for: <ul style="list-style-type: none"> (a) metal finishing, in which metal surfaces are prepared or finished by means of electroplating, electrolyse plating, anodising (chromating, phosphating and colouring), chemical etching or milling, or printed circuit board manufacture; (b) hot dip galvanising; or (c) spray painting and powder coating, excluding motor bodyworks. - emissions such as gases, odour, noise and dust.		300m	–

Activity		Attenuation Distance	
		Level 1 Activity	Level 2 Activity
Textile bleaching and dying The works involving bleaching, dyeing or printing of yarns, threads, fabrics or other textiles - emissions such as odour, noise and gases.	Textile bleaching and dying factory.	500m	1,000m
Waste depot The conduct of depots for the reception, storage, treatment or disposal of waste, excluding: (a) temporary storage at the place at which the waste is produced while awaiting transport to another place; (b) storage, treatment or disposal of clean fill; (c) storage, treatment or disposal of domestic waste at residential premises; or (d) a waste transfer station.	Waste depot non-putrescible waste only - emissions such as odour, noise, dust and disease vectors.	150m	300m
	Waste depot putrescible waste - emissions such as odour, noise, dust and disease vectors.	300m	750m
Waste transfer station Emissions such as odour, noise, dust, light pollution and disease vectors.		150m	–
Wind energy facility Output per wind turbine generator of less than 250kW.	single turbine generator <10kW - emissions such as noise, electromagnetic radiation, shadow flicker and blade glint.	60m	–
	single turbine generator >10kW - emissions such as noise, electromagnetic radiation, shadow flicker and blade glint.	250m	–
	wind farm with 2-4 turbine generators - emissions such as noise, electromagnetic radiation, shadow flicker and blade glint.	350m	–
	wind farm with 5 or more turbine generators - emissions such as noise, electromagnetic radiation, shadow flicker and blade glint.	500m	500m

Activity		Attenuation Distance	
		Level 1 Activity	Level 2 Activity
Wind energy facility Output per wind turbine generator 250kW or greater.	single turbine generator - emissions such as noise, electromagnetic radiation, shadow flicker and blade glint.	500m	–
	wind farm with 2-4 turbine generators- emissions such as noise, electromagnetic radiation, shadow flicker and blade glint.	750m	750m
	wind farm with 5 or more turbine generators - emissions such as noise, electromagnetic radiation, shadow flicker and blade glint.	1,000m	1,000m
Winery	Bottling facilities only – emissions such as odour and noise.	300m	–
	Wine making – emissions such as odour and noise.	500m	–
Woodchip mill	Less than 1000 tonnes per year production capacity - emissions such as noise and particles.	250m	–
	1000 tonnes to 20 000 tonnes per year production capacity - emissions such as noise and particles.	–	500m
	More than 20 000 tonnes per year production capacity - emissions such as noise and particles.	–	1,000m
Wood preservation works The conduct of wood preservation works as described in Schedule 2, clause 1(d) of the <i>Environmental Management and Pollution Control Act 1994</i> - emissions such as odour and noise.		–	300m
Wood processing works The conduct of works (other than works at a builders supply yard, home improvement centre or firewood depot) at which timber is sawn, cut, compressed, milled, machined or kiln-dried.	Sawmill - emissions such as noise and particles.	250m	500m
	All other types of operation (excluding joinery, firewood merchant or woodchip mill) - emissions such as noise and particles.	250m	1,000m

Activity	Attenuation Distance	
	Level 1 Activity	Level 2 Activity
Wool scouring, tannery or fellmongery The conduct of works for the scouring of wool or the commercial preservation or treatment or drying of animal skins or hides - emissions such as odour and noise.	250m	500m
Wrecking yard (automotive) Emissions such as noise and dust.	200m	—

Table C9.2 Attenuation Distances for Sewage Treatment Plant Processes

Activity (type of sewage treatment plant process)	Attenuation distance according to sewage treatment plant designed capacity (average dry weather flow) in kL/day or person equivalent (pe)				
	<275kL/day or <1000pe	<1375kL/day or <5000pe	<5500kL/day or <20000pe	<13750kL/day or <50000pe	>13750kL/day or >50000pe
Mechanical/biological treatment (includes aerated lagoons)	100m	200m	300m	400m	>400m
Aerobic lagoons	150m	350m	700m	1,000m	>1,000m
Facultative lagoons	300m	550m	700m	1,000m	>1,000m
Anaerobic lagoons	400m	700m	1,400m	2,200m	>2,200m