# Permit

#### **Environmental Protection Act 1994**

#### Environmental authority EPPR00927313

*This environmental authority is issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994.* 

#### Environmental authority number: EPPR00927313

#### Environmental authority takes effect on the date it is signed by the delegate.

#### **Environmental authority holder(s)**

Name(s)	Registered address
TOWNSVILLE CITY COUNCIL	103 Walker Street TOWNSVILLE QLD 4810

#### Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
ERA 60 - Waste disposal 2: Operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(b) (f) more than 50,000t but not more than 100,000t	Jensen Road, Deeragun QLD 4818 - Lot 44 on EP1017
ERA 60 - Waste disposal 1: Operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(a) (c) more than 100,000t but not more than 200,000t	Vantassel Street, Stuart QLD 4811 - Lot 2 on SP132603
ERA 60 - Waste disposal 2: Operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(b) (f) more than 50,000t but not more than 100,000t	Hervey Range Road, Alice River QLD 4817 - Lot 51 on EP812267
ERA 60 - Waste disposal 2: Operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(b) (a) less than 2000t	Toomulla Beach Road, Toomulla QLD 4816 - Lot 10 on CP845507
ERA 60 - Waste disposal 2: Operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(b) (a) less than 2000t	Majors Creek, Townsville QLD 4816 - Lot 77 on EP2381



Environmentally relevant activity/activities	Location(s)
ERA 60 - Waste disposal 2: Operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(b) (c) more than 5000t but not more than 10,000t	33 Magnetic Street, Magnetic Island QLD 4819 (Picnic Bay Landfill) - Lot 1 on P93835
ERA 60 - Waste disposal 2: Operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(b) (c) more than 5000t but not more than 10,000t	33 Magnetic Street, Magnetic Island QLD 4819 (Picnic Bay Landfill) - Lot 2 on SP157592
ERA 33 - Crushing, milling, grinding or screening Crushing, grinding, milling or screening more than 5000t of material in a year	Vantassel Street, Stuart QLD 4811 - Lot 2 on SP132603
ERA 54 - Mechanical waste reprocessing 1: Operating a facility for receiving and mechanically reprocessing, in a year, more than 5,000t of inert, non-putrescible waste or green waste only	Vantassel Street, Stuart QLD 4811 - Lot 2 on SP132603
ERA 63 - Sewage Treatment 1: Operating sewage treatment works, other than no-release works, with a total daily peak design capacity of (g) more than 100,000EP	Cleveland Bay Sewage Treatment Plant 1/426 Ron McLean Drive, Stuart, QLD 4811 - Lot 1 on RP732944 Lot 1 on RP732945
ERA 63 - Sewage Treatment 2: Operating a sewage pumping station mentioned in subsection (1)(b)	290 North Shore Boulevard BURDELL QLD 4818, 86 Chandler St GARBUTT QLD 4814, 87 Chandler St GARBUTT QLD 4814, 88 Chandler St GARBUTT QLD 4814, Adjacent to Lot 1000 on SP232889, Adjacent to Lot 2 on RP728200, Adjacent to Lot 2505 on SP273626, Adjacent to Lot 901 on SP135444, Bayswater Road, PIMLICO QLD 4812, Lot 1 on EP834, Lot 1 on RP312236, Lot 1 on RP708997, Lot 1 on RP718495, Lot 1 on RP721328, Lot 1 on RP721599, Lot 1 on RP721600, Lot 1 on RP722043, Lot 1 on RP724651, Lot 1 on RP728691, Lot 1 on RP729213, Lot 1 on RP731591, Lot 1 on RP735140, Lot 1 on RP740497, Lot 1 on RP743688,



Environmentally relevant activity/activities	Location(s)
	Lot 1 on RP745288 Lot 1 on RP745372 Lot 1 on
	RP812296. Lot 1 on RP846349. Lot 1 on RP909864.
	Lot 1 on SP117809. Lot 1 on SP189840. Lot 100 on
	RP840355 Lot 100 on SP264309 Lot 1000 on
	SP262846 Lot 1006 on SP236046 Lot 101 on
	RP896285 Lot 1099 on SP280605 Lot 11 on
	T118250 Lot 112 on SP130012 Lot 12 on
	SP253222 Lot 13 on BP707458 Lot 13 on
	RP725622 Lot 131 on EP2324 Lot 148 on
	RP703359 Lot 15 on T118506 Lot 150 on EP397
	Lot 150 on RP904789 Lot 157 on RP725435 Lot 16
	on SP101949 Lot 17 on RP728792 Lot 18 on
	EP2094 Lot 182 on RP860277 Lot 189 on
	RP703476 Lot 190 on SP295382 Lot 2 on
	RP709827 Lot 2 on RP709828 Lot 2 on RP709830
	L of 2 on RP709903 L of 2 on RP714347 L of 2 on
	RP717998 Lot 2 on RP746633 Lot 2 on RP904086
	Lot 20 on SP120865 Lot 200 on SP196161 Lot
	2007 on SP216355 Lot 2011 on SP256843 Lot 230
	on RP726066 Lot 239 on EP492 Lot 25 on
	T118472 Lot 263 on RP716359 Lot 28 on
	RP887765 Lot 295 on RP723525 Lot 3 on
	RP720872 Lot 3 on RP730221 Lot 3 on RP860282
	Lot 3 on RP869259 Lot 30 on RP712387 Lot 30 on
	T118550 Lot 301 on SP277786 Lot 31 on
	SP123544. Lot 31 on T118279. Lot 317 on RP647.
	Lot 335 on RP703355. Lot 336 on RP703355. Lot 34
	on EP1808. Lot 34 on SP155546. Lot 361 on
	RP716774, Lot 375 on RP723624, Lot 394 on
	RP705902, Lot 4 on RP849602, Lot 4011 on
	SP240077, Lot 4013 on SP240078, Lot 402 on
	SP159389, Lot 432 on EP1064, Lot 474 on EP1533,
	Lot 5 on RP705911, Lot 5 on RP708184, Lot 5 on
	T118546, Lot 500 on SP101864, Lot 503 on
	SP240052, Lot 504 on SP198393, Lot 504 on
	SP273620, Lot 505 on SP232897, Lot 505 on
	SP273621, Lot 51 on SP250574, Lot 566 on

Environmentally relevant activity/activities	Location(s)
	EP1602, Lot 616 on EP1816, Lot 63 on RP743609, Lot 63 on SP262012, Lot 632 on RP723677, Lot 7 on SP123458, Lot 7 on SP135436, Lot 7000 on SP273635, Lot 7000 on SP286591, Lot 71 on RP737097, Lot 71 on SP225277, Lot 76 on T118115, Lot 762 on EP1642, Lot 779 on SP108011, Lot 804 on SP184186, Lot 86 on RP703400, Lot 86 on RP703502, Lot 9 on RP703439, Lot 9 on RP731203, Lot 900 on SP123021, Lot 900 on SP160486, Lot 901 on SP169642, Lot 901 on SP188388, Lot 902 on RP903755, Lot 903 on SP182114, Lot 9034 on SP277213, Lot 905 on SP185415, Lot A on RP745828, Lot BN on SP277221, Lot 1 on SP305230, Lot 3035 on SP319696, Lot 1 on SP315847
ERA 64 - Water treatment 3: Treating 10ML or more raw water in a day	Douglas Water Treatment Plant 421 Angus Smith Drive - Lot 631 on EP1537
ERA 63 - Sewage Treatment 1: Operating sewage treatment works, other than no-release works, with a total daily peak design capacity of (g) more than 100,000EP	Mt St John Sewage Treatment Plant Lot 1 on RP723447
ERA 57 - Regulated Waste Transport Transporting regulated waste, other than end-of-life tyres (16 vehicles only)	Condon Sewage Treatment Plant State of Queensland
ERA 63 - Sewage Treatment 1: Operating sewage treatment works, other than no-release works, with a total daily peak design capacity of (e) more than 10,000 but not more than 50,000EP	Lot 52 on EP2176





Environmentally relevant activity/activities	Location(s)
ERA 62 - Resource recovery and transfer facility operation 1: Operating a facility for receiving and sorting, dismantling, baling or temporarily storing- (b) general waste ERA 62 - Resource recovery and transfer facility operation 1: Operating a facility for receiving and sorting, dismantling, baling or temporarily storing- (c) category 2 regulated waste	Magnetic Island Waste Transfer Station Lot 2 on RP721497
ERA 63 - Sewage Treatment 1: Operating sewage treatment works, other than no-release works, with a total daily peak design capacity of (b-i) more than 100 but not more than 1500EP if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	Toomulla Sewage Treatment Plant Lot 1 on SP235124
ERA 62 - Resource recovery and transfer facility operation 1: Operating a facility for receiving and sorting, dismantling, baling or temporarily storing- (b) general waste	Vantassel Street, Stuart QLD 4811 - Lot 2 on SP132603
ERA 62 - Resource recovery and transfer facility operation 1: Operating a facility for receiving and sorting, dismantling, baling or temporarily storing- (c) category 2 regulated waste	
ERA 63 - Sewage Treatment 1: Operating sewage treatment works, other than no-release works, with a total daily peak design capacity of (c) more than 1500 but not more than 4000EP	Picnic Bay Sewage Treatment Plant - Lot 1 on RP742477
ERA 62 - Resource recovery and transfer facility operation 1: Operating a facility for receiving and sorting, dismantling, baling or temporarily storing- (b) general waste	Hervey Range Road, Alice River QLD 4817 - Lot 51 on EP812267
ERA 62 - Resource recovery and transfer facility	





Environmentally relevant activity/activities	Location(s)
operation 1: Operating a facility for receiving and sorting, dismantling, baling or temporarily storing- (c) category 2 regulated waste	
ERA 63 - Sewage Treatment 1: Operating sewage treatment works, other than no-release works, with a total daily peak design capacity of (c) more than 1500 but not more than 4000EP	Horseshoe Bay Sewage Treatment Plant Lot 2 on RP724194 Lot 8 on EP2363 Lot 9 on EP2363

#### Additional information for applicants

#### Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority (EA) is issued is a restatement of the ERA as defined by legislation at the time the EA is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an EA as to the scale, intensity or manner of carrying out an ERA, the conditions prevail to the extent of the inconsistency.

An EA authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the EA specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

#### Contaminated land

It is a requirement of the EP Act that an owner or occupier of contaminated land give written notice to the administering authority if they become aware of the following:

- the happening of an event involving a hazardous contaminant on the contaminated land (notice must be given within 24 hours); or
- a change in the condition of the contaminated land (notice must be given within 24 hours); or
- a notifiable activity (as defined in Schedule 3) having been carried out, or is being carried out, on the contaminated land (notice must be given within 20 business days);

that is causing, or is reasonably likely to cause, serious or material environmental harm.

For further information, including the form for giving written notice, refer to the Queensland Government website <u>www.qld.gov.au</u>, using the search term 'duty to notify'.



#### Take effect

Please note that, in accordance with section 200 of the EP Act, an EA has effect:

- a) if the authority is for a prescribed ERA and it states that it takes effect on the day nominated by the holder of the authority in a written notice given to the administering authority-on the nominated day; or
- b) if the authority states a day or an event for it to take effect-on the stated day or when the stated event happens; or
- c) otherwise-on the day the authority is issued.

However, if the EA is authorising an activity that requires an additional authorisation (a relevant tenure for a resource activity, a development permit under the *Planning Act 2016* or an SDA Approval under the *State Development and Public Works Organisation Act 1971*), this EA will not take effect until the additional authorisation has taken effect.

If this EA takes effect when the additional authorisation takes effect, you must provide the administering authority written notice within 5 business days of receiving notification of the related additional authorisation taking effect.

If you have incorrectly claimed that an additional authorisation is not required, carrying out the ERA without the additional authorisation is not legal and could result in your prosecution for providing false or misleading information or operating without a valid environmental authority.

Signed: Eclark	Date: 14 January 2021
Liz Clarke	Enquiries:
Department of Environment and Science	Utilities and Government Organisations Assessment
Delegate of the administering authority	Department of Environment and Science
Environmental Protection Act 1994	Email: palm@des.gld.gov.au



#### **Obligations under the Environmental Protection Act 1994**

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

#### Other permits required

This permit only provides an approval under the *Environmental Protection Act 1994*. In order to lawfully operate you may also require permits / approvals from your local government authority, other business units within the department and other State Government agencies prior to commencing any activity at the site.

#### **Development Approval**

This permit is not a development approval under the *Planning Act 2016*. The conditions of this environmental authority are separate, and in addition to, any conditions that may be on the development approval. If a copy of this environmental authority is attached to a development approval, it is for information only, and may not be current. Please contact the Department of Environment and Science to ensure that you have the most current version of the environmental authority relating to this site.





#### **Conditions of environmental authority**

#### Part 1: Standard Condition for ERA 57

ERA	Location
ERA 57 Regulated Waste Transport— Transporting regulated waste other than end-of- life tyres.	Mobile and Temporary throughout the State of Queensland

With the exception of any variations, the environmentally relevant activities conducted at the locations as described above must be conducted in accordance with the attached document entitled:

• Code of environmental compliance for certain aspects of regulated waste transport (ERA 57) - Version 4.

# Part 2: Standard Conditions for ERA 63-(2)

Location:	
PS BU1	0 Dampier Crescent BURDELL QLD 4818 - Lot 2007 Plan SP216355
PS BU2	Yalbira Drive BURDELL QLD 4818 GPS 468155.345, 7871420.721
PS BU3	2-10 Iona Avenue BURDELL QLD 4818 - Lot 1006 Plan SP236046
PS BU4	290 North Shore Boulevard BURDELL QLD 4818 - Lot 2011 Plan SP221995. GPS 468361.972, 7873081.435
PS BU5	18 Trevalla Entrance BURDELL QLD 4818 - Lot 9034 Plan SP277213. GPS 467316.929, 7872500.278
PS BU7	Bohlevale School Road BURDELL QLD 4818 - Lot 1 Plan RP735140
PS WD2	Summerland Drive DEERAGUN QLD 4818 - Lot 905 Plan SP190030
PS WD5	2 Rangeview Street DEERAGUN QLD 4818 - Lot 100 Plan SP264309
PS WD15A	Gatwick Street BURDELL QLD 4818 - Lot 28 Plan RP887765.GPS 466829.714, 7872084.347
PS WB5	Garland Road BUSHLAND BEACH QLD 4818. GPS 467082.638, 7877606.971
PS WB8	110 Marina Drive BUSHLAND BEACH QLD 4818 - Lot 503 Plan SP240052. GPS 467121.293, 7877074.035
PS WB13	29 Coutts Drive BUSHLAND BEACH QLD 4818 - Lot 1 Plan RP846349. GPS 465492.724, 7877740.111
PS WB14	Coolaree Drive BUSHLAND BEACH QLD 4818 - Lot 200 Plan SP196161. GPS 464709.341, 7877967.486
PS ML01	Mt Low Parkway BUSHLAND BEACH QLD 4818 - Lot 901 Plan SP198388. GPS 464872.813, 7874581.840
PS ML21	220 Svensson Road MOUNT LOW QLD 4818 - Lot 2 Plan RP746633



PS 4A	64 Thirteenth Avenue RAILWAY ESTATE QLD 4810 - Lot 11 Plan T118250
PS 4B	36A Eleventh Avenue RAILWAY ESTATE QLD 4810 - Lot 335 Plan RP703355 and Lot 336 Plan RP703355
PS 5F	126 Queens Road HERMIT PARK QLD 4812 - Lot 189 Plan RP703476
PS 10K	300 Woolcock Street GARBUTT QLD 4814 - Lot 16 Plan SP101949
PS 11C	24A Chandler Street GARBUTT QLD 4814 - Lot 25 Plan T118472
PS 23	16 Little Fletcher Street TOWNSVILLE QLD 4810 - Lot 12 Plan SP253222
PS A9A	22 Forrest Street ROSSLEA QLD 4812 - Lot 504 Plan SP273620. GPS 479197.209, 7866175.705
PS K13B	146 Kern Brothers Drive KIRWAN 4817 - Lot 1 Plan RP745372. GPS 471105.052, 7865295.608
PS K13D	Golf Links Drive KIRWAN QLD 4817 - Lot 1 Plan RP909864. GPS 470238.666, 7865185.074.
PS K16A	Green Wood Drive KIRWAN QLD 4817 - Lot 900 Plan SP123021. GPS 472006.710, 7867102.006
PS K16B	Greenwood Drive BUSHLAND BEACH QLD 4818. GPS 471433.330, 7866692.102.
PS K16D	Wheeler Circuit KIRWAN QLD 4817 - Lot 902 Plan RP903755
PS K17C	Ridley Road KIRWAN QLD 4817 Lot 30 Plan T118550
PS K40	33 Willowbank Drive KIRWAN QLD 4817 - Lot 504 Plan SP198393. GPS 469921.411, 7866038.265.
PS K40A	53 Edenbridge Drive KIRWAN QLD 4817 - Lot 505 Plan SP232897
PS L6D	47 Liberty Drive MOUNT LOUISA QLD 4814 - Lot 51 Plan SP250574
PS W3	1415 Riverway Drive KELSO QLD 4815. GPS 471675.058, 7857102.238.
PS SA1A	18 Freshwater Parade DOUGLAS QLD 4814 - Lot 903 Plan SP182114. GPS 472372.362, 7863829.190.
PS SA1B	Angus Smith Drive DOUGLAS QLD 4814 - Lot 1 Plan SP189840. GPS 471816.203, 7863155.120.
PS S1A	67 Riverside Boulevard DOUGLAS QLD 4814 - Lot 901 Plan SP169642. GPS 473830.903, 7863738.062.
PS S2A	20-30 Keesing Road DOUGLAS QLD 4814 - Lot 3 Plan RP869259. GPS 475019.059, 7864630.366.
PS S3A	62 Marabou Drive ANNANDALE QLD 4814 - Lot 4 Plan RP849602
PS SA6A	Oonoonba Road IDALIA QLD 4811 - Lot 5 Plan RP705911. GPS 480142.071, 7865582.086.
PS SA6B	120 River Boulevard IDALIA QLD 4811. GPS 480436.954, 7866330.512.



PS SA6C	103-105 Oonoonba Road IDALIA QLD 4811 - Lot 1000 Plan SP232889. GPS 480737.822,
	7004939.231
PSSIUA	266 Angus Smith Drive DOUGLAS QLD 4814 - Lot 4011 Plan SP240077
PS SA10A	358A Angus Smith Drive DOUGLAS QLD 4814 - Lot 4013 Plan SP240078
PS S21	557 University Road ANNANDALE QLD 4814 - Lot 3 Plan RP860282
PS A11B	86-88 Chandler Street GARBUTT QLD 4814 - Lot CP Plan SP175566
PS 9M	238 Fulham Road VINCENT QLD 4814 - Lot 632 Plan RP723677
PS L17	55A Abattoir Road COSGROVE QLD 4818 - Lot 1000 Plan SP262846
PS L18A	64-72 Enterprise Street BOHLE QLD 4818 - Lot 616 Plan EP1816
PS L1A	7 Barellan Street CRANBROOK QLD 4814 - Lot 157 Plan RP725435
PS A9N	Mill Drive HEATLEY QLD 4814 -Lot 375 Plan RP723624
PS L6C	2-4 Sharp Street MOUNT LOUISA QLD 4814 - Lot 9 Plan RP731203. GPS 473137.527, 7867654.318
PS M1	21-27 Picnic Street PICNIC BAY QLD 4819 - Lot 18 Plan EP2094. GPS 482885.815, 7879353.319
PS M2	79-83 Sooning Street NELLY BAY QLD 4819 - Lot 34 Plan SP155546
PS J1	43 Eden Park Drive JENSEN QLOD 4818 - Lot 301 Plan SP277786. GPS 462853.908, 7872972.033
PS BP01	44 Needletail Way BOHLE PLAINS QLD 4817 - Lot 995 Plan SP185415. GPS 467811.975, 7864640.475
PS BP02	25 The Ring Road BOHLE PLAINS QLD 4817 - Lot 7000 Plan SP286591
PS BP03	807 Dalrymple Road SHAW QLD 4818 - Lot 71 Plan SP225277
PS SH2	22-60 Shaw Road SHAW QLD 4818 - Lot 7 Plan SP135436
PS 1A	20-40 Hanran Street TOWNSVILLE QLD 4810 - Lot 31 Plan SP123544
PS 2A	Perkins Street SOUTH TOWNSVILLE QLD 4810 - Lot 112 Plan SP130012
PS 3B	10 Sixth Street East SOUTH TOWNSVILLE QLD 4810 - Lot 2 Plan RP709827
PS 3C	39 Seventh Street SOUTH TOWNSVILLE QLD 4810 - Lot 2 Plan RP709903
PS 4C	9-25 First Street RAILWAY ESTATE QLD 48140 - Lot 1 Plan EP834
PS 4D	62 Railway Avenue RAILWAY ESTATE QLD 4810 - Lot 148 Plan RP703359
PS 5A	51 Ford Street HERMIT PARK QLD 4812 - Lot 2 Plan RP709828
PS 5B	64 Armstrong Street HERMIT PARK QLD 4812 - Lot 86 Plan RP703400
PS 5C	29 Crowle Street HYDE PARK QLD 4812 - Lot 9 Plan RP703439



PS 5D	37 Marks Street HERMIT PARK QLD 4812 - Lot 2 Plan RP709830
PS 5E	211 Charters Towers Road HYDE PARK QLD 4812 - Lot 317 Plan RP647
PS 6	41 Parkes Street WEST END QLD 4810 - Lot 150 Plan EP397
PS 7A	16 Howitt Street NORTH WARD QLD 4810 - Lot 31 Plan T118279
PS 7B	The Strand NORTH WARD QLD 4810 - Lot 7 Plan SP123458
PS A1A	2 Entertainment Drive TOWNSVILLE CITY QLD 4810 - Lot 100 Plan RP840355. GPS 481834.427, 7371220.175
PS 8A	47 Emmerson Street TOWN COMMON QLD 4810 - Lot 131 Plan EP2324
PS 8B	11 Fry Street BELGIAN GARDENS QLD 4810 - Lot 76 Plan T118115
PS 9A	0 Inglis Smith Street ROSSLEA QLD 4812 - Lot 1 Plan RP718495
PS 9B	9-15 Sherriff Street HERMIT PARK QLD 4812 - Lot 2 Plan RP714347
PS 9C	12 Mulligan Street MUNDINGBURRA QLD 4812 – Lot 13 Plan RP725622
PS 9D	4-16 Brownhill Street MUNDINGBURRA QLD 4812 – Lot 30 Plan RP712387
PS 9E	46 Wellington Street MUNDINGBURRA QLD 4812 – Lot 3 Plan RP720872
PS 9F	126 Wellington Street AITKENVALE QLD 4814 - Lot 1 Plan RP708997
PS 9G	31 Crete Street AITKENVALE QLD 4814 - Lot 17 Plan RP728792
PS 9J	46 Pugh Street AITKENVALE QLD 4814 - Lot 5 Plan RP708184
PS 9K	62 Anne Street AITKENVALE QLD 4814 - Lot 1 Plan RP722043
PS 9L	44 Anne Street AITKENVALE QLD 4814 - Lot 1 Plan RP721600
PS 10A	41 Gulliver Street MUNDINGBURRA QLD 4812 - Lot 13 Plan RP707458. GPS 477932.108, 7866995.115
PS 10B	28 Diprose Street PIMLICO QLD 4812 - Lot 86 Plan RP703502
PS 10C	0 McLachlan Street CURRAJONG 4812 - Lot 5 Plan T118546
PS 10D	Bayswater Road PIMLICO QLD 4812 - Lot 0 Plan RP00000. GPS 477747.735, 7868535.696
PS 10F	195 Bayswater Road CURRAJONG QLD 4812 - Lot 1 Plan RP721328
PS 10G	58-62 Sargeant Street GULLIVER QLD 4812 - Lot 239 Plan EP492
PS 10H	24 Leeds Street GULLIVER QLD 4812 - Lot 263 Plan RP716359
PS 10J	38 Cambridge Street GULLIVER QLD 4812 - Lot 361 Plan RP716774
PS 13A	46 Findlater Street OONOONBA QLD 4811 - Lot 394 Plan RP705902
PS A6	138 Ingham Road WEST END 4810 - Lot 432 Plan EP1064
PS A8C	28 Hugh Street GARBUTT QLD 4814 - Lot 474 Plan EP1533



PS S4A	35 Eucalyptus Avenue ANNANDALE QLD 4814 - Lot 99 Plan RP804278		
PS S6	194 Abbot Street CLUDEN QLD 4811 - Lot 1 Plan RP721599		
PS SA14A	Joseph Banks Avenue DOUGLAS QLD 4814 - Lot 0 Plan RP00000. GPS 474233.250, 7863441.829		
PS SA18A	76-94 Southwood Road STUART QLD 4811 - Lot 2 Plan RP717998		
PS SA5A	Stuart Street IDALIA QLD 4811 - Lot 0 Plan RP00000. GPS 479591.016, 764877.223		
PS 11B	77 Meenan Street GARBUTT QLD 4814 - Lot 15 Plan T118506		
PS 9N	36A Hutchins Street HEATLEY QLD 4814 - Lot 295 Plan RP723525		
PS L21A	713 Ingham Road MOUNT ST JOHN QLD 4818 - Lot 63 Plan SP262012		
PS L14A	26 Mather Street MOUNT ST JOHN QLD 4818 - Lot 1 Plan RP724651		
PS P1A	10 Cripps Street PALLARENDA QLD 4810 - Lot 566 Plan EP1602		
PS LB18A	14-64 Industrial Avenue BOHLE QLD 4818 - Lot 779 Plan SP108011. GPS 470370.238, 7870824.178		
PS 33	0 Clint Street KELSO QLD 4815 - Lot 34 Plan EP1808. GPS 471182.294, 7856457.829		
PS C5C	27 St Lucia Drive RASMUSSEN QLD 4815 - Lot 1 Plan RP812296		
PS C6B	0 Smith Road CONDON QLD 4815 - Lot 1 Plan RP729213		
PS C36A	4 Bowhunters Road CONDON QLD 4815 - Lot 1 Plan RP743688		
PS C36B	180 North Beck Drive CONDON QLD 4815 - Lot 150 Plan RP904789		
PS W4A	0 Miles Avenue KELSO QLD 4815 - Lot 3 Plan RP730221		
PS 37B	0 Smith Road CONDON QLD 4815 - Lot 2 Plan RP904086		
PS K12	0 Morley Street CONDON QLD 4815 - Lot 1 Plan RP728691		
PS K13A	55 Canterbury Road KIRWAN QLD 4817 - Lot 1 Plan RP745288		
PS K13E	0 Golf Links Drive KIRWAN QLD 4817 - Lot 1 Plan RP740497		
PS K15A	0 Dalrymple Road KIRWAN QLD 4817 - Lot 500 Plan SP101864. GPS 471499.914, 7865993.450		
PS K16C	1 Lappin Place KIRWAN QLD 4817 - Lot 900 Plan SP160486		
PS K17A	19 Tam O'Shanter Drive THURINGOWA CENTRAL QLD 4817 - Lot 762 Plan EP1642		
PS K21	0 Tinglewood Street KIRWAN QLD 4817 - Lot 230 Plan RP726066		
PS WD1	42 Innes Drive DEERAGUN QLD 4818 - Lot 804 Plan SP184186		
PS WD13	0 Giffey Street BURDELL QLD 4818 - Lot 1 Plan RP312236		
PS WD14	53 Beau Park Drive BURDELL QLD 4818 - Lot 182 Plan RP860277		
PS WB1	0 Mount Low Parkway BUSHLAND BEACH QLD 4818 - Lot 71 Plan RP737097		

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PS WB4	97 Marina Drive MOUNT LOW QLD 4818 - Lot A Plan RP745828	
PS WB12	29 Coutts Drive MOUNT LOW QLD 4818 - Lot 1 Plan RP846349	
PS WB7	0 Marina Drive BUSHLAND BEACH QLD 4818 - Lot 20 Plan SP120865	
PS M4A	61 Apjohn Street HORSESHOE BAY QLD 4819 - Lot 63 Plan RP743609. GPS 485152.666, 7885777.132	
PS A9A	Signature Drive, Rosslea Q 4812. GPS 479197.38823, 7866175.49697	
PS 9P	50 Alfred Street, Aitkenvale Q 4814. Lot 1 SP117809	
PS KE1	1645 Riverway Drive, Kelso Q 4815. Lot 2011 SP256843	
PS BU6	3 Pascoe Drive, Burdell Q 4818. EMT BN SP277221. GPS 467751.73536, 7873065.69447	
PS S15	Riveredge Boulevard, Oonoonba Q 4811. GPS 480125.77092, 7866810.57395	
PS SB15	Darter Street, Oonoonba Q 4811. GPS 480372.65435, 7866941.54632	
PS L1C	2 Castellana Street, CRANBROOK QLD 4814 (Lot 1 SP305230)	
PS BU6	15 Pasco Drive, BURDELL 4818 (Lot 3035 SP319696)	
PS A24	2 Pride Close, Railway Estate QLD 4810 (Lot 1 SP315847)	

With the exception of any variations, the environmentally relevant activities conducted at the locations as described above must be conducted in accordance with the attached document entitled:

• Code of Environmental Compliance for certain aspects of sewage treatment activities (ERA 63) - Version 1.

#### Variations to the Standard Conditions Include:

Condition	Condition
number	
Condition 10	The operator must ensure that contaminants are not released to land or waters (including the bed and banks of any waters) as a result of the activity unless all reasonable and practicable measures have been taken to prevent the release.



#### Part 3: Waste Disposal Activities

#### **Schedule 1: Waste Disposal General Conditions**

ERA	Location	
ERA 33 Crushing, milling, grinding or screening more than 5,000t of material in a year.	Stuart Waste Facility Vantassel Street, Stuart QLD 4811 - Lot 2 Plan	
ERA 54 - Mechanical waste reprocessing 1: Operating a facility for receiving and mechanically reprocessing, in a year, more than 5,000t of inert, non-putrescible waste or green waste only	SP132603	
ERA 60 Waste disposal (1)(c) operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(a)— more than 100,000t but not more than 200,000t.		
ERA 62 Resource recovery and transfer facility operation (1)(b) operating a facility for receiving and sorting, dismantling, baling or temporarily storing— general waste.		
ERA 62 Resource recovery and transfer facility operation (1)(c) operating a facility for receiving and sorting, dismantling, baling or temporarily storing—category 2 regulated waste.		
ERA 60 Waste disposal (2)(f) operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(b)— more than 50,000t but not more than 100,000t.	<b>Hervey Range Waste Facility</b> Hervey Range Road, Alice River QLD 4817 - Lot 51 Plan EP812267	
ERA 62 Resource recovery and transfer facility operation (1)(b) operating a facility for receiving and sorting, dismantling, baling or temporarily storing— general waste.		
ERA 62 Resource recovery and transfer facility operation (1)(c) operating a facility for receiving and sorting, dismantling, baling or temporarily storing— category 2 regulated waste.		
ERA 60 Waste disposal (2)(f) operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(b)— more than 50,000t but not more than 100,000t.	<b>Jensen Landfill</b> Jensen Road, Deeragun QLD 4818 - Lot 44 Plan EP1017	
ERA 60 Waste disposal (2)(c) operating a facility for disposing of, in a year, the following quantity of waste	<b>Picnic Bay Landfill</b> 33 Magnetic Street, Magnetic Island QLD 4819 - Lot 1 Plan P93835 and Lot 2 Plan SP157592	



mentioned in subsection (1)(b)— more than 5,000t but not more than 10,000t.	
ERA 60 Waste disposal (2)(a) operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(b)— less than 2,000t	<b>Majors Creek Landfill</b> Majors Creek, Townsville QLD 4810 - Lot 77 Plan EP2381
ERA 60 Waste disposal (2)(a) operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(b)— less than 2,000t	<b>Toomulla Landfill</b> Toomulla Beach Road, Toomulla QLD 4816 - Lot 10 Plan CP845507

The environmentally relevant activities conducted at the locations as described above must be conducted in accordance with the following general conditions of approval.

Agency interest: General		
Condition number	Condition	
G1.1	All reasonable and practicable <b>measures</b> must be taken to minimise the likelihood of <b>environmental harm</b> being caused.	
G1.2	The administering authority must be notified as soon as practicable after the operators of the activity to which this environmental authority relates become aware of any release of contaminants that occurs other than in accordance with the conditions of this environmental authority, or any event where environmental harm is caused or threatened.	
G1.3	All information and <b>records</b> that are required by the conditions of this environmental authority must be kept for a minimum of five (5) years. Environmental monitoring results must be kept until surrender of this environmental authority. All information and <b>records</b> required by the conditions of this environmental authority must be provided to the <b>administering authority</b> upon request.	
G1.4	An <b>appropriately qualified person</b> (s) must monitor, record and interpret all parameters that are required to be monitored by this environmental authority and in the manner specified by this environmental authority.	
G1.5	When required by the <b>administering authority</b> , monitoring must be undertaken in the manner prescribed by the <b>administering authority</b> , to investigate a complaint that is not considered by the <b>administering authority</b> to be frivolous or vexatious, of environmental nuisance arising from the <b>activity</b> . The monitoring results must be provided to the <b>administering authority</b> upon request.	
G1.6	The activity must be undertaken in accordance with written procedures that:	
	<ol> <li>identify potential risks to the environment form the activity during routine operations, closure and an emergency;</li> <li>establish and maintain control measures that minimise the potential for environmental harm;</li> <li>ensure plant, equipment and measures are maintained in a proper and effective condition;</li> <li>ensure plant, equipment and measures are operated in a proper and effective manner;</li> <li>ensure that staff are trained and aware of their obligations under the <i>Environmental</i> <i>Protection Act 1994</i>;</li> </ol>	

	6. ensure that reviews of environmental performance are undertaken at least annually.	
G1.7	All reasonable and practicable <b>measures</b> must be taken to contain litter within the waste <b>operations area</b> , and retrieve litter released.	
G1.8	All reasonable and practicable measures must be taken to exclude vectors and pest species to the extent necessary to prevent:	
	<ol> <li>nuisance to occupiers of neighbouring premises;</li> <li>any danger or risk to the health of any persons.</li> </ol>	
G1.9	You must record the following details for all environmental complaints received:	
	<ol> <li>date and time complaint was received;</li> <li>name and contact details of the complainant;</li> <li>nature of the complaint;</li> <li>investigations undertaken;</li> <li>conclusions formed;</li> <li>actions taken.</li> </ol>	
G1.10	Other than as permitted by this environmental authority, the <b>release of a contaminant into the environment</b> must not occur.	
G1.11	All analyses required under this environmental authority must be carried out by a laboratory that has NATA certification, or an equivalent certification, for such analyses. The only exception to this condition is for in situ monitoring of pH, Electrical Conductivity and Temperature.	
G1.12	All sampling and filed testing of contaminants, receiving <b>waters</b> and groundwaters and preservation of samples must be carried out in accordance with methods prescribed in the current edition of the <b>administering authority's</b> <i>Water Quality Sampling Manual.</i>	
G1.13	An annual monitoring report must be prepared each year and be provided to the <b>administering</b> <b>authority</b> upon request. The annual monitoring report must include but is not limited to the following matters:	
	<ol> <li>a summary of the previous twelve months monitoring results obtained in accordance with any of the monitoring requirements of this environmental authority, presented in graphical form showing a comparison to prior results; and</li> <li>an evaluation/explanation of the data from any monitoring programs; and</li> </ol>	
	<ol> <li>a summary of the records of any equipment failures or events recorded and</li> <li>an outline of actions taken or proposed to minimise the environmental risk from any</li> </ol>	
	deficiency identified by the monitoring or recording programs; and	
	<ol> <li>the holder of this environmental authority to the administering authority with the Annual Return which immediately follows the enactment of any such amendment.</li> </ol>	
Agency inte	erest: Air	
Condition number	Condition	
A1.1	Odours or airborne contaminants which are <b>noxious</b> or <b>offensive</b> or otherwise unreasonably disruptive to public amenity or safety must not cause nuisance to any <b>sensitive place</b> or <b>commercial place</b> .	



Agency interest: Noise		
Condition number	Condition	
N1.1	Other than as permitted within this environmental authority, noise generated by the <b>activity</b> must not cause <b>environmental nuisance</b> to any <b>sensitive place</b> or <b>commercial place</b> .	
N1.2	The method of measurement and reporting of noise levels must comply with the latest edition of the <b>administering authority's</b> <i>Noise Measurement Manual</i> .	
Agency inte	erest: Land	
Condition number	Condition	
L1.1	Treatment and management of acid sulfate soils must comply with the latest edition of the Queensland Acid Sulfate Soil Technical Manual.	
Agency inte	erest: Waste	
Condition number	Condition	
W1.1	Use wet cell batteries may be stored temporarily in a covered enclosure that is bunded to contain spillage and leakage.	
W1.2	Waste oil may only be stored temporarily at the licensed place in containers which;	
	<ol> <li>are stored in an area which is designated for this purpose and identified by appropriate information signs;</li> <li>bunded to contain spillage and leakage;</li> <li>have a filling mechanism which prevents rainwater and minimises spillage;</li> <li>are securely sealed when full to prevent rainwater entry and spillage.</li> </ol>	





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#### Schedule 2: Waste Disposal Site Specific Conditions Schedule 2 (a): Stuart Waste Facility Site Specific Conditions

ERA	Location
ERA 33 Crushing, milling, grinding or screening more than 5,000t of material in a year.	Stuart Waste Facility Vantassel Street, Stuart QLD 4811 - Lot 2 Plan
ERA 54 - Mechanical waste reprocessing 1: Operating a facility for receiving and mechanically reprocessing, in a year, more than 5,000t of inert, non-putrescible waste or green waste only	SP132603
ERA 60 Waste disposal $(1)(c)$ operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection $(1)(a)$ — more than 100,000t but not more than 200,000t.	
ERA 62 Resource recovery and transfer facility operation (1)(b) operating a facility for receiving and sorting, dismantling, baling or temporarily storing— general waste.	
ERA 62 Resource recovery and transfer facility operation (1)(c) operating a facility for receiving and sorting, dismantling, baling or temporarily storing— category 2 regulated waste.	

The environmentally relevant activities conducted at the locations as described above must be conducted in accordance with the following site specific conditions of approval.

Agency interest: General		
Condition	Condition	
number		
G2.1	A Site Development Plan (SDP) must be developed and implemented for a five (5) year operating period. The SDP must be reviewed and updated each year to cover the subsequent five years development for the landfill and must include details of at least the following:	
	<ol> <li>an accurate survey of the landfill site including levels and contours of the waste storage and disposal areas and the location and dimensions of these areas; and</li> <li>the design and construction standards for each waste disposal cell including details of the liner system for the base and walls of the cell, intermediate cover system and the final capping system; and</li> <li>a description of the stormwater collection and management system including details of the design and construction standards for stormwater diversion, collection, storage and disposal infrastructure; and</li> </ol>	

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	<ol> <li>a description of the leachate collection and management system including details of the design and construction standards for leachate collection, storage and disposal infrastructure; and</li> <li>a description of the landfill gas collection and management system including details of the design and construction standards for landfill gas extraction, reuse and disposal infrastructure; and</li> <li>a description of the progressive development of the landfill over the time period covered by the plan including details of how stormwater, leachate and landfill gas collection and management systems will be developed as new disposal cells are constructed and completed cells are stabilised and rehabilitated; and</li> <li>a description of the rehabilitation plan for the landfill including details of the final surface levels and profiles of completed cells and the how these ceils will be progressively covered, capped, stabilised, drained and vegetated.</li> </ol>
Agency inte	rest: Air
Condition	Condition
A2.1	A landfill gas management plan must be developed and implemented. The plan must outline actions and timeframes to achieve the following:
	<ol> <li>minimise emissions of landfill gas to the atmosphere; and</li> <li>monitor and minimise the sub-surface migration of the landfill gas to adjacent areas; and</li> <li>maximise the beneficial re-use of landfill gas; and</li> <li>minimise the risk of people being exposes to landfill gas and it reaching concentrations where there is a risk of combustion; and</li> <li>monitoring landfill gas to identify potential volumes, flow rates and composition and concentrations of constituent gases.</li> </ol>
A2.2	Any contract with a third part engaged to beneficially use landfill gas must include a clause requiring the third party to take all reasonable and necessary actions to prevent non-compliance with any relevant conditions of this environmental authority.
A2.3	The following materials must not be used for dust suppression purposes:
	<ol> <li>leachate or landfill gas condensate;</li> <li>waste oil or other hydrocarbons.</li> </ol>
Agency inte	rest: Water
Condition number	Condition
WT2.1	A liner system must be installed and maintained to:
	<ol> <li>prevent release of contaminants, including leachate, to land and waters; and</li> <li>prevent subsurface migration of landfill gas from the landfill unit.</li> </ol>
WT2.2	All ponds used for the storage of contaminants and wastes must designed, constructed, maintained and managed so that:
	1. the likelihood of any release through the base and walls of the pond is minimised; and



	2. the integrity and stability of the pond is maintained.
WT2.3	Any new waste disposal cell and/or pond used for the storage and/or treatment of contaminants and wastes must be designed by a suitably qualified person and certified by a Registered Professional Engineer of Queensland to confirm the ceil and/or pond has been designed in accordance with the standards prescribed in this environmental authority.
WT2.4	Within three months of the date of the completion of any new waste disposal cell and/or pond, a report from a Registered Professional Engineer of Queensland must be submitted to the <b>administering authority</b> certifying that the works (including any other associated works) have been constructed in accordance with the design as certified in condition WT2.3 and that the <b>works</b> are structurally adequate for the anticipated use.
WT2.5	All reasonable and practical <b>measures</b> must be taken to minimise the generation of leachate.
WT2.6	A <b>leachate</b> collection system must be designed by an <b>appropriately qualified person</b> and installed and maintained to:
	<ol> <li>collect leachate generated in the landfill unit; and</li> <li>convey the collected leachate out of the landfill unit to an appropriate leachate storage facility; and</li> <li>restrict the height of the leachate above the landfill cell liner over the uppermost layer in the lining system to a maximum level of:         <ol> <li>500mm in cells constructed before 1 January 2015; and</li> <li>300mm in cells constructed after 1 January 2015.</li> </ol> </li> </ol>
WT2.7	By 1 December of each year <b>leachate</b> ponds must have sufficient available storage capacity to fully contain the total potential volume of <b>leachate</b> generated for the next 12 months.
WT2.8	The depth of <b>leachate</b> in the waste cells and storage ponds must be monitored and recorded and <b>measures</b> must be undertaken to remove <b>leachate</b> from the waste cell and storage ponds as often as necessary to achieve compliance with the conditions of this environmental authority.
WT2.9	<b>Leachate</b> and stormwater runoff which has been in contact with waste materials in the <b>landfill unit</b> , must be collected in the <b>leachate</b> storage facility and be:
	<ol> <li>discharge to sewer, with or without pre-treatment in accordance with a Trade Waste Agreement; or</li> <li>managed by evaporation; or</li> <li>recirculated through waste disposed in the landfill unit; or</li> <li>treated by alternative technologies agreed by the administering authority for offsite disposal, discharge, or on-site reuse; or</li> <li>disposed of at a facility that is approved to receive such waste.</li> </ol>
WT2.10	The stormwater runoff from disturbed areas, generated by (up to and including) a <b>24 hour</b> storm event with an average recurrence interval of <b>1</b> in <b>10</b> years must be retained on site or managed to remove contaminants before release.
WT2.11	Prior to a " <b>controlled release event</b> " and as soon as practicable in the event of an " <b>uncontrolled release</b> " of any stormwater from a pond at the <b>authorised place</b> , samples of the stormwater must be taken and analysed for a least the characteristics listed in <i>Table WT2.11</i> - <i>Stormwater Quality Monitoring.</i>



	Table WT2.11 - Stormwater Quality Monitoring		
	Quality Characteristic	Monitoring Frequency	
	рН		
	Electrical Conductivity		
	Dissolved Oxygen		
	Temperature		
	Chloride		
	Sodium		
	Ammonia	Event-based monitoring: prior to release of	
	Nitrate	condition WT2.11	
	Zinc		
	Iron (dissolved)		
	Manganese		
	Total Organic Carbon		
	Total Organic Halogen		
	Biochemical Oxygen Demand		
	Associated monitoring requirements		
	1. Monitoring must be in accordance with the n administering authority's Water Quality S	nethods prescribed in the current edition of the <b>Sampling Manual</b> .	
WT2.12	The date, duration, estimated volume and quality characteristics of every stormwater release event must be recorded and the details made available to the <b>administering authority</b> upon request.		
WT2.13	Groundwater Monitoring Program must be designed for the <b>authorised place</b> by a person with appropriate qualifications and experience in the fields of hydrogeology and groundwater monitoring program design. The monitoring program must be able to determine whether or not there has been any statistically significant adverse change to ground water quality compared to background values at locations hydraulically down-gradient of the landfill.		
WT2.14	Groundwater quality must be monitored and <b>rec</b> groundwater quality must be:	ords retained. All determinations of	
	<ol> <li>made in accordance with methods prescribe the Australian Standard AS/NZS 5667.11 W groundwaters, or more recent additions or s become available;</li> <li>carried out by a person or body possessing perform the required monitoring;</li> <li>conducted for the water quality characteristic WT2.14 - Groundwater Quality Monitoring -</li> </ol>	ed in the <i>Water Quality Sampling Manual</i> and <i>Vater Quality Sampling: Guidance on sampling</i> upplements to these documents as such appropriate experience and qualifications to cs and at the frequency specified in <i>Table</i> <i>Indicators and Frequency</i> ;	



	<ol> <li>taken form sufficient monitoring bores to obtain representative samples both up-gradient and down-gradient of the potential influence of the land carried out with sufficient frequency and spatial and temporal replication statistically valid conclusions about the presence or absence of a releas from the landfill;</li> <li>carried out with sufficient number of sampling events to determine amb and natural variability of water quality;</li> <li>followed by an annual assessment of whether or not there has been an significant adverse change to groundwater quality compared to background locations hydraulically down-gradient of the landfill for each of the qualit <i>Table WT2.14 - Groundwater Quality Monitoring - Indicators and Freque</i> Table WT2.14 - Groundwater Quality Monitoring - Indicators and Freque</li> </ol>	of groundwater dfill; n to make se of contaminants ient water quality y statistically ound values at ty characteristics in <i>ency.</i> d <b>Frequency</b>	
	Quality Characteristic	Monitoring Frequency	
	pH		
	Electrical Conductivity		
	remperature		
	Major Ions (carbonate, bicarbonate, sulphate, chloride, nitrate, calcium, magnesium, sodium and potassium)		
	Heavy Metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, molybdenum, nickel, silver, tin, titanium, zinc)	Quarterly	
	Total Petroleum Hydrocarbons		
	Total Organochlorines		
	Total Organophosphates		
	Ammonia		
	Total Kieldahl Nitrogen		
	Biochemical Oxygen Demand		
	Associated monitoring requirements		
	<ol> <li>Monitoring must be in accordance with the methods prescribed in the ca administering authority's Water Quality Sampling Manual.</li> </ol>	urrent edition of the	
WT2.15	Groundwater monitoring bores must be fitted with a lockable cap which must be locked at all times other than at the time of sampling.		
Agency inte	Agency interest: Noise		
Condition number	Condition		





N2.1	<ul> <li>When requested by the administering authority, noise monitoring must be undertaken to investigate any compliant of environmental nuisance (noise). The results are to be provided to the administering authority within fourteen (14) days. Monitoring must include but not be limited to the following: <ol> <li>LA Max adj, T;</li> <li>background Noise Levels;</li> <li>the level and frequency of occurrence of impulsive or tonal noise; atmospheric conditions including wind speed and direction; effects due to extraneous factors such as traffic noise; and</li> <li>location, date and time of recording.</li> </ol> </li> </ul>
Agency inte	rest: Land
Condition number	Condition
L2.1	When the deposition of waste to the <b>landfill unit</b> ceases, a final <b>capping</b> system to the <b>landfill</b> <b>unit</b> must be designed by an <b>appropriately qualified person</b> and installed to minimise:
	<ol> <li>infiltration of water into the landfill unit and water ponding on the surface; and</li> <li>the likelihood of any erosion occurring to either the final capping system or the landfilled materials.</li> </ol>
	A final <b>capping</b> system is not required where the deposition of waste to a landfill unit ceases temporarily for the purpose of using an alternative working face.
L2.2	Land that has been disturbed for activities conducted under this environmental authority must be rehabilitated in a manner such that
	<ol> <li>suitable species of vegetation for the location are established and sustained for earthen surfaces;</li> <li>potential for erasion is minimized;</li> </ol>
	<ol> <li>potential for erosion is minimised,</li> <li>the quality of water, including seepage, released from the site does not cause environmental harm;</li> </ol>
	<ol> <li>potential for environmental nuisance caused by dust is minimised;</li> <li>the water quality of any residual water body does not have potential to cause environmental harm;</li> </ol>
	<ol> <li>the final landform is stable and protects public safety;</li> <li>the contaminant concentrations within the final capping layer are appropriate for the final land use and in accordance with the 'National Environmental Protection (Assessment of Soil Contamination) Measure 1999'.</li> </ol>
L2.3	Following cessation of deposition of waste in the <b>landfill unit</b> , post-closure care of the <b>landfill unit</b> must be conducted for a period of 30 years or until the <b>administering authority</b> determines, on the basis of correct information, that the <b>landfill unit</b> and surrounding site are stable and that no release of waste materials, <b>leachate</b> , landfill gas or other contaminants that may cause <b>environmental harm</b> is likely.
L2.4	A Closure and Post-Closure Care and Maintenance Plan must be submitted to the administering authority at least 12 months before the final receipt of waste into the landfill. The plan must provide details of at least the following matters:



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	<ol> <li>the proposed post-closure land use;</li> <li>the final surface contours (making allowances for landfill subsidence);</li> <li>the design of the final cover and capping system;</li> <li>the design of the final surface drainage;</li> <li>the design of the leachate management system;</li> <li>the revegetation program;</li> <li>the environmental monitoring system;</li> <li>the procedures including an inspection program for the on-going care and maintenance of the final cover system, vegetation and leachate management system;</li> <li>on-going gas monitoring and extraction.</li> </ol>
L2.5	The program of post-closure care implemented must be effective in preventing and/or minimising the likelihood of <b>environmental harm</b> being caused. The program must include measures to:
	<ol> <li>maintain the structural integrity and effectiveness of the final capping system;</li> <li>maintain and operate the leachate collection system;</li> <li>maintain the groundwater monitoring system and monitor quality of groundwater at a frequency sufficient to detect any release of contaminants to groundwater;</li> <li>maintain and operate the landfill gas monitoring system; and</li> <li>maintain and operate the landfill gas collection system.</li> </ol>
Agency inte	rest: Waste
Condition	Condition
number	
W2.1	Only the following waste streams can be received at the site:
	<ul> <li>(a) general waste</li> <li>(b) regulated waste</li> <li>(c) contaminated soil</li> <li>Notes:</li> </ul>
	<ol> <li>Wet cell batteries and waste on may be accepted and stored at the licensed place for recycling</li> <li>drums containing any residual regulated waste are a regulated waste unless effectively cleaned.</li> </ol>
W2.2	I.       wet cell batteries and waste on may be accepted and stored at the licensed place for recycling         II.       drums containing any residual regulated waste are a regulated waste unless effectively cleaned.         Waste and any contaminated soil disposed of at the premises to which this environmental authority relates:

Contaminant	Maximum contaminant level for <b>clay</b> <b>lined</b> landfills (mg/kg)	Maximum contaminant leve for <b>double lined</b> landfills (mg/kg)
Monocyclic aromatic hydrocarb	ons (MAH)	
Benzene	10	
Ethyl Benzene	500	1,0
Toluene	300	
Xylene	250	
Total MAH	500	1,0
Polycyclic aromatic hydrocarbol	ns (PAH)	
Total PAH	500	1,
Phenolic contaminants		
Non halogenated compounds:		
Phenol	100	
m-cresol	250	:
o-cresol	250	
p-cresol	250	:
Total non halogenated phenol	250	
Halogenated phenol		
Chlorophenol	1	
Pentachlorophenol	5	
Trichlorophenol	5	
Total halogenated phenol	5	
Chlorinated Hydrocarbons		
Chlorinated aliphatic compound	ls:	
Carbon tetrachloride	5	
1,2 Dichloroethane	10	
1,1 Dichloroethene	1	
Tetrachloroethene	10	
Trichloroethene	25	
Total chlorinated aliphatic comp	ounds 50	
Chlorinated aromatic compound	ds:	
Chlorobenzene	100	
Hovachlorobonzono	1	



Total chlorinated aromatic com	npounds		100	20
Non scheduled solid polyc biphenyls (PCBs)	hlorinated		2	ę
Pesticides				
Total organochlorine			5	ł
Total herbicides			25	
Total carbamates			25	!
Total organophosphorus			10	
Petroleum hydrocarbons				
Total petroleum hydrocarbons	(C <sub>6</sub> -C <sub>9</sub> )		500	1,0
Total petroleum hydrocarbons	(C <sub>10</sub> -C <sub>14</sub> )		5,000	10,0
Total petroleum hydrocarbons	(C <sub>15</sub> -C <sub>28</sub> )		10,000	50,0
Total petroleum hydrocarbons	(C <sub>29</sub> -C <sub>36</sub> )		10,000	50,0
Table - Allowable leaching co	ontaminant	t levels		
Table - Allowable leaching co	ontaminant Allowa levels landfil	able leaching contaminant ( <b>TCLP</b> *) for <b>clay lined</b> Ils (mg/l)	Allowable leac levels (TCLP) for dor (mg/l)	ching contaminant <b>uble lined</b> landfills
Table - Allowable leaching co         Contaminant         Non specific contaminants	ontaminant Allowa levels landfil	t <b>levels</b> able leaching contaminant ( <b>(TCLP</b> *) for <b>clay lined</b> Ils (mg/l)	Allowable leac levels ( <b>TCLP</b> ) for <b>dot</b> (mg/l)	ching contaminant <b>uble lined</b> landfills
Table - Allowable leaching co         Contaminant         Non specific contaminants         Biochemical oxygen demand	Allowa Allowa levels landfil 20,00	able leaching contaminant ( <b>TCLP</b> *) for <b>clay lined</b> Ils (mg/I) 0	Allowable leac levels ( <b>TCLP</b> ) for <b>dot</b> (mg/l) 20,000	ching contaminant <b>uble lined</b> landfills
Table - Allowable leaching co         Contaminant         Non specific contaminants         Biochemical oxygen demand         Total organic carbon	Allowa levels landfil 20,00 10,00	t <b>levels</b> able leaching contaminant ( <b>TCLP</b> *) for <b>clay lined</b> lls (mg/l) 0 0	Allowable leac levels (TCLP) for dor (mg/l) 20,000 10,000	ching contaminant <b>uble lined</b> landfills
Table - Allowable leaching co         Contaminant         Non specific contaminants         Biochemical oxygen demand         Total organic carbon         Petroleum hydrocarbons	Allowa Ievels Iandfil 20,00 10,00 25	t <b>levels</b> able leaching contaminant : ( <b>TCLP</b> *) for <b>clay lined</b> Ils (mg/l) 0	Allowable leac levels ( <b>TCLP</b> ) for <b>dot</b> (mg/l) 20,000 10,000 50	ching contaminant <b>uble lined</b> landfills
Table - Allowable leaching comparison         Contaminant         Non specific contaminants         Biochemical oxygen demand         Total organic carbon         Petroleum hydrocarbons         Metals/non-metals	Allowa levels landfil 20,00 10,00 25	t <b>levels</b> able leaching contaminant ( <b>TCLP</b> *) for <b>clay lined</b> lls (mg/l) 0 0	Allowable leac levels ( <b>TCLP</b> ) for <b>dot</b> (mg/l) 20,000 10,000 50	ching contaminant <b>uble lined</b> landfills
Table - Allowable leaching comparison         Contaminant         Non specific contaminants         Biochemical oxygen demand         Total organic carbon         Petroleum hydrocarbons         Metals/non-metals         Antimony	ontaminant Allowa levels landfil 20,00 10,00 25 0.5	t <b>levels</b> able leaching contaminant ( <b>TCLP</b> *) for <b>clay lined</b> Ills (mg/l) 0 0	Allowable leac levels (TCLP) for dot (mg/l) 20,000 10,000 50	ching contaminant <b>uble lined</b> landfills
Table - Allowable leaching comparison         Contaminant         Non specific contaminants         Biochemical oxygen demand         Total organic carbon         Petroleum hydrocarbons         Metals/non-metals         Antimony         Arsenic	ontaminant Allowa levels landfil 20,00 10,00 25 0.5	t levels able leaching contaminant (TCLP*) for clay lined lls (mg/l) 0	Allowable leac levels ( <b>TCLP</b> ) for <b>dot</b> (mg/l) 20,000 10,000 50 5 5	ching contaminant <b>uble lined</b> landfills
Table - Allowable leaching comparison         Contaminant         Non specific contaminants         Biochemical oxygen demand         Total organic carbon         Petroleum hydrocarbons         Metals/non-metals         Antimony         Arsenic         Barium	Allowa           Allowa           levels           landfil           20,00           10,00           25           0.5           0.5           10	t levels able leaching contaminant (TCLP*) for clay lined lls (mg/l) 0 0	Allowable leac levels (TCLP) for dor (mg/l) 20,000 10,000 50 5 5 5 100	ching contaminant <b>uble lined</b> landfills
Table - Allowable leaching comparison         Contaminant         Non specific contaminants         Biochemical oxygen demand         Total organic carbon         Petroleum hydrocarbons         Metals/non-metals         Antimony         Arsenic         Barium         Cadmium	Allowa           Allowa           levels           levels           20,00           10,00           25           0.5           0.5           10           0.5	t levels able leaching contaminant (TCLP*) for clay lined lls (mg/l) 0 0	Allowable leac levels ( <b>TCLP</b> ) for <b>dot</b> (mg/l) 20,000 10,000 50 5 5 5 100 0.5	ching contaminant uble lined landfills
Table - Allowable leaching comparised         Contaminant         Non specific contaminants         Biochemical oxygen demand         Total organic carbon         Petroleum hydrocarbons         Metals/non-metals         Antimony         Arsenic         Barium         Cadmium	Allowa           Allowa           levels           levels           20,00           10,00           25           0.5           0.5           10           0.05           0.5	t levels able leaching contaminant (TCLP*) for clay lined IIs (mg/I) 0 0 0	Allowable leac levels (TCLP) for dot (mg/l) 20,000 10,000 50 5 5 5 100 0.5	ching contaminant <b>uble lined</b> landfills
Table - Allowable leaching comparison         Contaminant         Non specific contaminants         Biochemical oxygen demand         Total organic carbon         Petroleum hydrocarbons         Metals/non-metals         Antimony         Arsenic         Barium         Cadmium         Chromium         Out of the	Allowa           Allowa           levels           levels           20,00           10,00           25           0.5           0.5           10           0.05           0.5           0.5	t levels able leaching contaminant (TCLP*) for clay lined Ils (mg/l) 0 0	Allowable leac levels ( <b>TCLP</b> ) for <b>dot</b> (mg/l) 20,000 10,000 50 50 5 5 5 5 100 0.5 5 5	ching contaminant uble lined landfills



Lead	0.5	5
Mercury	0.01	0.1
Molybdenum	0.1	5
Nickel	0.5	5
Selenium	0.1	1
Silver	0.5	5
Thallium	0.1	1
Tin	0.3	3
	0.5	5
Vanadium	0.5	5
Zinc	50	500
Inorganic anions		
Bromide	5	50
Chloride	6,000	6,000
Cvanide (total)	1	5
Eluorido	15	150
Nitrate	100	1,000
Sulphate	2 500	4,000
Monocyclic aromatic hydrocarbon (MAH)	2,000	4,000
Benzene	0.1	1
Ethyl benzene	5	50
Toluene	3	30
Xylene	2	20
Total MAH	5	50
Polycyclic aromatic hydrocarbons (PAH)	)	
Anthracene	0.07	0.7
Benz (a) anthracene	0.005	0.05
Benz (c) phenanthrene	0.005	0.05
Benzo (a) pyrene	0.002	0.02
Benzo (b) fluoranthene	0.005	0.05
Benzo (k) fluoranthene	0.005	0.05
Chrysene	0.01	0.1
Dibenz (a,h) anthracene	0.002	0.02
Dibenz (a,h) pyrene	0.01	0.1
Dimethylbenz (a) anthracene	0.005	0.05
Fluoranthene	0.02	0.2
Indeno (1,2,3-cd) pyrene	0.01	0.1



Nanhthalene	0.07	0.7
Phenanthrane	0.01	0.1
Pyrana	0.07	0.7
	0.1	1
Phonolic contaminants	0.1	
Non balaganatad compounds:		
Phonol	1	10
	2	20
	2	20
	2	20
	2	20
Halogenated phenois	0.01	0.4
	0.01	0.1
Pentachiorophenoi	0.1	1
	0.1	1
Chlorinated hydrocarbons		
Chlorinated aliphatic compounds		
Carbon tetrachloride	0.03	0.3
1,2 Dichloroethane	0.1	1
1,1 Dichloroethene	0.003	0.03
Tetrachloroethene	0.1	1
Trichloroethene	0.3	3
Chlorinated aromatic compounds		
Chlorobenzene (total)	1	10
Hexachlorobenzene	0.002	0.02
Pesticides		
Organochlorine		
Aldrin	0.001	0.01
Chlordane	0.006	0.06
Chlorpyrifos	0.01	0.03
Dieldrin	0.001	0.01
DDT	0.003	0.03
Endrin	0.001	0.01
Heptachlor	0.003	0.03
Lindane	0.1	1
Methoxychlor	0.1	1
Toxaphene	0.005	0.05
Herbicides		
2,4-D	0.1	1





	0.2	2
2,4,5 - 1	0.002	0.02
MCPA	0.2	2
Carbaryl	0.06	0.6
Carbofuran	0.03	0.3
Organophosphoru		
Diazinon	0.01	0.1
Methyl Parathion	0.006	0.06
Parathion	0.03	0.3
Triazines:		
Atrazine	0.01	0.03
Simazine	0.01	0.03
Fluorinated organic compounds		
Total fluorinated organic compounds (if leachate reused on or off-site)	0.0003	0.0003
Total fluorinated organic compounds (if leachate not reused on or off-site)	0.05	0.05
For any waste or soil contaminated by rad the Toxicity Characteristic Leaching Proce concentrations for the screening of gross Health and Medical Research Council (NF	dioactive material, the gross alpha a edure ( <b>TCLP</b> ) extracts from the material alpha and gross beta activity concern HMRC) Australian Drinking Water G	nd gross beta activity concentration in erial are no more than 100 times the ntrations specified in the National uidelines, 2011.
Novable leaching levels to be determined nvironment and Science (EPA), Washingt ethods" Document number SW 846. 3rd E come available. able - Maximum total contaminant ot suitable for final capping)	In the second se	naterial (note: this material is
Allowable leaching levels to be determined nvironment and Science (EPA), Washingti ethods" Document number SW 846. 3rd E ecome available. able - Maximum total contaminant ot suitable for final capping)	Identified TCLP procedure mention on DC (2008) "Test methods for eva Edition or more recent editions or su Ievels in soils used as cover r Maximum total contaminant levels	in soils used as cover material (mg/kg)
Allowable leaching levels to be determined nvironment and Science (EPA), Washingt ethods" Document number SW 846. 3rd E acome available. able - Maximum total contaminant ot suitable for final capping)	Identifier TCLP procedure mention on DC (2008) "Test methods for eval         Edition or more recent editions or su         Ievels in soils used as cover r         Maximum total contaminant levels         200	in soils used as cover material (mg/kg)
Allowable leaching levels to be determined nvironment and Science (EPA), Washingt hethods" Document number SW 846. 3rd E ecome available. able - Maximum total contaminant ot suitable for final capping) Contaminant Arsenic (total) Beryllium	Identified For the procedure mention on DC (2008) "Test methods for eval         Edition or more recent editions or su         Ievels in soils used as cover r         Maximum total contaminant levels         200         40	naterial (note: this material is
Allowable leaching levels to be determined nvironment and Science (EPA), Washingt ethods" Document number SW 846. 3rd E acome available. able - Maximum total contaminant ot suitable for final capping) Contaminant Arsenic (total) Beryllium Cadmium	Identified For the formation of DC (2008) "Test methods for eval         Edition or more recent editions or su         Ievels in soils used as cover r         Maximum total contaminant levels         200         40         40	naterial (note: this material is
Allowable leaching levels to be determined nvironment and Science (EPA), Washingt ethods" Document number SW 846. 3rd E ecome available. able - Maximum total contaminant ot suitable for final capping) Contaminant Arsenic (total) Beryllium Cadmium Chromium (iii)	Identified For the formation on DC (2008) "Test methods for eval         Edition or more recent editions or su         Ievels in soils used as cover r         Maximum total contaminant levels         200         40         240,000	naterial (note: this material is
Allowable leaching levels to be determined nvironment and Science (EPA), Washingt ethods" Document number SW 846. 3rd E ecome available. able - Maximum total contaminant ot suitable for final capping) Contaminant Arsenic (total) Beryllium Cadmium Chromium (iii) Chromium (vi)	In the form of the fore	naterial (note: this material is
Allowable leaching levels to be determined nvironment and Science (EPA), Washingt hethods" Document number SW 846. 3rd E ecome available. able - Maximum total contaminant ot suitable for final capping) Contaminant Arsenic (total) Beryllium Cadmium Chromium (iii) Chromium (vi) Copper	Busing the TCLP procedule mention on DC (2008) "Test methods for eval Edition or more recent editions or su         levels in soils used as cover r         Maximum total contaminant levels         200         40         240,000         200         2,000	naterial (note: this material is in soils used as cover material (mg/kg)



	Manganese		3,000
	Mercury (inorganic)		30
	Methyl Mercury		20
	Nickel		600
	Zinc		14,000
	PFOS (Perfluoro-octa	ne sulfonate)	6
	PFOA (Perfluoro-octa	noic acid)	16
	Total fluorinated orgar	nic compounds	10 (not including PFOS & PFOA)
W2.3	Notwithstanding an not be received at t 1. liquescent was 2. untreated <b>infec</b>	y other conditior the <b>authorised  </b> te streams or an c <b>tious</b> and chem	n of this environmental authority, the following wastes must <b>place</b> ; ny waste capable of yielding <b>free liquids</b> ; nical <b>wastes</b> and <b>liquid</b> pharmaceuticals from <b>clinical</b> and
	<ul> <li>related waste streams;</li> <li>cytotoxic wastes;</li> <li>untreated sharps;</li> <li>S8 pharmaceuticals;</li> <li>radioactive wastes, unless otherwise approved under the <i>Radiation Safety Act 1999</i>;</li> <li>pyrophoric wastes (where co-disposed with other potentially combustible material);</li> <li>explosives and ammunition, pyrotechnics or propellants, apart from trace residues no longer capable of supporting combustion or an explosive reaction.</li> </ul>		erwise approved under the <i>Radiation Safety Act 1999</i> ; isposed with other potentially combustible material); rotechnics or propellants, apart from trace residues no ombustion or an explosive reaction.
W2.4	Wastes that exhibit	any of the haza	and characteristics listed in <i>Table W2.4 - Waste Hazard</i>
		Table W2	.4 - Waste Hazard Characteristics
	Hazard Characteristic		Description of The Hazard Characteristic
	Ignitability Friction, absorption standard temper		<b>stes</b> that are capable of causing a fire when ignited through tion of moisture, or spontaneous chemical changes under erature and pressure.
	Corrosivity	Regulated was or greater	stes which on dissolution exhibit a pH of 2 or less, or 12.5
		Regulated was	stes if they have any of the following properties:
	Reactivity	<ul> <li>react violer</li> <li>form poten disposed w</li> <li>generate to or the envi</li> </ul>	ntly with water; tially explosive mixtures with water; and or other co- vastes; oxic gases, vapours, of fumes dangerous to human health ronment when mixed with water, and or other co-disposed
		<ul> <li>wastes;</li> <li>contain sul exposed to</li> </ul>	bstance which generate toxic gases vapours or fumes when o pH conditions between 2 and 12.5; and/or



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		<ul> <li>are capable of detonation or explosive reaction when subjected to a strong initiating source or if heated under confinement; and/or</li> <li>are readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.</li> </ul>
	Radioactivity	<b>Regulated wastes</b> containing radioactive substances unless disposal is specifically authorised under the <i>Radiation Safety Act 1999</i> .
W2.5	Keep and maintain <b>records</b> of the source, quantities and composition of all waste types received at the <b>authorised place</b> .	
W2.6	Waste must not be burned at the authorised place.	
W2.7	A maximum quantity of 499 tyres (or equivalent passenger units) may be temporarily stored at the <b>authorised place</b> in aboveground heaps.	
W2.8	Where there is more than one heap of waste tyres a separation distance between the heaps or other methods must be established and maintained so as to effectively prevent fire from spreading	
	2. to other waste	stored or disposed of at the licensed place.
W2.9	Deposited waste m prevent exposure c	ust be covered as soon as practicable to limit stormwater infiltration, f waste and prevent issues from vectors and pest species.
W2.10	Every lift of waste in the active waste disposal cell must be evenly and properly consolidated and compacted by sufficient passes of mechanical plant of an appropriate weight and type. This must be completed as soon as practicable after the waste is deposited. A waste <b>compaction</b> density of at least 700 kilograms per cubic metre must be achieved.	
W2.11	A monitoring progra to demonstrate con	am must be developed and implemented to collect and record sufficient data npliance with the waste <b>compaction</b> density standard in condition W2.10.
W2.12	Asbestos must be t buried at least two	emporarily covered immediately upon receipt delivery to the landfill and be metres below the landfill surface upon cessation of the day's activities.

#### Schedule 2 (b): Hervey Range Waste Facility Site Specific Conditions

ERA	Location
ERA 60 Waste disposal $(2)(f)$ operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection $(1)(b)$ — more than 50,000t but not more than 100,000t.	<b>Hervey Range Waste Facility</b> Hervey Range Road, Alice River QLD 4817 - Lot 51 Plan EP812267
ERA 62 Resource recovery and transfer facility operation (1)(b) operating a facility for receiving and sorting, dismantling, baling or temporarily storing— general waste.	
ERA 62 Resource recovery and transfer facility operation (1)(c) operating a facility for receiving	

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, in the second se			
			AAAA

and sorting, dismantling, baling or temporarily	
storing— category 2 regulated waste.	

The environmentally relevant activities conducted at the locations as described above must be conducted in accordance with the following site specific conditions of approval.

Agency interest: General			
Condition	Condition		
number			
G3.1	A Site Development Plan (SDP) must be developed and implemented for a five (5) year operating period. The SDP must be reviewed and updated each year to cover the subsequent five years development for the landfill and must include details of at least the following:		
	<ol> <li>an accurate survey of the landfill site including levels and contours of the waste storage and disposal areas and the location and dimensions of these areas; and</li> <li>the design and construction standards for each waste disposal cell including details of the</li> </ol>		
	liner system for the base and walls of the cell, intermediate cover system and the final capping system; and		
	3. a description of the stormwater collection and management system including details of the design and construction standards for stormwater diversion, collection, storage and disposal infrastructure; and		
	<ol> <li>a description of the leachate collection and management system including details of the design and construction standards for leachate collection, storage and disposal infrastructure: and</li> </ol>		
	5. a description of the landfill gas collection and management system including details of the design and construction standards for landfill gas extraction, reuse and disposal infrastructure; and		
	6. a description of the progressive development of the landfill over the time period covered by the plan including details of how stormwater, <b>leachate</b> and landfill gas collection and management systems will be developed as new disposal cells are constructed and completed cells are stabilised and rehabilitated; and		
	<ol> <li>a description of the rehabilitation plan for the landfill including details of the final surface levels and profiles of completed cells and the how these ceils will be progressively covered, capped, stabilised, drained and vegetated.</li> </ol>		
Agency inte	erest: Air		
Condition	Condition		
number			
A3.1	A landfill gas management plan must be developed and implemented. The plan must outline actions and timeframes to achieve the following:		
	<ol> <li>minimise emissions of landfill gas to the atmosphere; and</li> <li>monitor and minimise the sub-surface migration of the landfill gas to adjacent areas; and</li> <li>maximise the beneficial re-use of landfill gas; and</li> <li>minimise the risk of people being exposed to landfill gas and it reaching concentrations</li> </ol>		

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	5. monitoring landfill gas to identify potential volumes, flow rates and composition and concentrations of constituent gases.		
A3.2	Any contract with a third party engaged to beneficially use landfill gas must include a clause requiring the third party to take all reasonable and necessary actions to prevent non-compliance with any relevant conditions of this environmental authority.		
A3.3	The following materials must not be used for dust suppression purposes:		
	<ol> <li>leachate or landfill gas condensate;</li> <li>waste oil or other hydrocarbons.</li> </ol>		
Agency int	erest: Water		
Condition number	Condition		
WT3.1	All liner system must be installed and maintained to:		
	<ol> <li>prevent release of contaminants, including leachate, to land and waters; and</li> <li>prevent subsurface migration of landfill gas from the landfill unit.</li> </ol>		
WT3.2	All ponds used for the storage of contaminants and wastes must designed, constructed, maintained and managed so that:		
	<ol> <li>the likelihood of any release through the base and walls of the pond is minimised; and</li> <li>the integrity and stability of the pond is maintained.</li> </ol>		
WT3.3	Any new waste disposal cell and/or pond used for the storage and/or treatment of contaminants and wastes must be designed by a suitably qualified person and certified by a Registered Professional Engineer of Queensland to confirm the ceil and/or pond has been designed in accordance with the standards prescribed in this environmental authority.		
WT3.4	Within three months of the date of the completion of any new waste disposal cell and/or pond, a report from a Registered Professional Engineer of Queensland must be submitted to the <b>administering authority</b> certifying that the works (including any other associated works) have been constructed in accordance with the design as certified in condition WT2.3 and that the <b>works</b> are structurally adequate for the anticipated use.		
WT3.5	All reasonable and practical <b>measures</b> must be taken to minimise the generation of leachate.		
WT3.6	A <b>leachate</b> collection system must be designed by an <b>appropriately qualified person</b> and installed and maintained to:		
	<ol> <li>collect leachate generated in the landfill unit; and</li> <li>convey the collected leachate out of the landfill unit to an appropriate leachate storage facility; and</li> <li>restrict the height of the leachate above the landfill cell liner over the uppermost layer in the lining system to a maximum level of:         <ul> <li>(i) 500mm in cells constructed before 1 January 2015; and</li> <li>(ii) 300mm in cells constructed after 1 January 2015.</li> </ul> </li> </ol>		
WT3.7	By 1 December of each year <b>leachate</b> ponds must have sufficient available storage capacity to fully contain the total potential volume of <b>leachate</b> generated for the next 12 months.		



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WT3.8	<b>Leachate</b> and stormwater runoff which has been in contact with waste materials in the <b>landfill unit</b> , must be collected in the <b>leachate</b> storage facility and be:			
	<ol> <li>discharge to sewer, with or without pre-treatment in accordance with a Trade Waste Agreement; or</li> <li>managed by evaporation; or</li> <li>recirculated through waste disposed in the <b>landfill unit</b>: or</li> </ol>			
	4. treated by alternative technologies agreed b	y the administering authority for offsite		
	disposal, discharge, or on-site reuse; or disposed of at a facility that is approved to receive such waste			
WT3 9	5. disposed of at a facility that is approved to feceive such waste.			
	storm event with an average recurrence interval of 1 in 10 years must be retained on site or managed to remove contaminants before release.			
WT3.10	The depth of <b>leachate</b> in the waste cells and storage ponds must be monitored and recorded and <b>measures</b> must be undertaken to remove <b>leachate</b> from the waste cell and storage ponds as often as necessary to achieve compliance with the conditions of this environmental authority.			
WT3.11	Prior to a " <b>controlled release event</b> " and as soon as practicable in the event of an " <b>uncontrolled release</b> " of any stormwater from a pond at the <b>authorised place</b> , samples of the stormwater must be taken and analysed for a least the characteristics listed in <i>Table WT3.11</i> - <i>Stormwater Quality Monitoring</i> .			
	Table WT3.11 - Stormwater Quality Monitoring			
	Quality Characteristic         Monitoring Frequency			
	рН			
	Electrical Conductivity			
	Dissolved Oxygen			
	Temperature			
	Chloride			
	Sodium			
	Ammonia	Event-based monitoring: prior to release of		
	Nitrate	any stormwater form the site, as per		
	Zinc	condition VV13.11		
	Iron (dissolved)			
	Manganese			
	Total Organic Carbon			
	Total Organic Halogen			
	Biochemical Oxygen Demand			
	Associated monitoring requirements			

	1. Monitoring must be in accordance with the methods prescribed in the current edition of the administering authority's <i>Water Quality Sampling Manual</i> .		
WT3.12	The date, duration, estimated volume and quality characteristics of every stormwater release event must be recorded and the details made available to the <b>administering authority</b> upon request.		
WT3.13	Groundwater Monitoring Program must be designed for the <b>authorised place</b> by a person with appropriate qualifications and experience in the fields of hydrogeology and groundwater monitoring program design. The monitoring program must be able to determine whether or not there has been any statistically significant adverse change to ground water quality compared to background values at locations hydraulically down-gradient of the landfill.		
WT3.14	Groundwater quality must be monitored and <b>records</b> retained. All determinations of groundwater quality must be:		
	1. made in accordance with methods prescribed in the <i>Water Quality Sampling Manual</i> and the Australian Standard AS/NZS 5667.11 <i>Water Quality Sampling: Guidance on sampling groundwaters,</i> or more recent additions or supplements to these documents as such become available:		
	<ol> <li>carried out by a person or body possessing appropriate experience and qualifications to perform the required monitoring:</li> </ol>		
	<ol> <li>conducted for the water quality characteristics and at the frequency specified in <i>Table</i></li> <li>WT2 14 - Groundwater Quality Monitoring - Indicators and Frequency</li> </ol>		
	<ol> <li>taken form sufficient monitoring bores to obtain representative samples of groundwater both up gradient and down gradient of the potential influence of the longfill;</li> </ol>		
	<ol> <li>carried out with sufficient frequency and spatial and temporal replication to make statistically valid conclusions about the presence or absence of a release of contaminants from the landfill;</li> <li>carried out with sufficient number of sampling events to determine ambient water quality and natural variability of water quality;</li> <li>followed by an annual assessment of whether or not there has been any statistically significant adverse change to groundwater quality compared to background values at locations hydraulically down-gradient of the landfill for each of the quality characteristics in <i>Table WT2.14 - Groundwater Quality Monitoring - Indicators and Frequency.</i></li> </ol>		
	Table WT2.14 - Groundwater Quality Monitoring - Indicators an	d Frequency	
	Quality Characteristic	Monitoring Frequency	
	рН		
	Electrical Conductivity         Dissolved Oxygen         Temperature		
	Major Ions (carbonate, bicarbonate, sulphate, chloride, nitrate, calcium, magnesium, sodium and potassium)		


	Heavy Metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, molybdenum, nickel, silver, tin, titanium, zinc)		
	Total Petroleum Hydrocarbons		
	Total Organochlorines		
	Total Organophosphates		
	Ammonia		
	Total Kieldahl Nitrogen		
	Biochemical Oxygen Demand		
	Associated monitoring requirements		
	Monitoring must be in accordance with the methods prescribed in the current edition of the administering authority's <i>Water Quality Sampling Manual</i> .		
WT3.15	Groundwater monitoring bores must be fitted with a lockable cap which must be locked at all times other than at the time of sampling.		
Agency inte	erest: Noise		
Condition	Condition		
number			
N3.1	When requested by the <b>administering authority</b> , noise monitoring must be undertaken to investigate any compliant of <b>environmental nuisance</b> (noise). The results are to be provided to the <b>administering authority</b> within fourteen (14) days. Monitoring must include but not be limited to the following:		
	1. L <sub>A Max adj, T</sub> ;		
	<ol> <li>background Noise Levels;</li> <li>the level and frequency of occurrence of impulsive or tonal noise: atmospheric conditions</li> </ol>		
	including wind speed and direction; effects due to extraneous factors such as traffic noise;		
	and 1 location data and time of recording		
Agency inte	erest: Land		
Condition	Condition		
number	When the deposition of waste to the landfill unit ceases, a final canning system to the landfill		
L3.1	unit must be designed by an appropriately qualified person and installed to minimise:		
	<ol> <li>infiltration of water into the <b>landfill unit</b> and water ponding on the surface; and</li> <li>the likelihood of any erosion occurring to either the final <b>capping</b> system or the landfilled materials.</li> </ol>		
	A final <b>capping</b> system is not required where the deposition of waste to a landfill unit ceases temporarily for the purpose of using an alternative working face.		



100	I and that has been disturbed for a striction and stated under this and incompared at the site and
L3.2	be rehabilitated in a manner such that
	1. suitable species of vegetation for the location are established and sustained for earthen surfaces:
	2 potential for erosion is minimised
	<ol> <li>the quality of water, including seepage, released from the site does not cause environmental harm:</li> </ol>
	4. potential for <b>environmental nuisance</b> caused by dust is minimised:
	5. the water quality of any residual water body does not have potential to cause
	environmental harm;
	6. the final landform is stable and protects public safety;
	7. the contaminant concentrations within the final <b>capping</b> layer are appropriate for the final
	land use and in accordance with the 'National Environmental Protection (Assessment of Soil
	Contamination) Measure 1999'.
L3.3	Following cessation of deposition of waste in the <b>landfill unit</b> , post-closure care of the <b>landfill unit</b> must be conducted for a period of 30 years or until the <b>administering authority</b> determines, on the basis of correct information, that the <b>landfill unit</b> and surrounding site are stable and that no release of waste materials, <b>leachate</b> , landfill gas or other contaminants that may cause <b>environmental harm</b> is likely.
L3.4	The program of post-closure care implemented must be effective in preventing and/or
	minimising the likelihood of environmental harm being caused. The program must include
	measures to:
	1. maintain the structural integrity and effectiveness of the final <b>capping</b> system;
	2. maintain and operate the leachate collection system;
	3. maintain the groundwater monitoring system and monitor quality of groundwater at a
	frequency sufficient to detect any release of contaminants to groundwater;
	4. maintain and operate the landfill gas monitoring system; and
	5. maintain and operate the landfill gas collection system.
L3.5	A Closure and Post-Closure Care and Maintenance Plan must be submitted to the administering authority at least 12 months before the final receipt of waste into the landfill. The plan must provide details of at least the following matters:
	1. the proposed post-closure land use;
	2. the final surface contours (making allowances for landfill subsidence);
	3. the design of the final cover and capping system;
	4. the design of the final surface drainage;
	5. the design of the leachate management system;
	6. the revegetation program;
	7. the environmental monitoring system;
	8. the procedures including an inspection program for the on-going care and maintenance of
	a on-going day monitoring and extraction
Agency int	erest: Waste



Condition	Condition				
number					
W3.1	General and regulated waste may be accepted for disposal at the authorised place provided compliance is achieved with all other relevant conditions of this environmental authority.				
	Notes:				
	<ul> <li>(i) wet cell batteries and waste oil may be accepted and stored at the licensed place for recycling</li> <li>(ii) drums containing any residual regulated waste are a regulated waste unless effectively cleaned.</li> </ul>				
W3.2	Regulated wastes interred at the authorised place must not have a total contaminant concentration or toxicity characteristic leaching procedure (TCLP) leach test concentration that exceeds the values in <i>Table W3.2 - Waste Acceptance Criteria - Lined Waste Disposal Cells</i> .				
	Table W3.2 - Waste Acceptance Criteria - Lined Waste Disposal Cells				
	Contaminant	Maximum contaminant concentration in solid waste (mg/kg)	Maximum contaminant leaching level (mg/L)		
	Antimony	-	5.0		
	Arsenic	-	5.0		
	Barium	-	100.0		
	Cadmium	-	0.5		
	Chromium	-	5.0		
	Cobalt	-	5.0		
	Copper	-	100.0		
	Lead	-	5.0		
	Mercury	-	0.1		
	Molybdenum	-	1.0		
	Nickel	-	5.0		
	Selenium	-	1.0		
	Silver	-	5.0		
	Thallium	-	1.0		
	Tin	-	3.0		
	Vanadium	-	5.0		
	Zinc	-	500.0		
	Bromide	-	50.0		
	Chloride	-	6000		
	Cyanide (total)	-	5.0		
	Fluoride	-	150.0		



Sulphate	-	4000
Nitrate	-	1000
Total organic carbon	-	10000
Benzene	20	1.0
Ethyl Benzene	1000	50.0
Toluene	600	30.0
Xylene	500	20.0
Total Monocyclic aromatic hydrocarbons	1000	50.0
Anthracene	-	0.7
Benz (a) Anthracene	-	0.05
Benz (c) phenanthrene	-	0.05
Benzo (a) pyrene	-	0.02
Benzo (b) fluororanthene	-	0.05
Benzo (k) fluororanthene	-	0.05
Chrysene	-	0.1
Dibenz (a,h) anthracene)	-	0.02
Dibenz (a,h) pyrene	-	0.1
Dimethylbenz (a) anthracene	-	0.05
Fluoranthene	-	0.2
Indeno (1,2,3-cd) pyrene	-	0.1
Napthalene	-	0.7
Phenanthrene	-	0.1
Pyrene	-	0.7
Total polycyclic aromatic hydrocarbons (PAH)	1000	1.0
Phenol	250	10.0
m-cresol	500	20.0
o-cresol	500	20.0
p-cresol	500	20.0
Total non-halogenated phenol	500	-
Chlorophenol	5	0.1
Trichlorophenol	20	1.0
Pentachlorophenol	20	1.0
Total halogenated phenol	20	-

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Carbon tetrachloride	10	0.3
1,2 Dichloroethane	20	1.0
1,1 Dichloroethane	1	0.03
Tetrachloroethene	20	1.0
Trichloroethene	25	3.0
Total chlorinated aliphatic compounds	50	-
Chlorobenzene	200	10.0
Hexachlorobenzene	1	0.02
Total chlorinated aromatic compounds	200	-
Aldrin	-	0.01
Chlordane	-	0.06
Chlorphrifos	-	0.03
Dieldrin	-	0.01
DDT	-	0.03
Endrin	-	0.01
Heptachlor	-	0.03
Lindane	-	1.0
Methoxychlor	-	1.0
Toxaphene	-	0.05
Total organochlorine pesticides	10	-
2,4-D	-	1.0
2,4-DB	-	2.0
MCPA	-	2.0
2,4,5-T	-	0.02
Total herbicides	50	-
Carbaryl	-	0.6
Carbofuran	-	0.3
Total carbamate pesticides	50	-
Diazinon	-	0.1
Parathion	-	0.3
Methyl Parathion	-	0.06
Total organophosphorus pesticides	10	-
Atrazine	-	0.03



	Simazine		-	0.03	
	Total Petroleum Hy	drocarbons (C6-C9)	1000	-	
	Total Petroleum Hy	drocarbons (C10-C14)	10000	-	
	Total Petroleum Hy	drocarbons (C15-C28)	10000	-	
	Total Petroleum Hy	drocarbons (C <sub>28</sub> -C <sub>36</sub> )	50000	-	
	Total Petroleum Hy	drocarbons	-	50	
	PFOS (Perfluoro-oc	tane sulfonate)	6	-	
	PFOA (Perfluoro-oc	tanoic acid)	16	-	
	Total fluorinated org	anic compounds	-	0.05	
W3.3	The quantity of <b>limited regulated</b> waste that Is disposed of at the facility is to be no more than 10% of the total amount of waste received at the facility in a year. Limited <b>regulated waste</b> is defined in the <b>administering authority's</b> <i>Environmental Protection</i>			the facility is to be no more than ear. hority's Environmental Protection	
W3.4	Notwithstanding an not be received at t	y other condition of t he authorised place:	his environmental auth	ority, the following wastes must	
	<ol> <li>liquescent waste streams or any waste capable of yielding free liquids;</li> <li>untreated infectious and chemical wastes and liquid pharmaceuticals from clinical and related waste streams;</li> <li>cytotoxic wastes;</li> <li>untreated sharps;</li> <li>S8 pharmaceuticals;</li> <li>radioactive wastes, unless otherwise approved under the <i>Radiation Safety Act 1999</i>;</li> <li>pyrophoric wastes (where co-disposed with other potentially combustible material);</li> <li>explosives and ammunition, pyrotechnics or propellants, apart from trace residues no longer capable of supporting combustion or an explosive reaction.</li> </ol>				
W3.5	Wastes that exhibit any of the hazard characteristics listed in <i>Table W3.5 - Waste Hazard Characteristics</i> must not be received at the authorised place:			Table W3.5 - Waste Hazard	
		I able W3.5 - \	Waste Hazard Charac	teristics	
	Hazard Characteristic	Des	cription of The Haza	rd Characteristic	
	Ignitability Regulated wastes that are capable of causing a fire when ignited friction, absorption of moisture, or spontaneous chemical changes standard temperature and pressure.				
	Corrosivity Regulated wastes which on dissolution exhibit a pH of 2 or less, or greater				
	Reactivity	<ul> <li>Regulated wastes</li> <li>react violently v</li> <li>form potentially disposed waster</li> </ul>	if they have any of the vith water; explosive mixtures wit s;	following properties: th water; and or other co-	



	Bodiosetivity	<ul> <li>generate toxic gases, vapours, of fumes dangerous to human health or the environment when mixed with water, and or other co-disposed wastes;</li> <li>contain substance which generate toxic gases vapours or fumes when exposed to pH conditions between 2 and 12.5; and/or</li> <li>are capable of detonation or explosive reaction when subjected to a strong initiating source or if heated under confinement; and/or</li> <li>are readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.</li> </ul>		
	Radioactivity	specifically authorised under the Radiation Safety Act 1999.		
W3.6	Keep and maintain <b>records</b> of the source, quantities and composition of all waste types received at the <b>authorised place</b> .			
W3.7	Waste must not be	burned at the <b>authorised place</b> .		
W3.8	A maximum quantity of 499 tyres (or equivalent passenger units) may be temporarily stored at the <b>authorised place</b> in aboveground heaps.			
W3.9	Where there Is more than one heap of waste tyres a separation distance between the heaps or other methods must be established and maintained so as to effectively prevent fire from spreading:			
	<ol> <li>From one tyre storage heap to another;</li> <li>To other waste stored or disposed of at the licensed place.</li> </ol>			
W3.10	Deposited waste must be covered as soon as practicable to limit stormwater infiltration, prevent exposure of waste and prevent issues arising from vectors and pest species.			
W3.11	Every lift of waste in the active waste disposal cell must be evenly and properly consolidated and compacted by sufficient passes of mechanical plant of an appropriate weight and type. This must be completed as soon as practicable after the waste is deposited. A waste <b>compaction</b> density of at least 700 kilograms per cubic metre must be achieved.			
W3.12	A monitoring program must be developed and implemented to collect and record sufficient data to demonstrate compliance with the waste <b>compaction</b> density standard in condition W3.11.			
W3.13	Asbestos must be t buried at least two	emporarily covered immediately upon receipt delivery to the landfill and be metres below the landfill surface upon cessation of the day's activities.		

## Schedule 2 (c): Jensen Landfill Site Specific Conditions

ERA	Location
ERA 60 Waste disposal $(2)(f)$ operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection $(1)(b)$ — more than 50,000t but not more than 100,000t.	<b>Jensen Landfill</b> Jensen Road, Deeragun QLD 4818 - Lot 44 Plan EP1017



The environmentally relevant activities conducted at the locations as described above must be conducted in accordance with the following site specific conditions of approval.

Agency inte	erest: General			
Condition	Condition			
number				
G4.1	A Site Development Plan (SDP) must be developed and implemented for a five (5) year operating period. The SDP must be reviewed and updated each year to cover the subsequent five years development for the landfill and must include details of at least the following:			
	<ol> <li>an accurate survey of the landfill site including levels and contours of the waste storage and disposal areas and the location and dimensions of these areas; and</li> <li>the design and construction standard for each waste disposal cell including details of the liner system for the base and walls of the cell, intermediate cover system and final capping system; and</li> <li>a description of the stormwater collection and management system including details of the design and construction standards for stormwater diversion, collection, storage and disposal infrastructure; and</li> <li>a description of the leachate collection and management system including details of the design and construction standard for leachate collection, storage and disposal infrastructure; and</li> <li>a description of the landfill gas collection and management system including details of the design and construction standard for leachate collection, storage and disposal infrastructure; and</li> <li>a description of the landfill gas collection and management system including details of the design and construction standards for leachate collection, storage and disposal infrastructure; and</li> <li>a description of the landfill gas collection and management system including details of the design and construction standards for landfill gas extraction, rese and disposal infrastructure; and</li> </ol>			
	<ul> <li>the plan including details of how stormwater, <b>leachate</b> and landfill gas collection and management systems will be developed as new disposal cells are constructed and completed cells are stabilised and rehabilitated; and</li> <li>a description of the rehabilitation plan for the landfill including details of the final surface levels and profiles of completed cells and the how these cells will be progressively covered, capped, stabilised, drained and vegetated.</li> </ul>			
Agency inte	erest: Air			
Condition number	Condition			
A4.1	A landfill gas management plan must be developed and implemented. The plan must outline actions and timeframes to achieve the following:			
	<ol> <li>mimimise emissions of landfill gas to the atmosphere; and</li> <li>monitor and minimise the sub-surface migration of the landfill gas to adjacent areas; and</li> <li>maximise the beneficial reuse of landfill gas; and</li> <li>minimise the risk of people being exposed to landfill gas and it reaching concentrations where there is a risk of combustion; and</li> <li>monitoring landfill gas to identify potential volumes, flow rates and composition and concentrations of constituent gases.</li> </ol>			



A4.2	Any contract with a third party engaged to beneficially use landfill gas must include a clause requiring the third party to take all reasonable and necessary actions to prevent non-compliance with any relevant conditions of this environmental authority.
A4.3	The following materials must not be used for dust suppression purposes:
	<ol> <li>leachate or landfill gas condensate;</li> <li>waste oil or other hydrocarbons.</li> </ol>
Agency inte	erest: Water
Condition	Condition
number	
VVI4.1	A liner system must be installed and maintained to:
	<ol> <li>prevent release of contaminants, including leachate, to land and waters; and</li> <li>prevent subsurface migration of landfill gas from the landfill unit.</li> </ol>
WT4.2	All structures used for the storage of contaminants and wastes must be designed, constructed, maintained and managed so that:
	<ol> <li>the likelihood of any release through the base and wails of the pond is minimised;</li> <li>the integrity and stability of the pond is maintained.</li> </ol>
WT4.3	Any new waste disposal cell and/or pond used for the storage and/or treatment of contaminants and wastes must be designed by a suitably qualified person and certified by a Registered Professional Engineer of Queensland to confirm the cell and/or pond has been designed in accordance with the standards prescribed in this environmental authority.
WT4.4	Within three months of the date of the completion of any new waste disposal cell and/or pond, a report from a Registered Professional Engineer of Queensland must be submitted to the <b>administering authority</b> certifying that the <b>works</b> (including any other associated <b>works</b> ) have been constructed in accordance with the design as certified in condition WT4.3 and that the works are structurally adequate for the anticipated use.
WT4.5	All reasonable and practical measures must be taken to minimise the generation of leachate.
WT4.6	A <b>leachate</b> collection system must be designed by an <b>appropriately qualified person</b> and installed and maintained to:
	<ol> <li>collect leachate generated in the landfill unit;</li> <li>convey the collected leachate out of the landfill unit to an appropriate leachate storage facility; and</li> <li>restrict the height of the leachate above the landfill cell liner over the uppermost layer in the lining system to a maximum level of:         <ol> <li>500mm in cells constructed before 1 January 2015, and</li> <li>300mm in cells constructed after 1 January 2015.</li> </ol> </li> </ol>
WT4.7	By 1 December of each year <b>leachate</b> ponds must have sufficient available storage capacity to I fully contain the total potential volume of <b>leachate</b> generated for the next 12 months.
WT4.8	The stormwater runoff from disturbed areas, generated by (up to and including) a <b>24 hour</b> storm event with an average recurrence interval of <b>1</b> in <b>10</b> years must be retained on site or managed to remove contaminants before release.



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WT4.9	The depth of <b>leachate</b> in the waste cells and storage ponds must be monitored and recorded and <b>measures</b> must be undertaken to remove <b>leachate</b> from the waste cell and storage ponds as often as necessary to achieve compliance with the conditions of this environmental authority.				
WT4.10	<b>Leachate</b> and stormwater runoff which has been in contact with waste materials in the <b>landfill unit</b> , must be collected in the <b>leachate</b> storage facility and be:				
	<ol> <li>discharged to sewer, with or without pre-treatment, in accordance with a Trade Waste Agreement; or</li> <li>managed by evaporation; or</li> <li>recirculated through waste disposed in the landfill unit; or</li> <li>treated by alternative technologies agreed by the administering authority for offsite disposal, discharge, or on-site reuse; or</li> <li>disposed of at a facility that is approved to receive such waste.</li> </ol>				
WT4.11	Prior to a " <b>controlled release event</b> " and as soon as practicable in the event of an " <b>uncontrolled release</b> " of any stormwater from a pond at the <b>authorised place</b> , samples of the stormwater must be taken and analysed for at least the characteristics listed in <i>Table WT4.11</i> - <i>Stormwater and Surface Water Quality Monitoring</i> .				
	Table WT4.11 - Stormwater and S	Surface Water Quality Monitoring			
	Quality Characteristic	Monitoring Frequency			
	pH				
	Electrical Conductivity				
	Dissolved Oxygen				
	Temperature				
	Chloride				
	Sodium	Event-based monitoring:			
	Ammonia	1. prior to release of any stormwater from			
	Nitrate	the site, as per condition WT4.11; and			
	Zinc	2. when there is surface water in Stoney			
	Iron (dissolved)	Creek, as per condition w14.12			
	Manganese				
	Total Organic Carbon				
	Total Organic Halogen				
	Biochemical Oxygen Demand	1			
	Suspended Solids				
	Associated monitoring requirements				
	1. Monitoring must be in accordance with the methods prescribed in the current edition of the administering authority's <i>Water Quality Sampling Manual</i> .				

WT4.12	A surface water quality monitoring program must be designed and implemented whether releases of contaminants from the <b>authorised place</b> are causing adve the water quality of Stoney Creek. All determinations of water quality must be:	d to determine erse impacts to	
	<ol> <li>taken from sufficient monitoring locations to obtain representative samples both up-gradient and down-gradient of the potential influence of the landfill;</li> <li>carried out with sufficient frequency and spatial and temporal replication to valid conclusions about the presence or absence of a release of contamina landfill.</li> </ol>	of surface water and make statistically nts from the	
WT4.13	Monitoring must be conducted and <b>records</b> kept of the water quality in Stoney water quality characteristics and at the frequency specified in <i>Table WT4.11 - S Surface Water Quality Monitoring.</i>	Creek for the Stormwater and	
WT4.14	The date, duration, estimated volume and quality characteristics of every stormwater release event must be recorded and the details made available to the <b>administering authority</b> upon request.		
WT4.15	Groundwater Monitoring Program must be designed for the <b>authorised place</b> is appropriate qualifications and experience in the fields of hydrogeology and grou monitoring program design. The monitoring program must be able to determine there has been any statistically significant adverse change to ground water qua background values at locations hydraulically down-gradient of the landfill.	by a person with undwater whether or not lity compared to	
WT4.16	Groundwater quality must be monitored and <b>records</b> retained. All determinations of groundwater quality must be:		
	<ol> <li>made in accordance with methods prescribed in the Water Quality Sampling the Australian Standard AS/NZS 5667.11 Water Quality Sampling: Guidance groundwaters, or more recent additions or supplements to these documents become available;</li> </ol>	i <b>ng Manual</b> and ce on sampling s as such	
	<ol> <li>carried out by a person or body possessing appropriate experience and quiperform the required monitoring;</li> <li>conducted for the water quality characteristics and at the frequency specific</li> </ol>	alifications to	
	<ul> <li>4. taken from sufficient monitoring bores to obtain representative samples of g</li> </ul>	groundwater both	
	<ul> <li>up-gradient and down-gradient of the potential influence of the landfill;</li> <li>carried out with sufficient frequency and spatial and temporal replication to valid conclusions about the presence or absence of a release of contamina landfill;</li> </ul>	make statistically nts from the	
	6. carried out with sufficient number of sampling events to determine ambient and natural variability of water quality;	water quality	
	7. followed by an annual assessment of whether or not there has been any sta significant adverse change to ground water quality compared to background locations hydraulically down-gradient of the landfill for each of the quality ch Table WT4.16 - Groundwater Quality Monitoring - Indicators and Frequence	atistically d values at naracteristics in <i>y.</i>	
	Table WT4.16 - Groundwater Quality Monitoring - Indicators and Fi	requency	
	Quality Characteristic	Monitoring Frequency	





	На		
	Electrical Conductivity		
	Dissolved Oxygen		
	Temperature		
	Major Ions (carbonate, bicarbonate, sulphate, chloride, nitrate, calcium, magnesium, sodium and potassium)		
	Heavy Metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, molybdenum, nickel, silver, tin, titanium, zinc)	Quarterly	
	Total Petroleum Hydrocarbons		
	Total Organochlorines		
	Total Organophosphates		
	Ammonia		
	Total Kieldahl Nitrogen		
	Biochemical Oxygen Demand		
	Associated monitoring requirements		
	<ol> <li>Monitoring must be in accordance with the methods prescribed in the curre Department of Environment and Science Water Quality Sampling Manual</li> </ol>	ent edition of the al.	
WT4.17	Groundwater monitoring bores must be fitted with a lockable cap which must be locked at all times other than at the time of sampling.		
Agency inte	erest: Noise		
Condition number	Condition		
N4.1	When requested by the <b>administering authority</b> , noise monitoring must be un investigate any complaint of <b>environmental nuisance</b> (noise). The results are administering authority within fourteen (14) days. Monitoring must include but r the following:	ndertaken to to be provided to not be limited to	
	<ol> <li>L<sub>A Max adj, T</sub></li> <li><b>background</b> Noise Levels;</li> <li>the level and frequency of occurrence of impulsive or tonal noise; atmosph including wind speed and direction; effects due to extraneous factors such and</li> <li>location, date and time of recording.</li> </ol>	eric conditions as traffic noise;	





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Agency interest: Land		
Condition	Condition	
number	Willow the demonition of wants to the low difference of final commitments that the low diffe	
L4.1	unit must be designed by an <b>appropriately qualified person</b> and installed to minimise.	
	<ol> <li>infiltration of water into the <b>landfill unit</b> and water ponding on the surface; and</li> <li>the likelihood of any erosion occurring to either the final <b>capping</b> system or the landfilled materials.</li> </ol>	
	A final capping system is not required where the deposition of waste to a <b>landfill unit</b> ceases temporarily for the purpose of using an alternative working face.	
L4.2	<b>Land</b> that has been disturbed for activities conducted under this environmental authority must be rehabilitated in a manner such that:	
	<ol> <li>suitable species of vegetation for the location are established and sustained for earthen surfaces;</li> </ol>	
	<ol> <li>potential for erosion is minimised;</li> <li>the quality of water, including seepage, released from the site does not cause environmental harm;</li> </ol>	
	<ol> <li>potential for environmental nuisance caused by dust is minimised;</li> <li>the water quality of any residual water body does not have potential to cause environmental harm.</li> </ol>	
	6. the final landform is stable and protects public safety;	
	7. the contaminant concentrations within the final <b>capping</b> layer are appropriate for the final land use and in accordance with the <i>'National Environmental Protection (Assessment of Soil Contamination) Measure 1999.'</i>	
L4.3	Following cessation of deposition of waste in the <b>landfill unit</b> , post-closure care of the <b>landfill unit</b> must be conducted for a period of 30 years or until the <b>administering authority</b> determines, on the basis of correct information, that the <b>landfill unit</b> and surrounding <b>site</b> are stable and that no release of waste materials, <b>leachate</b> , landfill gas or other contaminants that may cause <b>environmental harm</b> is likely.	
L4.4	The program of post-closure care implemented must be effective in preventing and/or minimising the likelihood of <b>environmental harm</b> being caused. The program must include <b>measures</b> to:	
	<ol> <li>maintain the structural integrity and effectiveness of the final capping system;</li> <li>maintain and operate the leachate collection system;</li> <li>maintain the groundwater monitoring system and monitor quality of groundwater at a frequency sufficient to detect any release of contaminants to groundwater;</li> <li>maintain and operate the landfill gas monitoring system; and</li> <li>maintain and operate the landfill gas collection system.</li> </ol>	
L4.5	A Closure and Post-Closure Care and Maintenance Plan must be submitted to the administering authority at least 12 months before the final receipt of waste into the landfill. The plan must provide details of at least the following matters:	
	1. the proposed post-closure land use;	

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	<ol> <li>the final surface contours (making allowances for landfill subsidence);</li> <li>the design of the final cover and capping system;</li> <li>the design of the final surface drainage;</li> <li>the design of the leachate management system;</li> <li>the revegetation program;</li> <li>the environmental monitoring system;</li> <li>the procedures including an inspection program for the on-going care and maintenance of the final cover system, vegetation and leachate management system;</li> <li>on-going gas monitoring and extraction.</li> </ol>		
Agency inte	erest: Waste		
Condition number	Condition		
W4.1	<ul> <li>General and regulated waste may be accepted for disposal at the authorised place provided compliance is achieved with all other relevant conditions of this environmental authority.</li> <li>Notes:</li> <li>(i) Wet cell batteries and waste oil may be accepted and stored at the licensed place for recycling.</li> <li>(ii) Drums containing any residual regulated waste are a regulated waste unless effectively cleaned.</li> </ul>		
W4.2	Regulated wastes interred at the authorised place must not have total contaminant concentration or toxicity characteristic leaching procedure (TCLP) leach test concentration that exceeds the values in Table W4.2 - Waste Acceptance Criteria - Lined Waste Disposal Cells.         Table W4.2 - Waste Acceptance Criteria - Lined Waste Disposal Cells		
	Contaminant	concentration in solid waste (mg/kg)	Maximum contaminant leaching level (mg/L)
	Antimony		5.0
	Arsenic		5.0
	Barium		100.0
	Cadmium		0.5
	Chromium		5.0
	Cobalt		5.0
	Copper		100.0
	Lead		5.0
	Mercury		0.1
	Molybdenum		1.0
	Nickel		5.0
	Selenium		1.0
	Silver		5.0



Thallium		1.0
Tin		3.0
Vanadium		5.0
Zinc		500.0
Bromide		50.0
Chloride		6000
Cyanide (total)		5.0
Fluoride		150.0
Sulphate		4000
Nitrate		1000
Total organic carbon		10000
Benzene	20	1.0
Ethyl Benzene	1000	50.0
Toluene	600	30.0
Xylene	500	20.0
Total monocyclic aromatic hydrocarbon	1000	50.0
Anthracene		0.7
Benz (a) anthracene		0.05
Benz (c) phenanthrene		0.05
Benz (a) pyrene		0.02
Benzo (b) fluoranthene		0.05
Benzo (k) fluoranthene		0.05
Chrysene		0.1
Chlorpyrifos		0.03
Dibenz (a,h) anthracene		0.02
Dibenz (a,h) pyrene		0.1
Dimethylbenz (a) anthracene		0.05
Fluoranthene		0.2
Indeno (1,2,3-cd) pyrene		0.1
Napthalene		0.7
Phenanthrene		0.1
Pyrene		0.7



Total polycyclic aromatic hydrocarbon (PAH)	1000	1.0
Phenol	250	10.0
m-cresol	500	20.0
o-cresol	500	20.0
p-cresol	500	20.0
Total non-halogenated phenol	500	
Chlorophenol	5	0.1
Trichlorophenol	20	1.0
Pentachlorophenol	20	1.0
Total halogenated phenol	20	
Carbon tetrachloride	10	3.0
1,2 Dichloroethane	20	1.0
1,1 Dichloroethene	1	0.03
Tetrachloroethene	20	1.0
Trichloroethene	25	3.0
Total chlorinated aliphatic compounds	50	
Chlorobenzene	200	10.0
Hecachlorobenzene	1	0.02
Total chlorinated aromatic compounds	200	
Aldrin		0.01
Chlordane		0.06
Chlorphridos		0.03
Dieldrin		0.01
DDT		0.03
Endrin		0.01
Heptachlor		0.03
Lindane		1.0
Methoxychlor		1.0
Toxaphene		0.05
Total organochlorine pesticides	10	
2,4-D		1.0



	2.4-DB		2.0
			2.0
	245-T		0.02
	Total berbicides	50	0.02
	Carabanyl		0.6
	Carbofuran		0.3
		50	0.5
		50	0.1
	Diazinon		0.1
	Parathion		0.3
	Methyl Parathion		0.06
	Total organophosphorus pesticides	10	
	Atrazine		0.03
	Simazine		0.03
	Total Petroleum Hydrocarbons (C <sub>6</sub> -C <sub>9</sub> )	1000	
	Total Petroleum Hydrocarbons (C10-C14)	10000	
	Total Petroleum Hydrocarbons (C <sub>15</sub> -C <sub>28</sub> )	50000	
	Total Petroleum Hydrocarbons (C <sub>28</sub> -C <sub>36</sub> )	50000	
	Total Petroleum Hydrocarbons		50
	PFOS (Perfluoro-octane sulfonate)	6	
	PFOA (Perfluoro-octanoic acid)	16	
	Total fluorinated organic compounds		0.05
W4.3	The quantity of limited <b>regulate</b> 10% of the total amount of wast	<b>d waste</b> that is disposed of at the received at the facility in a yea	e facility is to be no more than r.
	Limited <b>regulated waste</b> is defined in the <b>administering authority's</b> <i>Environmental Protection Regulation 2019.</i>		
W4.4	Notwithstanding any other condination not be received at the <b>authorise</b>	ition of this environmental author ed place:	ity, the following wastes must
	<ol> <li>liquescent waste streams or</li> <li>untreated infectious and ch related waste streams;</li> </ol>	any waste capable of yielding finemical <b>wastes</b> and liquid pharm	ree liquids; naceuticals from clinical and



. cytotoxic wastes;	
 . untreated sharps;	
 . S8 pharmaceuticals;	
. radioactive wastes, unless otherwise approved under the Radiation Safety Act 1999;	
 . pyrophoric wastes (where co-disposed with other potentially combustible materials);	
. explosives and ammunition, pyrotechnics or propellants, apart from trace residues no longer capable of supporting combustion or an explosive reaction.	

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	Characteristics must not be	Characteristics must not be received at the authorised place. Table W4.5 - Waste Hazard Characteristics		
	Hazard Characteristic	Description Of The Hazard Characteristic		
	Ignitability	<b>Regulated wastes</b> that are capable of causing a fire when ignited through friction, absorption of moisture, or spontaneous chemical changes under standard temperature and pressure		
	Corrosivity	<b>Regulated wastes</b> which on dissolution exhibit a pH of 2 or less, or 12.5 or greater		
		Regulated wastes if they have any of the following properties		
	Reactivity	<ul> <li>react violently with water;</li> <li>form potentially explosive mixtures with water; and or other co-disposed wastes;</li> <li>generate toxic gases, vapours, of fumes dangerous to human health or the environment when mixed with waste, and or other co-disposed wastes;</li> <li>contain substances which generate toxic gases vapours or fumes when exposes to pH conditions between 2 and 12.5; and/or</li> </ul>		
		<ul> <li>are capable of detonation or explosive reaction when subjected to a strong initiating source or if heated under confinement; and/or</li> <li>are readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure</li> </ul>		
	Radioactivity	<b>Regulated wastes</b> containing radioactive substances unless disposal is specifically authorised under the <i>Radiation Safety Act 1999.</i>		
W4.6	Keep and maintain record received at the authorised	<b>s</b> of the source, quantities and composition of all waste types <b>I place</b> .		
W4.7	Waste must not be burned	at the authorised place.		
W4.8	A maximum quantity of 499 the <b>authorised place</b> in al	9 tyres (or equivalent passenger units) may be temporarily stored at poveground heaps.		
W4.9	Where there is more than one heap of waste tyres a separation distance between the heaps or other methods must be established and maintained so as to effectively prevent fire from spreading:			
	2. to other waste stored c	neap to another; or disposed of at the <b>licensed place</b> .		
W4.10	Deposited waste must be of exposure of waste and pre	covered as soon as practicable to limit stormwater infiltration, prevent vent issues arising from vectors and pest species.		
W4.11	Every lift of waste in the ac and compacted by sufficier	tive waste disposal cell must be evenly and properly consolidated nt passes of mechanical plant of an appropriate weight and type. This		



	must be completed as soon as practicable after the waste is deposited. A waste compaction density of at least 700 kilograms per cubic metre must be achieved.
W4.12	A monitoring program must be developed and implemented to collect and record sufficient data to demonstrate compliance with the waste <b>compaction</b> density standard in condition W4.11.
W4.13	Asbestos must be temporarily covered immediately upon receipt delivery to the landfill and be buried at least two metres below the landfill surface upon cessation of the day's activities.

# Schedule 2 (d): Picnic Bay and Majors Creek Landfill Site Specific Conditions

ERA	Location
ERA 60 Waste disposal $(2)(c)$ operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection $(1)(b)$ — more than 5,000t but not more than 10,000t.	<b>Picnic Bay Landfill</b> 33 Magnetic Street, Magnetic Island QLD 4819 - Lot 1 Plan P93835 and Lot 2 Plan SP157592
ERA 60 Waste disposal (2)(a) operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(b)— less than 2,000t	<b>Majors Creek Landfill</b> Majors Creek, Townsville QLD 4810 - Lot 77 Plan EP2381

The environmentally relevant activities conducted at the locations as described above must be conducted in accordance with the following site specific conditions of approval.

Agency interest: General		
Condition	Condition	
number		
G5.1	The <b>holder of this environmental authority</b> must develop and implement a Site Development Plan for each of the <b>licensed places</b> , to cover each 5 year period for which the <b>licensed place</b> is open to receive wastes or until a Post Closure Care and Maintenance Plan has been implemented.	
G5.2	A Site Development Plan (SDP) must be developed and implemented for a five (5) year operating period. The SDP must be reviewed and updated each year to cover the subsequent five years development for the landfill and must include details of at least the following:	
	<ol> <li>an accurate survey of the landfill site including levels and contours of the waste storage and disposal areas and the location and dimensions of these areas; and</li> <li>the design and construction standards for each waste disposal cell including details of the liner system for the base and walls of the cell, intermediate cover system and the final capping system; and</li> <li>a description of the stormwater collection and management system including details of the design and construction standards for stormwater diversion, collection, storage and disposal infrastructure; and</li> </ol>	



	<ul> <li>4. a description of the leachate collection and management system including details of the design and construction standards for leachate collection, storage and disposal infrastructure; and</li> <li>5. a description of the landfill gas collection and management system including details of the design and construction standards for landfill gas extraction, reuse and disposal</li> </ul>				
	<ul> <li>a description of the progressive development of the landfill over the time period covered by the plan including details of how stormwater, leachate and landfill gas collection and management systems will be developed as new disposal cells are constructed and completed cells are stabilised and rehabilitated; and</li> <li>a description of the rehabilitation plan for the landfill including details of the final surface levels and profiles of completed cells and the how these ceils will be progressively covered, capped, stabilised, drained and vegetated.</li> </ul>				
	The holder of this environmental authority must				
	<ol> <li>submit any Site Development Plan, Post Closure Care and Maintenance Plan or Detection Monitoring Program required under this environmental authority to the administering authority for its review and comment; and</li> <li>have due regard to that comment in the finalisation of the plans or programs; and</li> <li>complete and commence implementation of the plans or programs within 3 months of receipt of any comment from the administering authority; and</li> <li>submit a copy of the finalised plans or programs to the administering authority within 30 days of its finalisation.</li> </ol>				
	The <b>holder of this environmental authority</b> must submit details of any amendments to any Site Development Plan, Post Closure Care and Maintenance Plan or Detection Monitoring Program required under this environmental authority to the <b>administering authority</b> with the Annual Return which immediately follows the enactment of any such amendment.				
	The <b>holder of this environmental authority</b> must keep a written record of the results of all monitoring programs required under this environmental authority. This record must:				
	<ol> <li>record the results of all analyses, measurements and observations;</li> <li>record the date and time of sampling;</li> <li>be endorsed by a person or body possessing appropriate experience and qualifications to perform the required measurements on all the records of analysis results;</li> <li>have all records of analyses, measurements and observations signed by a responsible officer; and</li> <li>be made available upon request to any authorised person who must be permitted to make copies thereof.</li> </ol>				
Agency interest: Air					
Condition number	Condition				
A5.1	The <b>holder of this environmental authority</b> must adopt such practices and procedures as necessary to ensure that:				



A5.2	<ol> <li>the concentration of landfill gas (methane standards) generated by the landfill unit does not exceed 25 percent of the lower explosive limit for methane in useable closed spaces located on the facility excluding any gas control or recovery system components; and</li> <li>the concentration of landfill gas components, other than methane, generated by the landfill does not exceed concentrations which may pose a health risk to persons within useable closed spaces located on the facility excluding gas control or recovery system components.</li> <li>Where it is estimated that by the cessation of waste disposal activities 500 000 tonnes or more of waste will be disposed of at the licensed place, the bolder of this environmental authority.</li> </ol>
	<ul> <li>must:</li> <li>1. submit to the administering authority for review and comment, a proposal to implement a landfill gas monitoring program which is to include details of but not be limited to the following information:</li> </ul>
	<ul> <li>a. The depth and location of the proposed landing gas monitoring plezometers,</li> <li>b. piezometer design and construction details;</li> <li>c. frequency of monitoring;</li> <li>d. determinants to be monitored;</li> <li>e. the time scale proposed for the construction of monitoring wells and the implementation</li> </ul>
	of a monitoring program; and f. the parameters and detection limits of monitoring equipment 2. install landfill gas monitoring piezometers and implement a landfill gas monitoring program; and
	<ul> <li>3. install an effective gas collection and control system into any tipping area where the landfill gas monitoring program detects landfill gas in concentrations greater than;</li> <li>a. 25% of the lower explosive limit for methane in facility structures other than the gas control units or parts thereof; or</li> <li>b. the lower explosive limit for methane at the landfill boundary.</li> </ul>
A5.3	The following materials must not be used for dust suppression purposes:
	<ol> <li>leachate or landfill gas condensate;</li> <li>waste oil or other hydrocarbons.</li> </ol>

### Schedule 2 (e): Toomulla Landfill Site Specific Conditions

ERA	Location
ERA 60 Waste disposal (2)(a) operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(b)— less than 2,000t	<b>Toomulla Landfill</b> Toomulla Beach Road, Toomulla - Lot 10 Plan CP845506

The environmentally relevant activities conducted at the locations as described above must be conducted in accordance with the following site specific conditions of approval.

#### Agency interest: General





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Condition	Condition			
number				
G6.1	The <b>holder of this environmental authority</b> must develop and implement, as part of the Site Based Management Plans required under environmental authority, a Site Development Plan for each of the <b>licensed places</b> , to cover each 5 year period for which the <b>licensed place</b> is open to receive wastes or until a Post Closure Care and Maintenance Plan has been implemented.			
G6.2	The Site Development Plan must include details of at least the following:			
	<ol> <li>dimensions of any area of the licensed place used for waste disposal and storage over the period covered by this Site Development Plan;</li> <li>an accurate level survey of any area of the licensed place to be utilised for the disposal and storage of wastes over the period covered by this Site Development Plan. The levels must be reduced to a common datum and related to contour plans of the licensed place;</li> <li>the approximate dimensions of each waste disposal area and dimensions of the active waste disposal face to be constructed in the area designated in (a) over the period covered by this site development plan;</li> <li>the in situ permeability of earthen materials which are to be used for capping and/or lining of waste disposal areas and into which excavations will be made for the purposes of waste disposal;</li> <li>approximate location of any leachate dam or pond, pump well to be used or other plant and equipment installed as part of a leachate collection, storage or recirculation system;</li> <li>location of any areas to be capped, the proposed final surface levels and contours, final drainage system and species of vegetation to be planted as part of a rehabilitation program for licensed place over the period covered by this site development plan.</li> </ol>			
Agency inte	erest: Air			
Condition number	Condition			
A6.1	<ul> <li>The holder of this environmental authority must adopt such practices and procedures as necessary to ensure that:</li> <li>1. the concentration of landfill gas (methane standards) generated by the landfill unit does not exceed 25 percent of the lower explosive limit for methane in useable closed spaces located on the facility excluding any gas control or recovery system components; and</li> <li>2. the concentration of landfill gas components, other than methane, generated by the landfill does not exceed concentrations which may pose a health risk to persons within useable closed spaces.</li> </ul>			
A6.2	Where it is estimated that by the cessation of waste disposal activities 500,000 tonnes or more of waste will be disposed of at the <b>licensed place</b> , the <b>holder of this environmental authority</b> must implement the "Landfill Gas Management Plan - September 2001" prepared by Robert H. Amaral if the 500,000 tonnes disposal thresholds have been exceeded.			
A6.3	The following materials must not be used for dust suppression purposes:			
	1. leachate or landfill gas condensate			

	2. waste oil or other hydrocarbons.			
Agency interest: Water				
Condition number	Condition			
WT6.1	The <b>holder of this environmental authority</b> must ensure that all reasonable and practical <b>measures</b> are taken to ensure the <b>licensed place</b> is operated and managed so as to minimise the generation of <b>leachate</b> .			
WT6.2	The <b>holder of this environmental authority</b> must by the first Annual Return date develop a Detection Monitoring Program for each of the <b>licensed places</b> , which will effectively detect any release of contaminants from the <b>licensed place</b> to groundwater and/or surface <b>waters</b> .			
WT6.3	The Detection Monitoring Program referred to in condition WT6.2 must be developed by a person possessing appropriate qualifications and experience in environmental monitoring program design to be able to competently make recommendations about these matters.			
WT6.4	The Detection Monitoring Program must include:			
	<ol> <li>sufficient monitoring points and/or wells to obtain representative samples of groundwater and surface waters both up-gradient and down gradient of the potential influence of the licensed place; and</li> <li>monitoring and measurement techniques that will yield representative samples; and</li> <li>analysis of a sufficient number of indicator parameters whereby significant change of these parameters from up-gradient to down-gradient will indicate the presence of a release of contaminants from the licensed place; and</li> <li>sampling with sufficient spatial and temporal replication to make statistically valid conclusions about the presence or absence of a release from the licensed place with at least an eighty percent chance of detecting any release of contaminants from the licensed place if one exists.</li> </ol>			
WT6.5	On any occasion that samples are obtained in accordance with condition WT6.4, the holder of this environmental authority must measure and record standing groundwater levels in metres, accurate to 0.01 metre. The elevation of the reference point, relative to Australian Height Datum, for use in any groundwater level measurement must be determined to an accuracy of 0.005 metre.			
WT6.6	Measurement of groundwater levels required in condition WT6.5 must be undertaken prior to any disturbance by sampling, and must be reported as the depth in metres from the established reference point to the water surface within the bore.			
WT6.7	Any groundwater monitoring bore installed under this environmental authority must be fitted with a lockable cap which must be locked at all times other than at the time of sampling.			
Agency interest: Noise				
Condition number	Condition			



N6.1	Upon receipt of complaint regarding the emission of noise from the carrying out of the environmentally relevant activities, the holder of this environmental authority must, within a reasonable period of time:				
	<ol> <li>take any actions necessary to resolve the compliant including the use of appropriate dispute resolution if required; or</li> <li>implement noise abatement measures until emissions of noise from the activity does not result in sound pressure levels at the affected noise sensitive place greater than those specified in <i>Table N6.1 - Noise Limits.</i></li> </ol>				
	Table N6.1 - Noise Limits				
	Sound Pressure Level	Per	iod		
		7am to 6pm	6pm to 7am		
	L <sub>eq</sub>	50	45		
	L <sub>max</sub> 55 50				
	Associated monitoring require	ements:			
	1. All determinations of noise emissions must be carried out in accordance with the most recent version of the <b>administering authority's</b> <i>Noise Measurement Manual.</i>				
N6.2	For purposes of determining con	npliance with the limits specified	in Table N6.1 - Noise Limits:		
	<ol> <li>the sound pressure level should not exceed the level specified measured over any 15 minute period that is representative of the noise being investigated;</li> <li>the measurement location is 4.0 metres (± 0.5 metres) outside the part of the place most affected by the noise under investigation.</li> </ol>				
Agency inte	erest: Land				
Condition number	Condition				
L6.1	When the deposition of waste to the <b>landfill unit</b> ceases, a final <b>capping</b> system to the <b>landfill unit</b> must be designed by an <b>appropriately qualified person</b> and installed to minimise:				
	<ol> <li>infiltration of water into the landfill unit and water ponding on the surface; and</li> <li>the likelihood of any erosion occurring to either the final capping system or the landfilled materials.</li> </ol>				
	A final <b>capping</b> system is not required where the deposition of waste to a landfill unit ceases temporarily for the purpose of using an alternative working face.				
L6.2	Land that has been disturbed for activities conducted under this environmental authority must be rehabilitated in a manner such that:				
	<ol> <li>suitable species of vegetation for the location are established and sustained for earthen surfaces;</li> <li>potential for erosion is minimised;</li> <li>the quality of water, including seepage, released from the site does not cause environmental harm;</li> <li>potential for environmental nuisance caused by dust is minimised;</li> </ol>				



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	<ol> <li>the water quality of any residual water body does not have potential to cause environmental harm;</li> <li>the final landform is stable and protects public safety;</li> <li>the contaminant concentrations within the final capping layer are appropriate for the final land use and in accordance with the 'National Environmental Protection (Assessment of</li> </ol>			
L6.3	Soil Contamination) Measure 1999.' Prior to the completion of waste disposal activities at the licensed place, the holder of this environmental authority must submit to the administering authority a Closure Plan and a Post- closure Care and Maintenance Plan			
L6.4	<ul> <li>The Closure Plan referred to in condition L6.3 must describe the proposed actions of the holder of the environmental authority in relation to:</li> <li>1. final cover system;</li> <li>2. final surface contours (including allowance for land subsidence);</li> <li>3. land use in post-closure;</li> <li>4. surface drainage;</li> <li>5. leachate management.</li> </ul>			
L6.5	The holder of the environmental authority must commence closure activities no less than 3 months after the date on which the licensed place ceases to receive waste.			
L6.6	Following cessation of deposition of waste in the <b>landfill unit</b> , post-closure care of the <b>landfill unit</b> must be conducted for a period of 30 years or until the <b>administering authority</b> determines, on the basis of correct information, that the <b>landfill unit</b> and surrounding site are stable and that no release of waste materials, <b>leachate</b> , landfill gas or other contaminants that may cause <b>environmental harm</b> is likely.			
L6.7	The program of post-closure care implemented must be effective in preventing andfor minimising the likelihood of <b>environmental harm</b> being caused. The program must include <b>measures</b> to:			
	<ol> <li>maintain the structural integrity and effectiveness of the final capping system;</li> <li>maintain and operate the leachate collection system;</li> <li>maintain the groundwater monitoring system and monitor quality of groundwater at a frequency sufficient to detect any release of contaminants to groundwater;</li> <li>maintain and operate the landfill gas monitoring system; and</li> <li>maintain and operate the landfill gas collection system.</li> </ol>			
Agency interest: Waste				
Condition	Condition			
W6.1	Where <b>regulated waste</b> is removed from the premises to which this environmental authority applies (other than by a release as permitted under another schedule of this environmental authority), the <b>holder of this environmental authority</b> must monitor and keep <b>records</b> of the following: <ol> <li>the date, quantity and type of waste removed; and</li> <li>name of the worte transporter and/or diaposal energies that removed the worte and</li> </ol>			
L				



	3. the intended treatment/disposal destination of the waste.				
W6.2	The holder of this environmental authority must not:				
	<ol> <li>burn waste at or on any licensed place covered by this environmental authority; nor</li> <li>allow waste to burn or be burned at or on any licensed place covered by this environmental authority; nor</li> <li>remove waste from any licensed place covered by this environmental authority and burn such waste elsewhere.</li> </ol>				
W6.3	This environmental authority permits only the following wastes to be disposed of at the licensed				
	<ol> <li>domestic waste;</li> <li>commercial waste;</li> <li>domestic clean-up waste;</li> <li>construction or demolition waste;</li> <li>industrial waste;</li> <li>garden wastes;</li> <li>putrescible wastes; and</li> </ol>				
	8. solid inert wastes.				
	<ul> <li>(i) wet cell batteries and waste oil may be accepted and stored at the licensed place for recycling.</li> <li>(ii) drums containing any residual regulated waste are a regulated waste unless effectively cleaned.</li> <li>(iii) definitions of domestic, commercial, domestic clean-up, construction or demolition, garden and regulated wastes am in Environmental Protection Regulation 2019).</li> </ul>				
W6.4	Notwithstanding any other condition of this environmental authority, the following wastes must not be accepted onto the <b>licensed place</b> :				
	<ol> <li>liquescent waste streams or any waste capable of yielding free liquids (does not include leachate or condensate arising from gas collection within the licensed place);</li> <li>untreated infectious and chemical wastes and liquid pharmaceuticals from clinical and related waste stream;</li> <li>cytotoxic wastes;</li> <li>untreated sharps;</li> <li>S8 pharmaceuticals;</li> </ol>				
	<ol> <li>all radioactive wastes, unless otherwise approved under the <i>Radiation Safety Act 1999</i>;</li> <li>pyrophoric wastes (where co-disposed with other potentially combustible material); and</li> <li>explosives and ammunition, pyrotechnics or propellants, apart from trace residues no longer capable of supporting combustion or an explosive reaction.</li> </ol>				
W6.5	No wastes must be interred at the waste disposal facility which exhibits any of the hazard				
	Table W6.5				
	Hazard     Description Of The Hazard Characteristic       Characteristic     Image: Characteristic				





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	Ignitability	<b>Regulated wastes</b> that are capable of causing a fire when ignited through friction, absorption of moisture, or spontaneous chemical changes under standard temperature and pressure		
	Corrosivity	Regulated wastes which on dissolution exhibit a pH of 2 or less, or 12.5 or greater		
	Reactivity	<ul> <li>Regulated wastes if they have any of the following properties:</li> <li>react violently with waster;</li> <li>form potentially explosive mixtures with water; and or other co- disposed wastes:</li> </ul>		
		<ul> <li>generate toxic gases, vapours, of fumes dangerous to human health or the environment when mixed with water; and or other co-disposed wastes;</li> <li>contain substances which generate toxic gases vapours or fumes when exposed to pH conditions between 2 and 12.5; and/or</li> </ul>		
		<ul> <li>are readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure</li> </ul>		
	Radioactivity	Regulated wastes containing radioactive substances unless disposal is specifically authorised under the <i>Radiation Safety Act 1999</i>		
W6.6	Notwithstanding condition be accepted may be depo	W6.5, minor amounts of <b>regulated waste</b> not specifically permitted to posited at the <b>licensed place</b> provided:		
	<ol> <li>the regulated waste is incidental to and commingled with the general waste stream; and</li> <li>the quantity and concentration of the regulated waste (both individually and in aggregate) is insignificant; and</li> <li>it is impracticable to segregate the regulated waste from other waste which is permitted to be deposited; and</li> <li>the deposition of the regulated waste is not likely to cause any risk of fire, explosion, public health danger, nuisance, or environmental harm; and</li> </ol>			
	be included in the waste stream to be deposited at the waste disposal facility.			
W6.7	Asbestos must be temporarily covered immediately upon receipt delivery to the landfill and be buried at least two metres below the landfill surface upon cessation of the day's activities.			
W6.8	Deposited waste must be covered as soon as practicable to limit stormwater infiltration, prevent exposure of waste and prevent issues arising from vectors and pest species.			
W6.9	Waste tyres may be stored in temporary above ground heaps on the <b>licensed place</b> provided that there are no more than 500 waste tyres in each heap.			
W6.10	Where there is more than one heap of waste tyres a separation distance between the heaps or other methods must be established and maintained so as to effectively prevent fire from spreading:			
	<ol> <li>from one tyre storage heap to another;</li> <li>to other waste stored or disposed of at the licensed place.</li> </ol>			

# Schedule 2 (f): Magnetic Island Waste Transfer Station Site Specific Conditions

ERA	Location
ERA 62 Resource recovery and transfer facility operation (1)(b) operating a facility for receiving and sorting, dismantling, baling or temporarily storing— general waste.	Magnetic Island Waste Transfer Station 11 - 63 West Point Road, Magnetic Island QLD 4819 - Lot 2 Plan RP721497
ERA 62 Resource recovery and transfer facility operation (1)(c) operating a facility for receiving and sorting, dismantling, baling or temporarily storing— category 2 regulated waste.	

The environmentally relevant activities conducted at the locations as described above must be conducted in accordance with the following site specific conditions of approval.

Agency interest: General			
Condition	Condition		
number			
G7.1	Activities conducted under this environmental authority must not be conducted contrary to any of the following limitations:		
	<ol> <li>Waste shall be stored and transferred in accordance with drawing number 5716-SK208A "Magnetic Island Waste Transfer Station, Townsville City Council Cockle Bay Facility, Waste Area and Treatment Catchment Layout', 14 July 2014.</li> <li>Leachate and Stormwater runoff which has been in contact with waste materials shall be collected and treated in accordance with drawing number 5716-SK208A "Magnetic Island Waste Transfer Station, Townsville City Council Cockle Bay Facility, Waste Area and Treatment Catchment Layout', 14 July 2014.</li> <li>Notwithstanding any other condition of this environmental authority. Leachate and</li> </ol>		
	<ul> <li>Stormwater runoff from catchment 2 in accordance with drawing number 5716-SK208A "Magnetic Island Waste Transfer Station, Townsville City Council Cockle Bay Facility, Waste Area and Treatment Catchment Layout, 14 July 2014 shall be collected, treated and disposed of to the sewer network via trade waste agreement.</li> <li>The only waste permitted to be received at the facility is listed in Table G7.1 - Waste Acceptance Criteria:</li> </ul>		

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	Table	e G7.1 - Waste Acceptance Cr	iteria			
	Permitted Waste Onsite					
	Waste	Where Stored	Transportation Off Island			
	Domestic Waste	Push Pit/Bins	Bins			
	Commercial Waste	Push Pit/Bins	Bins			
	Domestic Clean-up waste	Push Pit/Bins	Bins			
	Construction or demolition waste	Push Pit/Bins	Bins			
	Garden waste	Green Waste Area	Mulched on site			
	Putrescible waste	Push Pit/Bins	Bins			
	Solid inert waste	Push Pit/Bins	Bins			
	Recyclables	Push Pit/Bins	Bins			
	Limited regulated waste	Purpose built fully enclosed containers or push pit as per Guidelines	Transported separately or bins			
	Electrical goods	Purpose built containers	Transported separately			
	Wet cell batteries	Purpose built fully enclosed containers	Transported separately			
	Gas cylinders	Purpose built containers	Transported separately			
	Waste oil	Purpose built fully enclosed containers	Transported separately			
	Tyres	Purpose built containers	Transported separately			
Agency inte	erest: Water					
Condition number	Condition					
WT7.1	The only contaminant to be release to surface waters is treated stormwater/wastewater at the specified release point in accordance with Table WT7.1 - Surface water release limits.					

	Table WT7.1 - Surface water release limits
	specified release point in accordance with Table WT7.1 - Surface water release limits.
1	The only contaminant to be release to surface waters is treated stormwater/wastewater at the

Release Point(s) and Monitoring Location(s) <sup>2</sup> Description (Universtal Transverse Mercator UTM)	Quality Characteristic (units)	Limit (units)	Limit Type
Discharge 5/B 55K E 482206.345 N 7880064.268	рН	6.5 - 8.0	Range
	Dissolved Oxygen	4.0 mg/L	Minimum
	Suspended Solids	10 mg/L	Maximum
	Ammonia	20 µg/L	Maximum



	Total Nitrogen	500 μg/L	Maximum	
	Total Phosphorous	50 μg/L	Maximum	
	Electrical Conductivity	98 µS/cm	Maximum	
	Biochemical Oxygen Demand (BOD)	15 mg/L	Maximum (long term 80 percentile)	
Discharge 5/A	Chemical Oxygen Demand (COD)	40 mg/L	Maximum (long term 8 percentile)	
55K 482065.437	Fluoride	0.110 mg/L	Maximum	
N7880170.965	Total Petroleum Hydrocarbons (TPH) and Total Recoverable Hydrocarbons (TRH	5.0 mg/L	Maximum	
	Boron	370 µg/L	Maximum	
	Cadmium	0.2 µg/L	Maximum	
	Chromium <sup>1</sup>	1.0 µg/L	Maximum	
	Lead	3.4 µg/L	Maximum	
	Zinc	8.0 µg/L	Maximum	
	Nickel	11 µg/L	Maximum	
	Copper	1.4 µg/L	Maximum	
	Arsenic	13 µg/L	Maximum	
	Major Cations and Anions (Ca, Mg, Na, K, Cl and SO <sub>4</sub> )	For interpreta	For interpretation purposes only	
	Hardness	For interpreta	tion purposes only	
	рН	6.5 - 8.0	Range	
	Suspended Solids	10 mg/L	Maximum	
Discharge 2/C	Total Nitrogen	500 µg/L	Maximum	
55K 482065.437	Total Phosphorous	50 μg/L	Maximum	
N7880170.965	Biochemical Oxygen Demand (BOD)	15 mg/L	Maximum (long term 8 percentile)	
	Ammonia	20 µg/L	Maximum	



	<sup>2</sup> Release points and areas must be in accordance with the map in plan titled 'Magnetic Island Waste Transfer Station, Townsville City Council Cockle bay Facility, Waste Area and Treatment Catchment Layout' Drawing number 5716-SK208A, 14 July 2014.
	Associated Monitoring Requirements:
	<ol> <li>Monitoring must be in accordance with the methods prescribed in the current edition of the Department of Environment and Science <i>Water Quality Sampling Manual</i>.</li> <li>Samples must be taken using representative sampling techniques</li> <li>All determinations must employ analytical practical quantification limits sufficiently low enough to enable comparisons to be made against water quality objectives/limits relevant to the particular water quality characteristic.</li> <li>Monitoring must be undertaken during a release as per the frequency stated.</li> <li>All monitoring devices must be correctly calibrated and maintained.</li> </ol>
WT7.2	Monitoring of contaminant releases to <b>waters</b> must be undertaken for the quality characteristics specified, and at the release points specified, in <i>Table WT7.1 - Surface water release limits</i> .
WT7.3	Monitoring of contaminant releases to <b>waters</b> must be undertaken at the following minimum frequencies:
	<ol> <li>Routine surface water monitoring must be undertaken at a monthly frequency between November of one year and March of the following year (wet season routine monitoring).</li> <li>Routine surface water monitoring must be undertaken at a three monthly frequency between March and September of the same year (dry season routine monitoring)</li> <li>Event based surface water monitoring must be undertaken as soon as practicable during any rainfall event that follows a period of fourteen (14) days where no rainfall has occurred (first flush monitoring)</li> </ol>
WT7.4	Notwithstanding any other condition, the release of contaminants to waters must not:
	<ol> <li>have any other properties at a concentration that is capable of causing environmental harm</li> <li>produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other visually objectionable matter</li> </ol>
WT7.5	The controlled release of treated/settled stormwater must be conducted in a way and at a rate that does not cause:
	<ol> <li>re-suspension of particles; or</li> <li>erosion of bed or banks of receiving waters; or</li> <li>landscape damage; or</li> <li>ponding of the water; or</li> <li>vegetation damage.</li> </ol>
WT7.6	First Flush Stormwater Collection System
	The first twenty millimetres (20mm) of stormwater runoff from the hardstand storage area must be directed to the stormwater treatment systems.
Agency inte	erest: Noise
Condition	Condition
number	



N7.1	Noise from th nuisance <b>sen</b>	e activity mus sitive place o	st not exceed or <b>commercia</b> Table	the levels ider I place. N7.1 - Noise	ntified in <i>Table</i>	9 N7.1 - Noise	<i>limit</i> s at any
	Noise level	Monday to Saturday		Sunday and Public Holidays			
	measured in dB(A)	7am-6pm	6pm-10pm	10pm-7pm	9am-6pm	6pm-10pm	10pm-9am
		Noise measured at a nuisance sensitive place					
	LAeq adj,T	Background +5	Background +3	Background +0	Background +5	Background +3	Background +0
	MaxL <sub>pA,T</sub>	Background +10	Background +8	Background +5	Background +10	Background +8	Background +5
			Noise	e measured at	a commercial	place	
	LAeq adj,T	Background +10	Background +8	Background +5	Background +10	Background +8	Background +5
	Мах <sub>ьра,т</sub>	Background +15	Background +13	Background +10	Background +15	Background +13	Background +10
	<ul> <li>authority</li> <li>3. Any moni</li> <li>in operat</li> </ul>	toring must be toring of noise ion.	e emissions fo	nual. rm the activity	must be unde	ertaken when t	the activity is
N7.2	in <b>operation</b> . When required by the <b>administering authority</b> , noise monitoring must be undertaken, in			ken, in			
	<ul> <li>results notified within 14 days to the administering authority. Monitoring must include:</li> <li>1. L<sub>Aeq adj,T</sub></li> <li>2. Background noise (Background) as LA 90, adj, T</li> <li>3. MaxLpA,T</li> <li>4. the level and frequency of occurrence of any impulsive or tonal noise</li> <li>5. atmospheric conditions including wind speed and direction</li> </ul>				lude:		
	6. effect	ts due to extra	neous factors	such as traffic	c noise		
	7. locati	on, date and t	ime of recordi	ng.			
Agency inte	erest: Waste						
Condition number	Condition						
W7.1	Waste must c place lawfully	only be remove able to receiv	ed from the <b>si</b> t e it.	te by a transp	orter lawfully a	able to transpo	ort it to a
W7.2	All waste is to be transferred and stored in a manner that prevents <b>environmental harm</b> .						



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### Part 4: Sewage Treatment Activities Schedule 3: Sewage Treatment General Conditions

ERA	Location
ERA 63 Sewage treatment (1)(g) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— more than 100,000EP.	<b>Cleveland Bay Sewage Treatment Plant</b> 1/426 Ron McLean Drive Stuart - Lot 1 Plan RP732944 and Lot 1 Plan RP732945
ERA 63 Sewage treatment (1)(g) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— more than 100,000EP.	Mt St John Sewage Treatment Plant Lot 1 Plan RP723447
ERA 63 Sewage treatment (1)(e) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— more than 10,000 but not more than 50,000EP.	<b>Condon Sewage Treatment Plant</b> Bowhunters Road, Condon - Lot 52 Plan EP2176
ERA 63 Sewage treatment (1)(b)(i) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— more than 100 but not more than 1,500EP— if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme.	<b>Toomulla Sewage Treatment Plant</b> Edgecomb Court, Toomulla - Lot 1 Plan SP235124
ERA 63 Sewage treatment (1)(c) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— more than 1,500 but not more than 4,000EP.	<b>Picnic Bay Sewage Treatment Plant</b> 65-73 West Point Road, Picnic Bay Lot 1 Plan RP742477
ERA 63 Sewage treatment (1)(c) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— more than 1,500 but not more than 4,000EP.	Horseshoe Bay Sewage Treatment Plant Apjohn and Pollard Streets Horseshoe bay Magnetic Island - Lot 8 Plan EP2363 and Lot 2 Plan RP724194 and Lot 9 Plan EP2363

The environmentally relevant activities conducted at the locations as described above must be conducted in accordance with the following general conditions of approval.

Agency interest: General		
Condition	Condition	
number		
G1-1	All reasonable and practicable <b>measures</b> must be taken to prevent or minimise environmental harm caused by the <b>activities</b> .	





G1-2	Any breach of a condition of this environmental authority must be reported to the <b>administering</b> <b>authority</b> as soon as practicable within 24 hours of becoming aware of the breach. Records must be kept including full details of the breach and any subsequent actions taken.
G1-3	Other than as permitted by this environmental authority, the <b>release of a contaminant into the environment</b> must not occur.
G1-4	All information and records required by the conditions of this environmental authority must be kept for a minimum of five years with the exception of environmental monitoring results which must be kept until surrender of this environmental authority. All information and records required by the conditions of this environmental authority must be provided to the <b>administering authority</b> upon request and in the format requested.
G1-5	An appropriately qualified person(s) must monitor, record and interpret all parameters that are required to be monitored by this environmental authority and in the manner specified by this environmental authority.
G1-6	All analyses required under this environmental authority must be carried out by a laboratory that has National Association of Testing Authorities (NATA) certification, or an equivalent certification, for such analyses. The only exception to this condition is for in situ monitoring of pH, dissolved oxygen, electrical conductivity, free residual chlorine and turbidity.
G1-7	An annual monitoring report must be prepared and submitted to the <b>administering authority</b> by 30 November each year, for the preceding financial year.
G1-8	You must record the following details for all environmental complaints received:
	<ol> <li>date and time complaint was received</li> <li>name and contact details of the complainant when provided and authorised by the complainant</li> <li>nature of the complaint</li> <li>investigations undertaken</li> <li>conclusions formed</li> <li>actions taken.</li> </ol>
G1-9	When required by the <b>administering authority</b> , monitoring must be undertaken in the manner prescribed by the <b>administering authority</b> to investigate a complaint of <b>environmental nuisance</b> arising from the <b>activity</b> . The monitoring results must be provided within 10 business days to the <b>administering authority</b> upon its request
G1-10	The <b>activity</b> must be undertaken in accordance with written procedures that:
	<ul> <li>(a) identify potential risks to the environment from the activity during routine operations, closure and an emergency</li> <li>(b) establish and maintain control measures that minimise the potential for environmental harm</li> <li>(c) ensure plant, equipment and measures are maintained in proper and effective condition</li> <li>(d) ensure plant, equipment and measures are operated in a proper and effective manner</li> <li>(e) ensure that staff are trained in and aware of their obligations under the <i>Environmental Protection Act 1994</i>.</li> <li>(f) ensure that reviews of environmental performance are undertaken at least annually.</li> </ul>
G1-11	Chemicals and fuels in container of greater than 15 litres must be stored within a <b>secondary containment system</b> .

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G1-12	Treated sewage effluent may be removed from the site and used for an alternate purpose, with the written consent of any third party involved.
Agency inte	erest: Air
Condition number	Condition
A1-1	Other than as permitted within this environmental authority, odours or airborne contaminants must not cause <b>environmental nuisance</b> at a <b>sensitive place</b> or <b>commercial place</b> .
Agency inte	erest: Acoustic
Condition number	Condition
N1-1	Other than as permitted within this environmental authority, noise generated by the <b>activity</b> must not cause <b>environmental nuisance</b> at a <b>sensitive place</b> or <b>commercial place</b> .
Agency inte	erest: Waste
Condition number	Condition
W1-1	All waste generated in carrying out the <b>activity</b> must be lawfully reused, recycled or removed to a facility that can lawfully accept the waste.





#### Schedule 4: Sewage Treatment Site Specific Conditions Schedule 4 (a): Cleveland Bay Sewage Treatment Plant Site Specific Conditions

ERA	Location
ERA 63 Sewage treatment (1)(g) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— more than 100,000EP	<b>Cleveland Bay Sewage Treatment Plant</b> 1/426 Ron McLean Drive Stuart - Lot 1 Plan RP732944 and Lot 1 Plan RP732945

The environmentally relevant activities conducted at the locations as described above must be conducted in accordance with the following site specific conditions of approval.

Agency interest: General											
Condition number	Condition										
G2-1	This app peak des	This approval authorises sewage treatment works using plant and equipment with a total daily peak design capacity of 126,000 <b>equivalent person (EP).</b>									
Agency inte	Agency interest: Water										
Condition number	Conditio	n									
WT2-1	The only Plant to <b>v</b>	contamin <b>vaters</b> is	ant permitted t	to be rele <b>ge waste</b>	ased from t water.	he Clevela	nd Bay Sev	vage Trea	Itment		
WT2-2	Treated s Plant to v	sewage w waters fro	astewater mus m the following	st only be g release	released fr point(s):	om the Cle	veland Bay	Sewage	Treatment		
	1. Relea	ase Point	RP1 - Clevela	nd Bay S	ewage Trea	atment Plar	nt outfall pip	e to Clev	eland Bay		
WT2-3	Release to waters from release point RP for all sewage inflows to the treatment plant up to a flow rate of 1,007 litres per second must be in compliance with the limits in Table 1 - Contaminant Release to Waters - Release Limits and Monitoring Points and the associated requirements. This excludes <b>by-pass</b> flows covered by Condition WT2-7.										
	MP	DL	Quality Characteristic	Min	Long Term 50 <sup>th</sup> Percentile	Short Term 80 <sup>th</sup> Percentile	Long Term 80 <sup>th</sup> Percentile	Max	Frequency		
	W1	RP1	BOD <sub>5</sub> (mg/L)	-	6	15	10	20	Weekly		
			Totally Suspended Solids ( <b>mg/L</b> )	-	9	20	14	30	Weekly		



			-	-						
		Total Nitrogen ( <b>mg/L</b> as N)	-	5	-	-	15	Weekly		
		Ammonia ( <b>mg/L</b> as N)	-	1	-	-	3	Weekly		
		Total Phosphorus ( <b>mg/L</b> as P)	-	1	-	-	3	Weekly		
		pH (pH units)	6.5	-	-	-	8.5	Weekly		
		Dissolved Oxygen ( <b>mg/L</b> )	2.0	-	-	-	-	Weekly		
		Faecal Coliforms (cfu/100mL)	1000 cfu/ samples t one day a cfu/100m	100mL as a <b>n</b> aken at not le and 4 out of 5 L.	nedian value ss than half-h samples cont	with a <b>minimu</b> nourly intervals aining less tha	<b>m</b> of 5 in any n 4000	Weekly		
	Associated require	ments:								
WT2-4	<ol> <li>Associated requirements:         <ol> <li>Sampling must be in accordance with the Water Quality Manual and all monitoring devices must be effectively calibrated and maintained.</li> <li>COB may be monitored as an alternative to BOD<sub>5</sub> once a reliable correlation has been determined through analysis of a minimum number of 24 wastewater samples over a minimum period of 12 months and with the agreement of the administering authority.</li> <li>Enterococci may be monitored as an alternative to faecal coliforms. Risk thresholds (or guidelines values)( from the NHMRC Recreation Water Quality Guidelines (2008) can be used to derive suitable release limits for enterococci that are essentially equivalent to the traditional primary and secondary recreation categories</li> <li>Nitrogen and phosphorus concentrations are to be determined using flow weighted composite samples. Flow weighted composite samples are to be 'weighted' to the wastewater flow, with the volume of the sample changing in proportion of the flow. The flow 'proportional' composite sample shall be run over a 24-hour period with not more than a 2- hour interval between each collection</li> <li>RP1 - Cleveland Bay Purification Plant Outlet into waters described as Cleveland Bay</li> <li>W1 - combined permeate line to the standpipe</li> <li>MP - Monitoring Point</li> <li>Displayment as the propertion of the standpipe</li> </ol></li></ol>									
VV12-4	In addition to WT2-3, the release to <b>waters</b> must not produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other visually objectionable matter excluding <b>bypass</b> releases covered by water conditions WT2-7 and WT2-8.									
WT2-5	<b>Treated wastewater</b> released from the Cleveland Bay Sewage Treatment Plant at release point RP1, must be monitored at monitoring point W1, combined permeate line, for the quality characteristics and at the frequencies specified in Table 1.									
WT2-6	The daily volume of <b>treated wastewater</b> released from the Cleveland Bay Sewage Treatment Plant must be determined or estimated for each release point, and records kept of such determinations.									



WT2-7	Inflows above 1,007 litres per second must be screened before being released from release point RP1.									
WT2-8	The <b>administering authority</b> must be notified within 24 hours of any <b>bypass</b> release ceasing.									
WT2-9	The following details must be recorded in relation to each <b>bypass</b> release:									
	<ul> <li>(a) the start time, date and duration of the release;</li> <li>(b) the estimated volume of the bypass release;</li> <li>(c) the level of treatment at the sewage treatment plant prior to discharge;</li> <li>(d) the cause of the release; and</li> <li>(e) any monitoring of the water quality released.</li> </ul>									
WT2-10	The annual loads of tota RP1 must comply with the Load Limits.	l nitrogen and total phos ne limits listed in Table 2	phorus released to wate - Contaminant Release	ers from release point to Waters - Annual						
	Table 2 -	Contaminant Release	to Waters - Annual Loa	ad Limits						
	Monitoring Point	Contaminant	Limit Type	Release Limit						
	\\\/1	Total Nitrogen (TN)	Appual Load	52,925 kg						
	VV 1	Total Phosphorus (TP)	Annual Load	10,585 kg						
WT2-11	Calculate and keep reco waters from monitoring	ords of annual loads of to point W1. Loads must be	tal nitrogen and total ph e calculated using the fo	osphorus released to llowing method:						
	Actual load = yearly ave	erage dry weather flow	x 365 x yearly median of	concentration (mg/L)						
WT2-12	Disinfection of wastewat such as ultraviolet radiat	er released to water mu ion.	st be undertaken using r	non-chemical methods						
WT2-13	The holder of this approving reuse measures and/or the studies shat have the following object	val must conduct regular treatment technologies to Ill inform a Contaminant tives:	studies to investigate a o further reduce the rele and Release Reduction	dditional treated water ase of contaminants to Strategy that must						
	(a) Implementation of co	ost effective additional o	r alternative treatment te	echnologies;						
	<ul> <li>(b) Implementation of condition</li> <li>(c) Reporting to the <b>adr</b> current level of re-use</li> </ul>	ost effective re-use option <b>ninistering authority</b> of se, including justification	ns; and the outcomes of the inv where re-use options ar	restigations and the re not adopted.						
WT2-14	A Receiving Environmer commencement of this a contaminants on the rec	nt Monitoring Program m approval and conducted eiving water environmer	ust be designed within 6 to monitor the effects of it.	6 months of the the release of						
WT2-15	The REMP for the sewa	ge treatment plant must	include but not be limite	d to the following:						
	<ul> <li>i. description of polyackground wat that takes into control in takes into control in takes inclusion; and the locations of the proposed satisfy.</li> </ul>	otentially affected receivi er quality characteristics onsideration any tempor elected physicochemical monitoring stations inclu	ng <b>waters</b> including key based on accurate and al variation (e.g. season and biological indicators ding any control location	communities and reliable monitoring data ality); and and reasons for their as; and						



V.	the water quality characteristics of receiving <b>waters</b> to be determined and clarification of contaminant concentrations or levels indicating adverse environmental impacts during the REMP; and
vi.	the frequency of sampling and analysis; and
vii.	any historical data sets to be relied upon; and
viii.	description of the statistical basis on which conclusions are drawn; and
ix.	any relevant reports prepared by other governmental or professional research
	organisations that relate to the receiving environment within which the REMP is proposed.

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Agency inte	erest: Water									
Condition number	Condition									
L2-1	The only contaminant permitted to be released to land at the Cleveland Bay Sewage Treatment Plant is treated sewage wastewater in compliance with the release limits stated in <i>Table 3</i> - <i>Contaminant Release Limits to Land and Monitoring Location and Frequency.</i>									
	Table 3 - C	Contaminant R	elease Limits	to Land and Mon	itoring Loca	tion and	I Frequency			
	Source	Description	Monitoring Location	Quality Characteristics	Limit Type	Limit	Monitoring Frequency			
	Cleveland	Treated	W2 (Site	Turbidity (NTU)	Maximum	5	Weekly			
	Bay Sewage Treatment	sewage effluent	Irrigation Pump)	Faecal Coliforms (cfu/100mL)	Median	<10	Weekly <sup>1</sup>			
	Fidint			рН	Range	6.5- 8.5	Weekly			
	Notes: "<: indi	cates less than	I							
	1. A <b>mediar</b> day.	<b>1</b> value from a mi	inimum of 5 sarr	ples taken at not les	s than half-hou	ırly interva	als in any one			
L2-2	Monitoring m monitoring lo 3 - Contamir	oust be underta ocation for the q ant Release Li	ken and record Juality characte <i>mit</i> s <i>to Land a</i>	ds kept of contamir eristics and not less nd Monitoring Loca	nant releases s frequently the ation and Free	to land a nan spec quency	at the ified in <i>Table</i>			
L2-3	The irrigation	n of treated wa	stewater mus	t be carried out in a	a manner suc	h that:				
	i. no w irriga	astewater is re ation within 10 r	leased within 3 metres of the p	30 metres of any w property boundary;	atercourse or	for abov	ve ground			
	ii. vege	tation is not da	maged; Latruatura dam							
	iv. there	e is no surface i	ponding of was	stewater;						
	v. perc	olation of waste	ewater beyond	the plant root zone	e is minimise	d;				
	vi. the c mea exce	capacity of the l sured by bioche eded; and	and to assimila emical or chen	ate nitrogen, phosp nical oxygen demai	horus, salts, nd) and other	organic contam	matter (as inants is not			
	vii. the c	quality of groune	dwater is not a	dversely affected.						





## Schedule 4 (b): Mt St John Sewage Treatment Plant Site Specific Conditions

ERA	Location
ERA 63 Sewage treatment (1)(g) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— more than 100,000EP	Mt St John Sewage Treatment Plant Lot 1 Plant RP723447

The environmentally relevant activities conducted at the locations as described above must be conducted in accordance with the following site specific conditions of approval.

Agency interest: General									
Condition number	Condition	Condition							
G3-1	This approv peak desigr	al authorises s a capacity of 10	ewage tr )6,500 <b>ec</b>	eatment wo <b>quivalent p</b>	orks using p <b>erson (EP)</b>	lant and eq	uipment	with a total c	laily
Agency inte	erest: Water								
Condition number	Condition								
WT3-1	The only co waters is tr	ntaminant perr eated sewage	nitted to l wastew	be released <b>ater</b> .	form the N	lt St John S	Sewage T	reatment Pla	ant to
WT3-2	Treated seven Plant to wat	wage wastewa ers from	ater must	only be rel	eased from	the Mt St J	lohn Sew	age Treatm	ent
	• Rel cha	ease Point W nnel to Snaggy	<b>1</b> - Mt St 、 ⁄ Creek	John Sewa	ge Treatme	nt Plant out	tfall pipe t	o discharge	
WT3-3	Release to flow rate of Release to This exclude	<b>waters</b> from re 888 litres per s Waters - Relea es <b>by-pass</b> flo <sup>•</sup>	lease poi econd m se Limits ws cover	int RP for a ust be inco and Monito ed by Cond	II sewage ir mpliance wi pring Points ition WT3-7	nflows to the ith the limits and the as 7.	e treatme s in Table ssociated	nt plant up te 1 - Contam requiremen	o a inant ts.
	Table	1 - Contamina	int Relea	se to Wate	rs - Releas	se Limits a	nd Monit	oring Point	S
	Monitoring Point	Quality Characteristic	Min	Long Term 50 <sup>th</sup> Percentile	Short Term 80 <sup>th</sup> Percentile	Long Term 80 <sup>th</sup> Percentile	Max	Frequency	
	M2 Wet BOD₅ (mg/L) - 6 15 10 20 Weekly								
	well between secondary clarifiers	Totally Suspended Solids ( <b>mg/L</b> )	-	9	20	14	30	Weekly	
	and	Total Nitrogen ( <b>mg/L</b> as N)	-	5	-	-	15	Weekly	

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	disinfection system	Ammonia ( <b>mg/L</b> as N)	-	1	-	-	3	Weekly			
		Total Phosphorus ( <b>mg/L</b> as P)	-	1	-	-	3	Weekly			
		pH (pH units)	6.5	-	-	-	8.5	Weekly			
		Dissolved Oxygen ( <b>mg/L</b> )	2.0	-	-	-	-	Weekly			
	M3 Post disinfection	Faecal Coliforms (cfu/100mL)1000 cfu/100mL as a median value with a minimum of 5 samples taken at not less than half-hourly intervals in any one day and 4 out of 5 samples containing less than 4000 cfu/100mL.Weekly									
	Associated	requirements:									
WT3-4	<ol> <li>Sampling effective</li> <li>COB mathematical through a months a</li> <li>Enterocol values)( release I recreation</li> <li>Nitrogen samples volume of shall be</li> <li>In addition t of oil or great matter exclution</li> </ol>	g must be in acc ly calibrated and analysis of a min and with the agree occi may be more from the NHMR limits for enteroor on categories and phosphoru . Flow weighted of the sample ch run over a 24-her o WT3-3, the r ase, nor contain uding <b>bypass</b>	ereleases of the second	vith the Wate ed. Innative to <b>BC</b> Inher of 24 w the <b>adminis</b> an alternativ ion Water Q are essential rations are to e samples ar proportion or with not more <b>waters</b> multiplicating oil, covered by	er Quality Ma <b>DD</b> <sub>5</sub> once a r astewater s <b>stering auth</b> e to faecal c uality Guide ly equivalent b be determi e to be 'weig f the flow. Th te than a 2-1 Just not proo grease, sc water conc	anual and all reliable corre amples over rority. coliforms. Ris lines (2008) t to the tradit ned using flo ghted' to the ned using flo ghted' to the ne flow 'prop hour interval duce any sl um, litter or ditions WT3	monitoring a diation has a minimur sk threshol can be use tional prima bow weighte wastewate bottonal' co between e ick or other r other vis 3-7 and W	g devices mu been determ m period of 12 ds (or guideli ed to derive s ary and secon ed composite er flow, with t omposite sam each collection er visible ev sually object /T3-8.	ined ined 2 nes suitable ndary he nple on. ridence ionable		
WT3-5	<b>Treated wastewater</b> released from the Mt St John Sewage Treatment Plant at release point W1, must be monitored at monitoring points M2 and M3, for the quality characteristics and at the frequencies specified in Table 1.										
WT3-6	The daily volume of <b>treated wastewater</b> released from the Mt St John Sewage Treatment Plant must be determined or estimated for each release point, and records kept of such determinations.										
WT3-7	Inflows abov W1.	ve 888 litres pe	er second	l must be s	creened be	fore being	released	from release	e point		
WT3-8	The admini	stering autho	<b>rity</b> must	be notified	within 24 I	hours of an	y <b>bypass</b>	release cea	asing.		
WT3-9	The followin	ng details must	be record	ded in relat	ion to each	n <b>bypass</b> re	elease:				
		cane, date all	a aaraii0i		<i>a</i> ,						



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#### Environmental authority EPPR00927313

	<ul> <li>(b) the estimated volume of the <b>bypass</b> release;</li> <li>(c) the level of treatment at the sewage treatment plant prior to discharge;</li> <li>(d) the cause of the release; and</li> <li>(e) any monitoring of the water quality released.</li> </ul>										
WT3-10	The annual loads of total nitrogen and total phosphorus released to waters from release point W1 must comply with the limits listed in <i>Table 2 - Contaminant Release to Waters - Annual Load Limits</i> .										
	Release Point     Contaminant Release to Waters - Annual Load Limits										
	W1	Total Nitrogen (TN)	Annual Load	46,720 kg							
		Total Phosphorus (TP)		9,344 kg							
WT3-11	Calculate and keep reco waters from release poi	ords of annual loads of to nt W1. Loads must be ca	tal nitrogen and total ph alculated using the follow	osphorus release to wing method:							
	Actual load = yearly ave	rage dry weather flow	x 365 x yearly <b>median</b> c	concentration (mg/L)							
WT3-12	Disinfection of wastewat methods.	er released to water mu	st only be achieved usin	g non-chemical							
WT3-13	The holder of this approval must conduct regular studies to investigate additional treated water reuse measures and/or treatment technologies to further reduce the release of contaminants to <b>waters</b> . The studies shall inform a Contaminant and Release Reduction Strategy that must have the following objectives:										
	<ul> <li>(a) Implementation of contract</li> <li>(b) Implementation of contract</li> <li>(c) Reporting to the address</li> <li>current level of re-use</li> </ul>	ost effective additional o ost effective re-use optic ninistering authority of th se, including justification	r alternative treatment te ons; and le outcomes of the inves where re-use options a	echnologies; stigations and the re not adopted.							
WT3-14	A Receiving Environmer commencement of this a contaminants on the rec	nt Monitoring Program m approval and conducted eiving water environmer	ust be designed within 6 to monitor the effects of nt.	6 months of the the release of							
WT3-15	The REMP for the sewa	ge treatment plant must	include but not be limite	d to the following:							
	i. description of potentially affected receiving <b>waters</b> including key communities and background water quality characteristics based on accurate and reliable monitoring data that takes into consideration any temporal variation (e.g. seasonality); and										
	II. description of se inclusion; and iii iii. the proposed sa	the locations of monito	ring stations including a	ny control locations; and							
	iv. the water quality contaminant cor the REMP; and	characteristics of receiv ncentrations or levels inc	ving <b>waters</b> to be detern licating adverse environ	nined and clarification of mental impacts during							
	v. the frequency of	sampling and analysis;	and								
	vii. description of th	e statistical basis on whi	ch conclusions are draw	vn; and							



	viii. any relevant reports prepared by other governmental or professional research organisations that relate to the receiving environment within which the REMP is proposed.
WT3-16	A groundwater monitoring system must:
	<ul> <li>(a) be designed and installed by an appropriately qualified person(s) with experience and qualifications in hydrology and groundwater monitoring; and</li> <li>(b) include a sufficient number of bores installed at depths and locations which yield representative groundwater samples from at least the uppermost aquifer so as to: <ul> <li>i. detect any seepage of contaminants to groundwater from the site; and</li> <li>ii. establish the quality of groundwater affected by any seepage of contaminants; and</li> </ul> </li> <li>(c) include monitoring of background groundwater from the activity and hydraulically down gradient bore(s) of the activity.</li> </ul>
WT3-17	A groundwater monitoring program must be designed and implemented by an appropriately qualified person, and carried out and periodically reviewed following this on an ongoing basis by an appropriately qualified person. The groundwater monitoring program must include:
WT3-18	<ul> <li>(a) identification of the sewage treatment plant for which groundwater will be monitored;</li> <li>(b) identification of trigger parameters that are associated with the potential or actual contaminants held in the sewage treatment plant;</li> <li>(c) identification of trigger concentration levels that are suitable for early detection of contaminant releases at the sewage treatment plant;</li> <li>(d) justification for the selected trigger concentration levels. Justification may include basing the limits on ongoing background monitoring, or determining the limits by another method as considered applicable by an appropriately qualified person;</li> <li>(e) installation of groundwater monitoring bores that: <ul> <li>i. are within formations potentially affected by the sewage treatment plant authorised under this environmental authority (i.e. within the potential area of impact);</li> <li>ii. provide for the early detection of negative impacts prior to reaching groundwater dependent ecosystems, landholder's active groundwater bores, or water supply bores;</li> <li>iii. provide for the early detection of negative impacts prior to reaching migration pathways to other formations (i.e. faults, areas of unconformities known to connect two or more formations)</li> </ul> </li> <li>(f) monitoring of groundwater at each monitoring bore at least quarterly for the trigger parameters identified in section (b);</li> <li>(g) groundwater trigger action response procedures for when trigger parameters and trigger levels identified in sections (b) and (c) trigger the early detection of seepage of contaminants, or upon becoming aware of any monitoring results that indicate potential groundwater contaminant; and</li> <li>(h) a rationale detailing the program conceptualisation including assumptions, determinations, monitoring equipment, sampling methods and data analysis.</li> </ul>
WT3-18	Should three or more consecutive exceedances of any adopted alert level trigger value be exceeded:



WT3-19	<ul> <li>(a) within 1 month of becoming aware of the consecutive exceedances: give or send a written notice to the administering authority advising of the consecutive exceedances; and</li> <li>(b) within 3 months of becoming aware of the consecutive exceedances: <ul> <li>i. undertake, or commission the undertaking of, a study to identify appropriate remedial actions; and</li> <li>ii. give or send a complete and final report of the study to the administering authority.</li> </ul> </li> <li>A report must be prepared by an appropriately qualified person and submitted each year with the Annual Return that includes the following matters: <ul> <li>(a) a summary and interpretation of the data obtained from the groundwater monitoring program over the previous twelve months, including a comparison of monitoring results to</li> </ul> </li> </ul>				
	adopted alert le (b) an outline of ac any deficiency program; and (c) the effectivenes	evel trigger values; ations taken or prop identified by the inter ss of the groundwat	and osed to be taken to erpretation of the da ter monitoring syste	minimise the enviro ata from the ground m.	onmental risk from water monitoring
Agency inte	erest: Land				
Condition number	Condition				
L2-1	The only contaminant permitted to be released to land at the Mt St John Sewage Treatment Plant is <b>treated sewage wastewater</b> in compliance with the release limits stated in <i>Table 3 -</i> <i>Contaminant Release Limits to Land at St John Sewage Treatment Plant.</i>				
	Monitoring	Quality Characteristics	Limit Type	Limit	Monitoring Frequency
	M1 Between the	Turbidity (NTU)	Maximum	5	Weekly
	DAFF system and the clear	Faecal coliforms (cfu/100mL)	Median	<10	Weekly <sup>1</sup>
	Water otorage	рН	Range	6.5-8.5	Weekly
	Notes: '<' indicates le	ess than			
	1. A <b>median</b> value from a minimum of 5 samples taken at not less than half-hourly intervals in any one day.			intervals in any one	
L2-2	Monitoring must be undertaken and records kept of contaminant releases to land at the monitoring location for the quality characteristics and not less frequently than specified in <i>Table 3 - Contaminant Release Limits to Land at St John Sewage Treatment Plant.</i>				
L2-3	The irrigation of tre	ated wastewater n	nust be carried out	in a manner such th	nat:
	<ul> <li>viii. no wastewater is released within 30 metres of any watercourse or for above ground irrigation within 10 metres of the property boundary;</li> <li>ix. vegetation is not damaged;</li> <li>x. soil erosion and soil structure damage is avoided;</li> <li>xi. there is no surface ponding of wastewater;</li> </ul>				



xii. xiii.	percolation of wastewater beyond the plant root zone is minimised; the capacity of the land to assimilate nitrogen, phosphorus, salts, organic matter (as measured by biochemical or chemical oxygen demand) and other contaminants is not
xiv.	the quality of groundwater is not adversely affected.

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# Schedule 4 (c) Condon and Toomulla Sewage Treatment Plant Site Specific Conditions

ERA	Location
ERA 63 Sewage treatment (1)(e) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— more than 10,000 but not more than 50,000EP	<b>Condon Sewage Treatment Plant</b> Bowhunters Road, Condon - Lot 52 Plan EP2176
ERA 63 Sewage treatment (1)(b)(i) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— more than 100 but not more than 1,500EP— if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme - IT or IR	<b>Toomulla Sewage Treatment Plant</b> Edgecomb Court, Toomulla - Lot 1 Plan SP235124

The environmentally relevant activities conducted at the locations as described above must be conducted in accordance with the following site specific conditions of approval.

Agency interest: General			
Condition	Condition		
number			
WT4-1	Contaminants must not be directly or indirectly released from any source on the licensed place to any <b>waters</b> at any location other than the contaminants and sources at the locations listed below:		
	Release Point Locations		
	<i>Release point W1</i> - <b>Waters</b> described as Bohle River at a location described as adjacent to the Condon Sewage Treatment Plant at approximately 20.5 km AMTD.		
	<i>Release point W4</i> - <b>Waters</b> described as unnamed creek at a location described as adjacent to the Toomulla Sewage Treatment Plant.		
	Contaminants and Sources for Release Points		
	Release point W1 - Treated sewage effluent from the Condon Sewage Treatment Plant.		
	<i>Release point W4</i> - <b>Treated sewage effluent</b> from the evaporation lagoon during wet weather at the Toomulla Sewage Treatment Plant.		
WT4-2	Release Point W4 shall only be used while the connected population of the Toomulla Sewage Treatment Plant Sewerage Scheme does not exceed 450 equivalent persons.		
WT4-3	The total quantity of contaminants released from release point number W1 during any <b>dry weather day</b> must not exceed 5000 cubic metres and during a wet weather day must not exceed 15000 cubic metres.		
WT4-4	The release of contaminants from release point W4 must only occur when:		
	(a) the freeboard of the evaporation pond is less than 0.5 metre; and		



	(b) the effluent discharge rate w to 1.	vill achieve a dilution of receiving	waters to effluent of at least 5			
WT4-5	The release of contaminants to <b>waters</b> must comply, at the sampling and in situ monitoring point(s) specified in Condition WT4-1, with each of the limits specified in Table 1 for each quality characteristic.					
	Table 1 - Release Quality Characteristic Limits All Licensed Premises					
	Quality Characteristics	Release Limit	Limit Type			
	5-day Biochemical Oxygen Demand	15	Long Term 80th Percentile compliance			
	5-day Biochemical Oxygen Demand	23	Short Term 80th Percentile compliance			
	5-day Biochemical Oxygen Demand	45	Maximum			
	Suspended Solids	20	Long Term 80th Percentile compliance			
	Suspended Solids	30	Short Term 80th Percentile compliance			
	Suspended Solids	60	Maximum			
	рН	6.5 - 8.5 pH units	Range			
	Dissolved Oxygen	2 mg/L	Minimum			
	Free Residual Chlorine	0.7 mg/L	Maximum			
	Faecal Coliforms, based on a minimum of five samples collected at not less than fortnightly intervals, but in the case of Toomulla at not less than monthly intervals.	1000 colonies per 100 millilitres	Median			
	Faecal Coliforms, based on a minimum of five samples collected at not less than fortnightly intervals, but in the case of Toomulla at not less than monthly intervals, with four out of five samples containing less than the maximum specified.	4000 colonies per 100 millilitres	Maximum			
	Associated Requirements:					
	1. Sampling must be in accordance devices must be effectively cali	ce with the <i>Water Quality Sampling</i> brated and maintained.	<b>g Manual</b> and all monitoring			



WT4-6	In addition to WT4-5 the release to <b>waters</b> must not produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other visually objectionable matter.		
WT4-7	All ponds used for the storage or treatment of contaminants or wastes must be installed and maintained to prevent any discharge through the bed or banks of the pond from causing environmental harm or environmental nuisance in any waters (including groundwaters).		
WT4-8	All ponds used for the storage or treatment of contaminants or wastes with the exception of the evaporation lagoon at the Toomulla Sewerage Treatment Plant must be constructed and maintained so that a freeboard of not less than 0.5 metres is available for containment of rainfall.		
WT4-9	The <b>holder of this environmental authority</b> is responsible for the making of determinations and keeping of records of the quality of the contaminants at the monitoring points, quality characteristics, and at the frequency specified in <i>Table 2</i> :		
		Table 2	
	Quality Characteristic	Monitoring Points	Frequency
	5-day Biochemical Oxygen Demand	M1, M4	Fortnightly (M4 = monthly)
	Suspended Solids	M, M4	Fortnightly (M4 = monthly)
	рН	M1	Daily
	Dissolved Oxygen	M1	Daily
	Total Nitrogen	M5	Monthly
	Total Phosphorus	M5	Monthly
	Free Residual Chlorine	M1A	Fortnightly
	Faecal Coliforms (Organisms/100mL)	M1A, M5	Fortnightly (M5 = monthly)
WT4-10	All determinations of the quality	of contaminants must be sample	es at the locations listed below:
	Monitoring Point Locations		
	<ul> <li>M1 - At a point prior to chlorination at the Condon Sewage Treatment Plant</li> <li>M1A - At the outlet of the chlorine contact tank at the Condon Sewage Treatment Plant</li> <li>M4 - At the outlet of the Toomulla Sewage Treatment Plant prior to the evaporations pond.</li> <li>M5 - Within the discharge structure for the evaporation pond.</li> </ul>		
Agency inte	erest: General		
Condition number	Condition		
L4-1	The defined contaminant release areas are described as Condon Sewage Treatment Plant.		
L4-2	The release of contaminants to that surface runoff is likely to oc	land must not be carried out if so cur.	bil moisture conditions are such



L4-3	The contaminar each of the relea Monitoring Loca Table 3 - Cont	nt/s released mu ase limits specif tions and Frequ taminant Relea	st comply, at the sa ied in Table 3 - Col lency for each qual <b>se Limits to Land</b>	ampling and in- ntaminant Rele ity characteristi and Monitorin	situ measurem ase Limits to L c. <b>og Locations a</b>	ent point/s, with and and and Frequency
	Description	Monitoring Location	Quality Characteristics	Limit Type	Limit	Monitoring Frequency
	Treated sewage effluent	M1A	Faecal Coliforms (cfu/100mL)	Median	1000	Fortnightly
			Faecal Coliforms (cfu/100mL)	Maximum	4000	Fortnightly
			рН	Range	6.5 - 8.5	Weekly

## Schedule 4 (d): Picnic Bay Sewage Treatment Plant Site Specific Conditions

ERA	Location
ERA 63 Sewage treatment (1)(c) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— more than 1,500 but not more than 4,000EP	<b>Picnic Bay Sewage Treatment Plant</b> 65-73 West Point Road, Picnic Bay Lot 1 Plant RP742477

The environmentally relevant activities conducted at the locations as described above must be conducted in accordance with the following site specific conditions of approval.

Agency interest: General				
Condition number	Condition			
G5-1	Activities under this environmental authority must be conducted in accordance with the following limitations:			
	<ol> <li>This Environmental Authority authorises the operation of a membrane bioreactor sewage treatment plant with a peak design capacity of 2400 connected EP at Lot 1 RP 742477 County of Elphinstone Parish of Magnetic.</li> <li>A minimum of 20 hectares must be made available for the irrigation of treated effluent.</li> </ol>			
G5-2	A receiving environment monitoring program must be designed and implemented by <b>appropriately qualified persons</b> to monitor the effects of the <b>activity</b> on groundwater and soils.			
G5-3	The receiving environment monitoring program required by condition G5-2, must include at least the following:			



	Groundwater Monitoring			
	(a) he able to determine the impacts of the licensed activity on the space bustom of the impact of the licensed activity on the space bustom of the impact of the licensed activity on the space bustom of the licensed of the license of the licensed of the			
	(a) be able to determine the impacts of the licensed <b>activity</b> on the <b>groundwater</b> quality in the underlying aquifer; and			
	(b) include, but not be limited to, a sufficient number of bores (minimum of three) installed at locations and depths which yield representative groundwater samples from at least the upper-most aquifer so as to:			
	<ul> <li>i. establish the quality of groundwater that has not been affected by seepage or drainage of contaminants to groundwater from the activity; and</li> <li>ii. detect any seepage of contaminants to groundwater from the licensed place; and</li> </ul>			
	(c) include monitoring of background groundwater quality, hydraulically up-gradient of any release of contaminants to groundwater; and			
	<ul> <li>(d) include monitoring of upstream groundwater quality, hydraulically down gradient of all storage ponds, sewage treatment plant and irrigation areas;</li> </ul>			
	<ul> <li>(e) include, but not limited to, six monthly monitoring of the quality of groundwater to detect any possible release(s) of contaminants; and</li> </ul>			
	(f) consider the potential use of <b>groundwater</b> in the vicinity.			
	Soil Survey			
	A soil survey of Lot 2 on RP721497 is required to be completed 5 years post commencing irrigation to ensure that the capacity of the land to assimilate nitrogen, phosphorus, salts and organic matter is not exceeded. The survey needs to include:			
	<ol> <li>soil and sub-soil analysis, including assessment of the soils form representative locations, including type, structure, pH, phosphorus adsorption level and capacity, nutrient status, salinity and sodicity, and cation exchange capacity of the irrigation release areas; and</li> <li>determination of the quantity and quality of contaminants applied to the soils from the recycled water irrigation; and</li> </ol>			
	3. re-assessment including modelling of the water, nutrient and salt balances and irrigation			
	<ol> <li>reporting of monitoring results and an assessment of the impact of the releases on the irrigation areas.</li> </ol>			
Agency inte	erest: Water			
Condition number	Condition			
WT5-1	Treated effluent disposal from the Picnic Bay Sewage Treatment Plant is to occur by land irrigation only to the onsite irrigation areas, Picnic Bay Golf Course, the Magnetic Island Waste Transfer Station (Lot 2 RP721497), the Magnetic Island closed Landfill (Lot 1 P93835 and Lot 2 SP157592) and Forest Area (Lot 2 RP721497) or any other location approved from time to time as an effluent irrigation area. Contaminants must not be directly or indirectly released from any source on the premises to which this Environmental Authority relates to any waters at any location other than the contaminants and sources at the locations listed below:			



	Emergency Release point W1 -V Attachment 1 - Approved Plan 1 to the Nelly Bay Pump Station, S	Waters described as Gustav Cre 7942-F4, at a position at 484, 16 Sooning Street Nelly Bay.	ek at a location shown in Part 6, 60E 7,881,520N AMG adjacent			
	Wet Weather Release point W2 - Approved Plans at a location d Elphinstone, Parish of Magnetic,	- Wetlands as shown on plan 17 escribed as adjacent to Lot 1 RF , West Point Road Cockle Bay	942-F4 in Part 6, Attachment 1 742477, County of			
	<i>Irrigation Release point W3</i> - as shown on plan 17942-F4 in Part 6, Attachment 1 - Approved Plans at a location described as within Lot 1 RP 742477, County of Elphinstone, Parish of Magnetic, West Point Road Cockle Bay.					
	<b>Contaminants and Sources fo</b>	r Release Points:				
	<i>Release point W1 -</i> Pre-Treated Station emergency overflow.	Sewage Treatment Plant effluer	nt from the Nelly Bay Pump			
	<i>Release Point W2</i> - Treated Sev Treatment Plant.	vage Treatment Plant effluent fro	om Picnic Bay Sewage			
	<i>Release point W3</i> - Treated Sew Treatment Plant.	vage Treatment Plant effluent fro	om the Picnic Bay Sewage			
	Magnetic Island Waste Transfe	er Station Irrigation Area:				
	Irrigation Area as shown on Plar	n 5716-C50 B in Part 6, Attachm	ent 1 - Approved Plans.			
	Magnetic Island Closed Landf	ill - Lot 1 P93835 and Lot 2 SP	157592:			
	Irrigation Area as shown on map	- Picnic Bay STP Irrigation Area	as			
	Forest Area - Lot 2 RP721497					
	Irrigation Area as shown on map - Picnic Bay STP Irrigation Areas					
WT5-2	The release from release point W2, of treated effluent to the Picnic Bay Wetland, is only permitted in times when wet weather storage capability is exceeded and climatic conditions prevent irrigation activities.					
WT5-3	The release of contaminants from the Picnic Bay Sewage Treatment Plant to waters and land must comply at the sampling and in situ monitoring point(s) with each of the limits specified in <i>Table 1 - Quality Characteristic Limits, Emergency and Wet Weather Release (W1 and W2)</i> and <i>Table 2 - Quality Characteristic Limits and Land irrigation Release (W3)</i> where applicable for each quality characteristic.					
	W2)					
	Quality Characteristics	Release Limit	Limit Type			
	5-day Biochemical Oxygen Demand	6 <b>mg/L</b>	Long Term 50th Percentile			
	5-day Biochemical Oxygen Demand	35 <b>mg/L</b>	Maximum			
	Total Suspended Solids	9 <b>mg/L</b>	Long Term 50th Percentile			
	Total Suspended Solids	50 <b>mg/L</b>	Maximum			



	рН	6.5 - 8.5 pH units	Range				
	Faecal Coliforms, based on a minimum of 5 samples collected at not less than weekly intervals	1000 colonies per 100mL sample	Median				
	Total -N	5 <b>mg/L</b>	Long Term 50th Percentile				
	Total -N	10 <b>mg/L</b>	Maximum				
	Total -P	1 mg/L	Long Term 50th Percentile				
	Total -P	3 <b>mg/L</b>	Maximum				
	Ammonia -N	1 <b>mg/L</b>	Long Term 50th Percentile				
	Ammonia -N	3 <b>mg/L</b>	Maximum				
	Dissolved Oxygen	2 mg/L	Maximum				
	Table 2 - Quality Cha	aracteristic Limits and Land in	rigation Release (W3)				
	Quality Characteristics	Release Limit	Limit Type				
	Total -N	5 <b>mg/L</b>	Long Term 50th Percentile				
	Total -N	10 mg/L	Maximum				
	Total -P	1 mg/L	Long Term 50th Percentile				
	Total -P	3 mg/L	Maximum				
	Ammonia -N	1 mg/L	Long Term 50th Percentile				
	Total Dissolved Salts	1000 <b>mg/L</b>	Maximum				
	Electrical Conductivity	1500 µS/cm	Maximum				
	Sodium Adsorption Ratio	30	Maximum				
	Total Suspended Solids	<5 <b>mg/L</b>	Long Term 50th Percentile				
	рН	6.5 - 8.5	Range				
	E. coli	<10 cfu/100mL sample	Median				
	Associated Requirements:						
	<ol> <li>Sampling must be in accordance with the <i>Water Quality Sampling Manual</i> and all monitoring devices must be effectively calibrated and maintained.</li> </ol>						
WT5-4	Monitoring of contaminant releases must be undertaken in accordance with <i>Table 3 - Monitoring Frequency</i> and the associated monitoring requirements and records of the volume, date, time of commencement and duration of each occasion on which any release of contaminants is made to the effluent irrigation areas and the dates on which no such release takes place. <b>Table 3 - Monitoring Frequency</b>						



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	Quality Characteristics	Frequency	Sampling Locations - Part 6, Attachment 1 - Approved Plan 17942-F3 and F4				
	5-day Biochemical Oxygen Demand ( <b>mg/L</b> )	Monthly for the duration when irrigation occurs	W1 and W2				
	Total Suspended Solids (mg/L)	Monthly for the duration when irrigation occurs	W1, W2 and W3				
	Ammonia - N	Monthly for the duration when irrigation occurs	W1, W2 and W3				
	Electrical Conductivity (µS/cm)	Monthly for the duration when irrigation occurs	W1, W2 and W3				
	pH (units)	Monthly for the duration when irrigation occurs	W1, W2 and W3				
	Dissolved Oxygen (mg/L)	Monthly for the duration when irrigation occurs	W1, W2 and W3				
	Total Nitrogen (as Nitrogen) (mg/L)	Monthly for the duration when irrigation occurs	W1, W2 and W3				
	Total Phosphorus (as Phosphorus) ( <b>mg/L</b> )	Monthly for the duration when irrigation occurs	W1, W2 and W3				
	Faecal Coliforms	Monthly for the duration when irrigation occurs	W1 and W2				
	Sodium Adsorption Ratio	Monthly for the duration when irrigation occurs	W3				
	Free and Total Chlorine (mg/L)	Monthly for the duration when irrigation occurs	W3				
	E. coli (cfu/100 mL)	Monthly for the duration when irrigation occurs	W3				
	Total Dissolved Salts	Monthly for the duration when irrigation occurs	W3				
WT5-5	In addition to WT5-4, the release to <b>waters</b> must not produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other visually objectionable matter.						
Agency inte	erest: General						
Condition number	Condition						
L5-1	Treated effluent released to land	d must be done in accordance w	th documentation that ensures:				
	<ul> <li>(a) drainage to groundwater and minimised</li> <li>(b) surface pondage and run-of</li> </ul>	a subsurface flows of contamina f of effluent is prevented	nts to surface waters are				
	(b) surface portuage and run-of	i or enfuent is prevented					

	<ul> <li>(c) degradation of soil structure is minimised</li> <li>(d) soil sodicity and the build-up of nutrients and heavy metals in the soil and subsoil are minimised</li> </ul>
	(e) spray drift or overspray does not carry beyond effluent disposal areas
	<ul> <li>(f) effluent disposal areas are maintained with an appropriate crop in a viable state for transpiration and nutrient uptake</li> </ul>
	(g) sufficient buffer zones are maintained between irrigation sites and sensitive environmental receptors.
L5-2	When weather conditions or soil conditions preclude the release of treated sewage effluent to land, effluent must not be irrigated to land.
L5-3	The irrigation of treated effluent must be distributed evenly across the allocated land areas.

## Schedule 4 (e) Horseshoe Bay Sewage Treatment Plant Site Specific Conditions

ERA	Location
ERA 63 Sewage treatment (1)(c) operating	Horseshoe Bay Sewage Treatment Plant
sewage treatment works, other than no-release	Apjohn and Pollard Streets Horseshoe Bay Magnetic
works, with a total daily peak design capacity of—	Island - Lot 8 Plan EP2363 and Lot 2 Plan RP724194
more than 1,500 but not more than 4,000EP	and Lot 9 Plan EP2363

The environmentally relevant activities conducted at the locations as described above must be conducted in accordance with the following site specific conditions of approval.

Agency interest: Land							
Condition	Condition						
L6-1	The only contaminant permitted to be released to land is <b>treated sewage effluent</b> in compliance with the release limits stated in <i>Table 1 - Contaminant Release Limits to Land and Monitoring Location and Frequency</i> and the conditions of this <b>approval</b> .						
	Source	Description	Monitoring Location	Quality Characteristics	Limit Type	Limit	Monitoring Frequency
	Horseshoe	Treated	Effluent	Turbidity (NTU)	Maximum <sup>1</sup>	2	Continuous
	Bay Sewage Treatment	Sewage Effluent	Storage Tank	Faecal Coliforms2 (cfu <sup>3</sup> /100mL)	Median	<10	Weekly
				Chlorine residual mg/L4	Maximum	1	Continuous



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				pН	Range	6.5 - 8.5	Weekly
				EC (µS/cm) <sup>5</sup>	Maximum	1000/1600	Weekly
	<ol> <li>Notes:         <ol> <li>Turbidity should be monitored continuously with an alarm set for when NTU&gt;2 and automatic supply shutoff when NTU&gt;5.</li> <li>The holder may choose to measures E.coli in the place of Faecal Coliforms to satisfy this requirement.</li> <li>cfu = colony forming units</li> <li>Total chlorine residual of 1.0 mg/L after minimum contact time of 30 minutes.</li> <li>For sustainable irrigation, salinity should be kept as low as possible, e.g. if TDS&gt;1000 mg/L or EC&gt;1600 µS/cm, a salinity reduction program should be implemented. However, there may be some uses where salinity control is not required, or where other salinity management options are more practical.</li> </ol> </li> </ol>						
L6-2	Monitoring must be undertaken and records kept of contaminant releases to <b>land</b> at the monitoring location for the quality characteristics and not less frequently than specified in <i>Table 1 - Contaminant Release Limits to Land and Monitoring Location and Frequency</i> . All determinations of the quality of contaminants released must be made in accordance with methods prescribed in the latest edition of the <b>administering authority's Water Quality Sampling Manual.</b>						
L6-3	The irrigation	n of treated eff	luent or recla	imed water must I	pe carried ou	t in a manne	r such that:
	<ul> <li>(a) no wastewater is released within 30 metres of any watercourse or for above ground irrigation, within 10 metres of the property boundary;</li> <li>(b) vegetation is not damaged;</li> <li>(c) soil erosion and soil structure damage is avoided;</li> <li>(d) there is no surface ponding of treated effluent or reclaimed water;</li> <li>(e) percolation of wastewater beyond the plant root zone is minimised;</li> <li>(f) the capacity of the land to assimilate nitrogen, phosphorus, salts, organic matter (as measured by biochemical or chemical oxygen demand) and other contaminantsis not exceeded;</li> <li>(g) the quality of ground water is not adversely affected; and</li> <li>(h) Spray from any irrigation of treated wastewater must not drift beyond the boundaries of the licensed place.</li> </ul>						
L6-4	Take all reas	sonable and pro- n <b>treated efflu</b>	racticable ste ent or reclain	ps to ensure that p ned water, by sucl	bersons are r h means as -	not likely to b	e exposed to
	<ul> <li>(a) selection</li> <li>(b) appropri</li> <li>(c) restriction</li> <li>(d) monitori and/or</li> <li>(e) use of a</li> <li>(f) Notices public the wasteway</li> </ul>	n of irrigator ec ate timing of ir on of access to ng relevant gro ppropriate with prominently di tat the area is ater: and/or	quipment with rigation; and/ areas either bundwater qu hholding peric splayed on an irrigated with	I low exposure risk for being irrigated or ality indicators fro ods for livestock gr reas undergoing w treated waste wat	; and/or that are fresh m any potent azing; and/o /astewater irr er and not to	nly irrigated; tially affected r igation, warr use or drink	and/or I bores; ning the the



	<ul> <li>(g) Maintaining effective separation between wastewater application areas and boundaries, sensitive areas and bores; and/or</li> <li>(h) Lockable valves or removable handles must be fitted to all treated wastewater release pipes situated in public access areas</li> </ul>								
L6-5	<ul> <li>Treated effluent released to land must be done in accordance with documentation that ensures:</li> <li>(a) drainage to groundwater and subsurface flows of contaminants to surface waters are prevented</li> <li>(b) surface pondage and run-off of effluent is prevented</li> <li>(c) degradation of soil structure is minimised</li> <li>(d) soil sodicity and the build-up of nutrients and heavy metals in the soil and subsoil are</li> </ul>								
	<ul> <li>(d) solid solid solid up of numerical and nearly metals in the solid and subsolidate minimised</li> <li>(e) spray drift or overspray does not carry beyond effluent disposal areas</li> <li>(f) effluent disposal areas are maintained with an appropriate crop in a viable state for transpiration and nutrient uptake</li> <li>(g) sufficient buffer zones are maintained between irrigation sites and sensitive environmental receptors.</li> </ul>								
L6-6	When condi directed to a	tions preve storage or	nt the irrigation alternative me	of <b>trea</b> asures	nted effluen must be tal	i <b>t</b> to <b>land</b> , th ken to lawfu	ne contamii Illy dispose	nants of eff	must be luent.
Agency inte	erest: Water								
Condition number	Condition								
WT6-1	The only contaminants to be released directly or indirectly to waters (including groundwater) are treated sewage effluents in compliance with the release limits listed in <i>Table 3 - Contaminant Release Limits to Water and Release and Monitoring Locations and Frequency</i> at discharge locations described in Table 3								
	Table 3 -	Contamina	int Release Lii	mits to and	Water and Frequency	Release a	nd Monito	ring L	ocations
	Monitoring Point	Discharge Location	Quality Characteristic	Min	Long Term 50 <sup>th</sup> Percentile	Short Term 80 <sup>th</sup> Percentile	Long Term 80 <sup>th</sup> Percentile	Max	Frequency
	MP1 Final	RP1	COD (mg/L)	-	-	-	-	70	Daily
	manhole on Lot 2 on RP724194	Endeavour Creek	Suspended Solids ( <b>mg/L</b> )	-	-	35	30	45	Weekly
	to the discharge	8 on EP2363	<b>Total Nitrogen</b> (mg/L as N)	-	10	-	-	25	Daily <sup>2</sup>
	pipe into Endeavour	RP2 Rapid	Ammonia (mg/L as N)	-	-	-	-	2.0	Weekly
	Creek	infiltration beds within Lot	Total Phosphorus (mg/L as P)	-	3	-	-	8	Daily <sup>2</sup>





	MP2 2 on	pH (pH units)	6.5	-	-	-	8.5	Weekly	
	Manhole	RP724194	Dissolved	2.0	-	-	-	-	Weekly
	after		Oxygen (mg/L)						
	effluent	RP3 Rapid	Thermo-	-	1000	-	-	-	Weekly
	storage	infiltration	tolerant		median				
	tank	Lot 13 on	Coliforms						
		E124292	mL)						
	MP2		,						
	Manhole								
	immediately								
	effluent								
	storage								
	tank								
	Notes:								
	1. Weekly	samples are	to be taken on a	day of	the week roll	ling forward e	each week in	oclusive	e of
	Saturday	/s and Sunda	ays rather than o	n one si	tatic day. Als	o see ' <b>week</b>	ly' in definitio	ons.	••
	2. Nitrogen samples	ana pnospn Flow weigh	orus concentration ted composite sa	ons are moles a	to de detern are to he 'we	ined using 11 viabled' to the	ow weighted wastewater	flow v	DSITE with the
	volume d	of the sample	changing in pro	portion	to the flow. T	The flow 'prop	ortional' cor	nposite	sample
	shall be	run over a 24	4-hour period with	h not m	ore than a 2-	hour interva	l between ea	ch coll	ection.
	Release Po	int Locatio	ons						
	Release Po	int RP1 - W	aters described	d as En	ideavour Ci	reek within	Lot 8 on EF	2363.	
	Release Point RP2 - Rapid infiltration beds at Lot 2 on RP724194.								
	Release Po	Release Point RP3 - Rapid infiltration bed at Lot 13 on E124292.							
	Monitoring	Point Loca	ations						
	Monitoring I	Point MP1 -	The monitoring	g point	for determi	ning compli	ance with th	ne con	taminant
	release limits is the final manhole on Lot 2 on RP724194 to the discharge pipe into Endeavour Creek.								
	Monitoring I release limit	Po <i>int MP</i> 2 - ts is the ma	The monitoring	g point tely afte	for determiner the efflue	ning compli ent storage	ance with tl tank.	ne con	taminant
WT6-2	The release	to waters	must not produ	ce any	slick or oth	er visible e	vidence of a	oil or g	rease, nor
	contain visible floating oil, grease, scum, litter or other visually objectionable matter excluding <b>bypass</b> releases covered by water conditions WT6-9.								
WT6-3	The daily vo	olume of wa	stewater flow a	nd dail	y volume o	f effluent re	leased to w	aters	(including
	groundwate device with determination	r) must be o an accurac <u>y</u> ons.	determined or e y of ±5%, for ex	estimate cample	ed by an ap a calibrate	propriate c d flow mete	ontinuous n r and recor	neasu ds kep	rement ot of such



WT6-4	Monitoring must be undertaken and records kept of contaminant releases to <b>waters</b> (including groundwater) at the monitoring location for the quality characteristics and not less frequently than specified in <i>Table 3 - Contaminant Release Limits to Water and Release and Monitoring Locations and Frequency.</i> All determinations of the quality of contaminants released must be made in accordance with methods prescribed in the latest edition of the <b>administering authority's Water Quality Sampling Manual</b> .					
WT6-5	The total mass load of <b>total nitrogen</b> and <b>total phosphorus</b> released to <b>waters</b> (including groundwater) for release point must comply with the limits listed in <i>Table 4 - Release Mass Load Limits</i> .					
	Destad	Table 4 -	Release Mass Loa	ad Limits	Delesses L'mit	
	Period	Release Point	Contaminant			
	Each Calendar Year	RP1, RP2 and RP3	as N	Annual Load	l o be calculated using formula 1 (kg/calendar year)	
		RP1, RP2 and RP3	<b>Total</b> <b>Phosphorus</b> as P	Annual Load	To be calculated using Formula 2 (kg/calendar year)	
	Calculation of Rel	ease Mass Load L	imits:			
	Formula 1: Annual	Mass Load Limit TN	N = ADWF1 x 365 x	5 mg/L		
	Formula 2: Annual	Mass Load Limit TF	P = 365 x 1 x mg/L			
	Notes:					
	<ol> <li>Average Dry Weather Flow (ADWF) = the average daily wastewater flow (ML) for all days in a year that occur within any period of 7 consecutive days during which the rainfall<sup>2</sup> on any is less than 0.25 mm, infiltration of stormwater into the sewerage system is at a minimum<sup>3</sup> and abnormal influences such as public holidays are excluded.</li> <li>Rainfall recorded at any rainfall measuring station recognised by the Commonwealth Bureau of Meteorology within the sewered area connected to the sewage treatment plant, or if no such measuring station exists, at the nearest such station to the sewage treatment plant.</li> <li>Infiltration of stormwater sewage into the sewerage system is at a minimum when rainfall over days does not exceed 50 mm.</li> </ol>					
WT6-6	Calculate and keep phosphorus release following formula:	e records of <b>daily</b> are sed to <b>waters</b> at RF	nd <b>annual mass lo</b> a P1, RP2 and RP3. N	ads of total nitroge Aass loads must be	en and <b>total</b> calculated by the	
	<b>Daily Mass Load</b> = RP1, RP2 and RP3	= measured value <sup>1</sup> ( 3.	of contaminant ( <b>mg</b>	<b>/L</b> ) x Daily Flow for	release points	
	Annual Load = the	sum of the <b>daily n</b>	nass loads release	d for that calendar y	/ear.	
	Notes:					





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	1. The measured value being the value measured that day or on the most recent sampling occasion if not measured that day.						
WT6-7	Release of contaminants to surface <b>waters</b> must only occur if flow in receiving <b>waters</b> , namely Endeavour Creek, exceeds 55.6ML/day as measured at a point in Endeavour Creek adjacent to the discharge location.						
WT6-8	<b>By-pass flow events</b> must only occur for wet weather related flows that are in excess of the hydraulic capacity of the plant (5xADWF), provided that all reasonable and practicable measures must be taken to minimise the volume and occurrence of such events, including compliance with recognised design guidelines to cater for expected wet weather flows, minimising infiltration and ensuring connected population does not exceed the plant's design population on a hydraulic basis.						
WT6-9	Any influent from a <b>by-pass event</b> must be treated as a minimum by <b>fine screening</b> and disinfection prior to release to <b>waters</b> from release point RP1.						
WT6-10	The administering authority must be notified within 24 hours of any bypass release ceasing.						
WT6-11	The following details must be recorded in relation to each bypass release:						
	<ul> <li>(a) the start time, date and duration of the release;</li> <li>(b) the estimated volume of the <b>bypass</b> release;</li> <li>(c) the level of treatment at the sewage treatment plant prior to discharge;</li> <li>(d) the cause of the release; and</li> <li>(e) any monitoring of the water quality released.</li> </ul>						
WT6-12	All ponds or other structures used for the storage or treatment of contaminants, sewage or wastes at or on the <b>authorised place</b> must be constructed, installed and maintained:						
WT6-13	Design and implement an on-going Groundwater Monitoring Program to assess the quality of groundwater affected, or likely to be affected, by the indirect discharge of <b>treated effluent</b> to the groundwater.						
WT6-14	A Groundwater Monitoring Program must:						
	<ul> <li>(a) Be designed and installed and maintained by a person possessing appropriate qualifications and experience in the fields of hydrogeology and groundwater monitoring program design to be able to competently make recommendations about these matters; and</li> <li>(b) Provide for the following: <ul> <li>i. Include monitoring bores that are located hydraulically down gradient from the rapid</li> </ul> </li> </ul>						
	infiltration beds and effluent irrigation area; and						
	<li>Representative groundwater sampling from the uppermost aquifer within or adjacent to the effluent irrigation area and rapid infiltration beds; and</li>						
	<ul> <li>Representative groundwater sampling from "background bore(s)" that are hydraulically up-gradient of effluent irrigation area and are representative of the same aquifer mentioned in condition (c)(i); and</li> </ul>						
	iv. The quality of groundwater hydraulically down gradient of any release of						
	v. That the locations for groundwater monitoring facilities must be recorded with reference to horizontal coordinates accurate to 1.0 metre; and						

vi.	That on any occasion that groundwater samples are obtained, measurement and recording of standing groundwater levels in metres, accurate to 0.01 metre is undertaken; and
vii.	The elevation of the reference point, relative to Australian Height Datum, for use in any groundwater level measurement must be determined to an accuracy of 0.01 metre; and
viii.	Monitor for at least the contaminants listed in <i>Table 3 - Contaminant Release Limits</i> to Water and Release and Monitoring Locations and Frequency;
ix.	Sufficient spatial and temporal sampling to assess whether or not there has been a statistically significant change compared to background values.

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WT6-15	Conduct monitoring and keep records of contaminant releases to groundwater. All determinations of contaminant releases must:			
	<ul> <li>(a) Be made in accordance with methods prescribed in the latest edition of the administering authority's Water Quality Sampling Manual;</li> <li>(b) Be conducted at least at the frequency of every month at locations determined by the</li> </ul>			
	groundwater monitoring network and at least for water quality characteristics in Table 3 - Contaminant Release Limits to Water and Release and Monitoring Locations and			
	<ul> <li>(c) Be undertaken prior to commencement of effluent irrigation and indirect release to groundwater via the rapid infiltration beds;</li> </ul>			
	(d) Be performed by a person or body possessing appropriate experience and qualifications to perform the required determinations; and			
	(e) Assess whether or not there has been any statistically significant change compared to background values at locations hydraulically down gradient of the effluent irrigation area for at least each quality characteristic in <i>Table 3 - Contaminant Release Limits to Water and Release and Monitoring Locations and Frequency.</i>			
Agency inte	erest: Waste			
Condition number	Condition			
W6-1	Screenings, grit and sewage and wastewater treatment plant sludge's generated by the sewage treatment process must not be stored on <b>site</b> for any period of time longer than that necessary to dewater any sludge's and collected screenings and grit and prepare these wastes for transport to and disposal at an appropriately authorised facility that can lawfully accept such waste or to a facility that can lawfully and appropriately reuse, recycle or reprocess such waste (in accordance with a relevant resource <b>approval</b> ).			
W6-2	Biosolids and sludge's must be stored, managed and utilised on- <b>site</b> in accordance with the Environmental Guidelines, <i>Use and Disposal of Biosolids Products, 1997 - NSW EPA.</i>			





#### Part 4: Water Treatment Activities Schedule 5: Douglas Water Treatment Plant

ERA	Location
ERA 64 Water treatment (3) treating 10ML or	Douglas Water Treatment Plant
more raw water in a day.	Angus Smith Drive, Douglas - Lot 631 Plan EP1537

The environmentally relevant activities conducted at the locations as described above must be conducted in accordance with the following site specific conditions of approval.

Agency interest: General					
Condition number	Condition				
G1	Prevent and / or minimise likelihood of environmental harm.				
	In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused				
G2	Maintenance Of Measures, Plant and Equipment				
	The operator of an ERA which this approval relate must:				
	<ul> <li>(a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and</li> </ul>				
	<ul><li>(b) maintain such measure, plant and equipment in proper and efficient condition; and</li><li>(c) operate such measures, plant and equipment in a proper and efficient manner.</li></ul>				
G3	Site Based Management Plan				
	From commencement of an ERA to which this approval relate, a site based management plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out.				
	The SBMP must address the following matters:				
	<ul> <li>(a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals.</li> <li>(b) Identification of environmental issues and potential impacts</li> <li>(c) Control measures for routine operations to minimise likelihood of environmental harm</li> <li>(d) Contingency plans and emergency procedures for non-routine situations.</li> <li>(e) Organisational structures and responsibility</li> <li>(f) Effective communication.</li> <li>(g) Monitoring of contaminant releases</li> <li>(h) Conducting environmental impact assessments</li> <li>(i) Staff training</li> </ul>				

	<ul><li>(j) Record keeping</li><li>(k) Periodic review of environmental performance and continual improvement</li></ul>			
G4	The site based management plan must not be implement or amended in a way that contravenes any condition of this approval			
G5	Records			
	Record, compile and keep all monitoring results required by this approval and present this information to the administering authority when requested.			
G6	All records required by this approval must be kept for 5 years.			
G7	Waste Records			
	A record of all waste excluding trackable waste must be kept detailing the following information:			
	<ul> <li>(a) date of pickup of waste;</li> <li>(b) description of waste;</li> <li>(c) quantity of waste;</li> <li>(d) origin of the waste; and</li> <li>(e) destination of the waste.</li> </ul>			
	Note: Trackable wastes as listed in Schedule 11 of the Environmental Protection Regulation 2019 are not covered by this condition. Trackable wastes have similar recording requirements to this condition in accordance with a waste tracking system established under the above Regulation.			
G8	Notification			
	Telephone the EPA's Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants no in accordance with the conditions of this approval.			
G9	Information About Spills			
	A written notice detailing the following information must be provided to the EPA within 14 days of any advice provided in accordance with condition G8:			
	(a) the name of the operator, including their approval / registration			
	(b) number;			
	(d) quantity and substance released:			
	(e) vehicle and registration details;			
	(f) person/s involved (driver and any others);			
	(g) the location and time of the release; (b) the suspected cause of the release;			
	(i) a description of the effects of the release:			
	(j) the results of any sampling performed in relation to the release;			
	(k) actions taken to mitigate any environmental harm caused by the release; and			
	(I) proposed actions to prevent a recurrence of the release.			
G10	Monitoring			
	A competent person(s) must conduct any monitoring required by this approval.			
G11	Equipment Calibration			

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All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this approval must be calibrated, and appropriately operated and maintained
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G12	Trained / Experienced Operator(s)
	The daily operation of the water treatment system and pollution control equipment must be carried out by a person(s) with appropriate experience and / or qualifications to ensure the effective operation of that treatment system and control equipment.
G13	Spill Kit
	An appropriate spill kit, personal protective equipment and relevant operator instructions / emergency procedure guides for the management of wastes and chemicals associated with the ERA must be kept at the site, and in each vehicle used if the activity is a mobile ERA
G14	Spill Kit Training
	Anyone operating under this approval must be trained in the use of the spill kit.
Agency inte	erest: Air
Condition number	Condition
A1	Dust Nuisance
	The release of dust and / or particulate matter resulting from the ERA must not cause an environmental nuisance at any nuisance sensitive or commercial place.
A2	Nuisance
	The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause nuisance at any nuisance sensitive or commercial place.
Agency inte	erest: Land
Condition number	Condition
L1	Preventing Contaminant Release To Land
	Contaminants must not be release to land
L2	Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm.
	Note: All petroleum product storage's must be designed, constructed and maintained in accordance with AS 1940 - Storage and Handling of Flammable and Combustible Liquids.
Agency inte	erest: Noise
Condition	Condition
N1	Noise Nuisance
	Noise form the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place.



N2	Noise Monitoring
	When requested by the administering authority, noise monitoring must be undertaken to investigate any complaint of noise nuisance, and the results notified within 14 days to the administering authority. Monitoring must include:
	<ul> <li>(a) LA 10, adj, 10 mins</li> <li>(b) LA 1 adj, 10 mins</li> <li>(c) the level and frequency of occurrence of impulsive or tonal noise;</li> <li>(d) atmospheric conditions including wind speed and direction;</li> <li>(e) effects due to extraneous factors such as traffic noise; and</li> <li>(f) location, date and time of recording</li> </ul>
N3	The method of measurement and reporting of noise levels must comply with the latest edition of the Environmental Protection Agency's Noise Measurement Manual.
Agency inte	erest: Social
Condition number	Condition
S1	Complaint Response
	The operator of the ERA must record the following details for all complaints received and provide this information to the administering authority on request:
	<ul> <li>(a) time, date, name and contact details of the complainant;</li> <li>(b) reasons for the complaint;</li> <li>(c) any investigations undertaken;</li> <li>(d) conclusions formed; and</li> <li>(e) any actions taken</li> </ul>
Agency inte	erest: Water
Condition number	Condition
W1	Release To Waters
	Contaminants that may cause environmental harm must not be directly or indirectly released from any source to any waters at any location other than the source at the locations listed below:
	Release Point W1 - Waters described as Sludge lagoon overflow at a location described as the outlet at the southern end of Sludge Lagoon 1.
	Release Point W2 - Waters described as Sludge lagoon overflow at a location described as the outlet at the southern end of Sludge Lagoon 2.
W2	Release To Waters
	The release of contaminants to waters must comply, at the monitoring point in <i>Table 1 - Contaminant Release Limits to Water</i> with each of the limits specified in Table 1 for each quality characteristic.



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W3	Monitoring									
	Monitoring must be undertaken and records kept of contaminant releases to waters at the monitoring point for the quality characteristics and not less frequently than specified in <i>Table 1 - Contaminant Release Limit to Water</i> . All determinations of the quality of contaminants released must be:									
	<ul> <li>(a) made in accordance with methods prescribed in the latest edition of the administering authority's Water Quality Sampling Manual; and</li> <li>(b) carried out on samples that are representative of the discharge.</li> </ul>									
	Table 1 - Contaminant Release Limits to Water									
	Monitoring	Release	Quality	Release Limit			No. of	Monitoring		
	Point	Location	Characteristic	Minimum	Load	Maximum	Samples to be Taken	Frequency		
	W1, W2	W1, W2	Filterable Aluminium	-	-	200µg/L	At least 1 sample per megalitre or part thereof of overflow during any event	Each overflow event		
	W1, W2	W1, W2	рН	6.5	-	8.5	At least 1 sample per megalitre or part thereof of overflow during any event	Each overflow event		
	W1, W2	W1, W2	Total Aluminium	-	Maximum monthly load 100kg Maximum yearly load 500kg	-	At least 1 sample per megalitre or part thereof of overflow during any event	Each overflow event		
	<ul> <li>Associated F</li> <li>1. The Tota taken du the relea</li> <li>2. The max loads for</li> <li>3. The max for each</li> <li>4. Monitorir appreciae</li> </ul>	Requirement I Aluminium ring an over se concentr imum month each overfl imum yearly overflow even ng of wastev	nts: release load is t flow event. Indiv ation of the samp hly load for Total ow event in that / load for Total A ent in that year m vater releases m on at the time of t	to be calcula idual loads a ple for that o Aluminium month meas luminium is neasured in ay be carrie	ated as the su are calculate overflow ever is to be calcu sured in acco to be calcula accordance d out at eithe	um of individ d by multiply nt. Ilated by the ordance with ted by the a with conditio or W1 and / c	lual loads from ring the release addition of all i condition W4. ddition of all ind n W4 or W2 dependir	each sample e volume by individual dividual loads ng on		
		ial condition		ne release.						

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5.	Maximum monthly and yearly loads of Total Aluminium are the combined total of both loads measured
	at monitoring points W1 and W2.

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W4	Monitoring Discharge Volume
	The volume of sludge lagoon overflow must be determined to an accuracy of $\pm 5\%$ and records kept of such determinations
W5	Stormwater Management
	There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain.
W6	Suitable banks and / or diversion drains must be installed and maintained to exclude stormwater runoff from entering any ponds or other structures used for the storage or treatment of contaminants or wastes.
W7	Pond Conditions
	All ponds used for the storage or treatment of contaminants, sewage or wastes at or on the authorised place must be constructed, installed and maintained:
	<ul> <li>(a) so as to minimise the likelihood of any release of effluent through the bed or banks of the pond to any waters (including ground water);</li> <li>(b) so that a freeboard capable of containing a 1 in 10 year 24 hour duration storm event is maintained at all times, except in emergencies; and</li> <li>(c) so as to ensure the stability of the ponds' construction.</li> </ul>


# Part 5: Definitions

Key terms and/or phrases used in this document are defined in this section and bolded throughout this document. Applicants should note that where a term is not defined, the definition in the *Environmental Protection Act 1994,* its regulations or environmental protection policies must be used. If a word remains undefined it has its ordinary meaning.

Active waste disposal face means an area currently being used for the disposal and burial of waste accepted under a condition of this environmental authority.

Activity means the environmentally relevant activities, whether resource activities or prescribed activities, to which the environmental authority relates.

Administering authority means the Department of Environment and Science or its successor or predecessors.

**Annual return** means the return required by the annual notice (under section 316 of the *Environment Protection Act 1994*) for the section 73F registration certificate that applies to the development approval.

**Appropriate dispute resolution** means allowing parties in dispute about an alleged or potential noise nuisance to discuss the matter without threat of legal action. Disputes caused through noise may be discussed in conference:

- (a) at a dispute centre under the Dispute Resolution Centre Act 1990;
- (b) with a National Dispute Centre approved mediator,
- (c) with a Queensland Law Society approved mediator,
- (d) by a professional service offering independent mediation or dispute resolution conference process: or
- (e) by an Administering Authority or industry organisation offering an independent mediation or dispute resolution conference process

**Appropriately qualified person(s)** means a person or persons who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis to performance relative to the subject matter using the relevant protocols, standards, methods or literature.

Approval means this environmental authority.

Authorised place or licensed place or site mean the place authorised under this environmental authority for the carrying out of the specified environmentally relevant activities.

**Background** means noise, measured in the absence of the noise under investigation, as  $L_{A90,T}$  being the A-weighted sound pressure level exceeded for 90 percent of the time period of not less than 15 minutes, using Fast response.

Boundary means within one metre of the cadastral boundary of the site.

Capping means the covering of a landfill with impervious material to Inhibit penetration by liquids.

**Commercial place** means used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

**Compaction** means increasing the density of solid waste in landfills by the repeated passage of heavy machinery over its surface.

Clinical waste means waste that has the potential to cause disease including, for example, the following:



- (a) animal waste;
- (b) discarded sharps;
- (c) human tissue waste;
- (d) laboratory waste.

**Controlled release event** point source discharges of waste water or other contaminants generated by the ERA (e.g. discharge of treated effluent from sewage treatment plants, placement of contaminants into water such as dredge spoil, disposal or fish food in sea cage aquaculture, or the intentional introduction of substances into groundwater such as by framing to release underground gas); or changes to hydrology, including aquifers, stream flow rates or water availability.

**Domestic waste** means waste, other than domestic clean-up waste, green waste, recyclable waste, interceptor waste or waste discharged to a sewer, produced as a result of the ordinary use or occupation of domestic premises.

**Environmental harm** is any adverse effect, or potential adverse effect (whether temporary or permanent and of whatever magnitude, duration or frequency) on an environmental value, and includes environmental nuisance.

Environmental nuisance as defined under Chapter 1 of the Environmental Protection Act 1994.

Environmental value as defined in Chapter 1 of the Environmental Protection Act 1994.

Filterable Aluminium means total dissolved aluminium.

**Free liquid** means liquid which readily separates from the solid portion of a waste under ambient temperature and pressure as determined by Method 9095 (Paint Filter Liquids Test) described in "US EPA: Free Liquids (Paint Filter)" Federal Register, Vol. 50, no 83. P 18370, April 1985.

General waste means waste other than regulated waste.

**Groundwater monitoring system** means a system of groundwater monitoring devices, such as monitoring bores, used to provide data in respect to the level and quality of groundwater In the uppermost aquifer where the location of the groundwater monitoring devices is such that comparisons of groundwater quality and groundwater level can be made between groundwater flowing from beneath the site (down-gradient flow) of the activity and groundwater flowing towards the site of the activity (up-gradient flow).

Holder of this environmental authority means Townsville City Council.

**Infectious waste** means waste containing viable microorganisms or their toxins which are known or suspected to cause disease in animals or humans.

**Intrusive noise** means noise that, because of its frequency, duration, level, tonal characteristics, impulsiveness or vibration —

- is clearly audible to, or can be felt by, an individual; and
- annoys the individual.
- In determining whether a noise annoys an individual and is unreasonably intrusive, regard must be given to Australian Standard 1055.2 — 1997 Acoustics — Description and Measurement of Environmental Noise Part 2 — Application to Specific Situations.

Land means land excluding waters and the atmosphere.

Landfill unit means a discrete area of land or an excavation that receives solid waste



L<sub>A 10, adj, 10 mins</sub> means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 10% of any 10 minute measurement period, using Fast response.

L<sub>A 1, adj, 10 mins</sub> means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 1% of any 10 minute measurement period, using Fast response.

L<sub>Aeq adj,T</sub> means the adjusted A weighted equivalent continuous sound pressure level measures on fast response, adjusted for tonality and Impulsiveness, during the time period T, where T is measured for a period no less than 15 minutes when the activity is causing a steady state noise, and no shorter than one hour when the approved activity is causing an intermittent noise.

L<sub>Amax adj,T</sub> means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over a time period of not less than 15 minutes, using fast response.

 $L_{eq}$  means the equivalent continuous A-weighted sound pressure level adjusted for noise character and measured over a time period of not less than 15 minutes using fast response.

 $L_{max}$  means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over a time period of not less than 15 minutes, using fast response.

**Leachate** means a liquid that has passed through or emerged from, or is likely to have passed through or emerged from, a material stored, processed or disposed of at the site that contains soluble, suspended or miscible contaminants likely to have been derived from the said material.

**Leachate recirculation** means the practice of returning leachate to the upper layers of a landfill, from which it has been abstracted, usually by direct spraying or pump well injection.

Liquid means any substance that;

- Has an angle of repose of less than five degrees; or
- becomes free flowing at or below 60 degrees Celsius or when It Is transported; or
- Is not generally capable of being picked up by a spade or shovel.

**Lower explosive limit** means the lowest percentage by volume of a mature of explosive gases in air that will propagate a flame at 25 °C and atmospheric pressure.

**Max**<sub>LpA,T</sub> means the maximum A-weighted sound pressure level measured over a time period T of not less than 15 minutes, using Fast response.

mg/L means milligrams per litre.

**Measures** has the broadest interpretation and includes plant, equipment, physical objects, monitoring, procedures, actions, directions and competency.

NATA means National Association of Testing Authorities.

Noxious means harmful or injurious to health or physical well-being.

**Nuisance sensitive place** or **sensitive place** includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place;

1. a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or

- 2. a motel, hotel or hostel; or
- 3. a kindergarten, school, university or other educational institution; or
- 4. a medical centre or hospital; or
- 5. a protected area under the *Nature Conservation Act 1992*. the *Marine Parks Act 2004* or a World Heritage Area; or
- 6. a public thoroughfare, park or gardens; or
- 7. for noise, a place defined as a sensitive receptor for the purposes of the *Environmental Protection* (*Noise*) *Policy 2019.*

**Offensive** means causing offence or displeasure; is unreasonably disagreeable to the sense; disgusting, nauseous or repulsive.

Putrescible waste means waste food or waste animal matter (including dead animals) and any mixture of such wastes.

**Records** include breach notifications, written procedures, analysis results, monitoring reports and monitoring programs required under a condition of this authority.

#### Regulated waste means waste that -

- (a) is commercial or industrial waste, whether or not it has been immobilised or treated; and
- (b) is of a type, or contains a constituent of a type, mentioned in Schedule 7 of the Environmental Protection Regulation 2008

#### Regulated waste Includes:

- (a) for an element any chemical compound containing the element; and
- (b) anything that contains residues of the waste.

#### Release of a contaminant into the environment means to;

- 1. deposit, discharge, emit or disturb the contaminant; and
- 2. cause or allow the contaminant to be deposited, discharged, emitted or disturbed; and
- 3. fail to prevent the contaminant from being deposited, discharged emitted or disturbed; and
- 4. allow the contaminant to escape; and
- 5. fail to prevent the contaminant from escaping.

Release point means the point were contaminants overflow from the sludge lagoons.

**Secondary containment system** means a system designed, installed and operated to prevent any release of contaminants from the system, or containers within the system, to land, groundwater, or surface waters.

**Site** means the place to which this development approval relates or the premises to which this development approval relates.

TCLP means a toxicity characteristic leaching procedure.

**Uncontrolled release** unintentional releases of contaminants (e.g. leaks through, or overflows from, waste water ponds or poorly managed fuel or oil storages, contamination by landfill leachate, generation of acid mine drainage).

Works or operation means the relevant activity approved under this environmental authority.

Waste operations area means the following areas:

- 1. waste receiving
- 2. sorting
- 3. treating
- 4. recycling
- 5. disposal.

**Waters** includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water, natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part thereof.

You means the holder of the environmental authority.

**24 hour storm event with an average recurrence interval of 1 in 10 years** means the maximum rainfall depth from a 24 hour duration precipitation event with an average recurrence interval of once in 10 years. For example, an Intensity-Frequency-Duration table for a 24 hour duration event with an average recurrence interval of 1 in 10 years, identifies a rainfall intensity of 8.2mm/hour. The rainfall depth for this event is therefore 24 hour x 8.2mm/hour = 196.8mm.

**80th percentile** means not more than one (1) of the measured values of the quality characteristic is to exceed the stated release limit for any five (5) consecutive samples for a sampling point at any time during the environmental activity(ies) works.

## Part 5 (a) - Definitions for the Sites Listed Below

Environmentally relevant activities	Locations
ERA 63 Sewage treatment (1)(g) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— more than 100,000EP	<b>Cleveland Bay Sewage Treatment Plant</b> 1/426 Ron McLean Drive Stuart - Lot 1 Plan RP732944 and Lot 1 Plan RP732945
ERA 63 Sewage treatment (1)(g) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— more than 100,000EP	Mt St John Sewage Treatment Plant Lot 1 Plan RP723447
ERA 63 Sewage treatment (1)(e) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— more than 10,000 but not more than 50,000EP	<b>Condon Sewage Treatment Plant</b> Bowhunters Road, Condon - Lot 52 Plan EP2176
ERA 63 Sewage treatment (1)(b)(i) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— more than 100 but not more than 1,500EP— if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme - IT or IR	<b>Toomulla Sewage Treatment Plant</b> Edgecomb Court, Toomulla - Lot 1 Plan SP235124
ERA 63 Sewage treatment (1)(c) operating sewage treatment works, other than no-release	Picnic Bay Sewage Treatment Plant

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works, with a total daily peak design capacity of—	65-73 West Point Road, Picnic Bay
more than 1,500 but not more than 4,000EP	Lot 1 Plan RP742477
ERA 63 Sewage treatment (1)(c) operating	Horseshoe Bay Sewage Treatment Plant
sewage treatment works, other than no-release	Apjohn and Pollard Streets Horseshoe bay Magnetic
works, with a total daily peak design capacity of—	Island - Lot 8 Plan EP2363 and Lot 2 Plan RP724194
more than 1,500 but not more than 4,000EP	and Lot 9 Plan EP2363

Note that where a term is not defined, the definition in the Environmental Protection Act 1994, its regulations or environmental protection policies must be used. If a word remains undefined it has its ordinary meaning.

Act means the Environmental Protection Act 1994.

Activity means the environmentally relevant activities, whether resource activities or prescribed activities, to which the environmental authority relates.

Administering authority means the Department of Environment and Science or its successor or predecessors.

Annual load means the sum of all the daily loads released during the same calendar year period.

**Appropriate dispute resolution** means allowing parties in dispute about an alleged or potential noise nuisance to discuss the matter without threat of legal action. Disputes caused through noise may be discussed in conference:

- (a) at a dispute centre under the Dispute Resolution Centre Act 1990
- (b) with a National Dispute Centre approved mediator;
- (c) with a Queensland Law Society approved mediator,
- (d) by a professional service offering independent mediation or dispute resolution conference process; or
- (e) by an administering authority or industry organisation offering an independent mediation or dispute resolution conference process.

**Appropriately qualified person(s)** means a person or persons who has professional qualifications, training, skills and experience relevant to the EA requirements and can give authoritative assessment, advice and analysis in relation to the EA requirements using the relevant protocols, standards, methods or literature.

**Authorised place** means the place authorised under this Environmental Authority for the carrying out of the specified environmentally relevant activities.

**Bypass** means when the standard treatment processes of the plant do not occur as a result of wet weather and Inflows that are In excess of the peak design capacity for inflow resulting in the release of untreated or partially treated effluent from the sewage treatment plant to the environment.

**By-pass flow events** means discharge events during which effluent which, due to hydraulic design constraints of the treatment plant, bypasses some wastewater treatment processes and is discharged to the receiving environment.

**BOD**<sub>5</sub> means the 5 day biochemical oxygen demand determined using standard tests (e.g. those used by NATA laboratories). This test is not inhibited for nitrification, otherwise would be referred to as "carbonaceous" BOD.

COD means chemical oxygen demand determined using standard tests (e.g. those used by NATA laboratories).

**Commercial place** means a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.



**Compound** means an area bounded by natural ground contours or by a bund, sufficiently impervious to retain spillage or leakage pending recovery.

Daily refers to a normal working day.

**Daily mass load** means the kilograms of contaminant released that day for each release point, obtained from the product of the measured flow for each release point that day in megalitres and the measured concentration of the relevant contaminant in milligrams per litre (the measured value being the concentration measured that day or on the most recent sampling occasion if not measured that day).

Day means any 24 hour period.

**Design Average Dry Weather Flow (DADWF)** means the average dry weather flow of the treatment plant at the design horizon.

Dwelling means any of the following structures or vehicles that is principally used as a residence-

- a house, unit, motel, nursing home or other building or part of a building:
- a caravan, mobile home or other vehicle or structure on land;
- a water craft in a marina.

Environmental nuisance as defined under Chapter 1 of the Environmental Protection Act 1994.

Environmental value as defined under Chapter 1 of the Environmental Protection Act 1994.

**Fine screen** means a screen with an aperture size not greater than 12mm GPS means Geographic Positioning System Grab sample means one sample collected at any point in time.

Groundwater means water that occurs naturally in, or is introduced artificially into, an aquifer.

**Groundwater monitoring system** means a system of groundwater monitoring devices, such as monitoring bores, used to provide data in respect to the level and quality of groundwater in the uppermost aquifer where the location of the groundwater monitoring devices is such that comparisons of groundwater quality and groundwater level can be made between groundwater flowing from beneath the site (down-gradient flow) of the activity and groundwater flowing towards the site of the activity (up-gradient flow).

Holder of this environmental authority means Townsville City Council.

 $L_{eq}$  means the equivalent continuous A-weighted sound pressure level adjusted for noise character and measured over a time period of not less than 15 minutes using fast response.

 $L_{max}$  means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over a time period of not less than 15 minutes, using fast response.

L<sub>Aeq</sub> means the value of the A-weighted sound pressure level of a continuous steady sound that has the same mean-square sound pressure as a sound under consideration whose level varies with time. The equivalent continuous weighted sound pressure level is quoted to the nearest whole number of decibels.

Land in the "Agency interest Land" section of this Part means land excluding waters and the atmosphere.

**Long term 50th percentile** means the median value of the measured values of the quality characteristic is not to exceed the stated release limit for any fifty two (52) consecutive samples where:

- 1. the consecutive samples are taken over a one year period; and
- 2. the consecutive samples are taken at a weekly frequency.





**Long term 80th percentile** means not more than ten (10) of the measured values are to exceed the stated release limit for any fifty-two (52) consecutive samples where:

- 1. the consecutive samples are taken over a one year period;
- 2. the consecutive samples are taken at approximately equal periods; and
- 3. the time interval between the taking of each consecutive sample is not less than six (6) days.

**mg/L** means milligrams per litre. Maximum means that the measured value of the quality characteristic or contaminant must not be greater than the release limit stated.

**Measures** has the broadest interpretation and includes plant, equipment, physical objects, monitoring, procedures, actions, directions and competency.

**Median** means the middle value, where half the data are smaller and half the data are larger. If the number of samples is even, the median is the arithmetic average of the two middle values.

**Minimum** means that the measured value of the quality characteristic or contaminant must not be less than the release limit stated.

NATA means National Association of Testing Authorities.

*Noise Measurement Manual* means the following document or more recent additions or supplements to that document as such become available

• Environmental Protection Agency. (2000). Noise Measurement Manual Third Edition, Environmental Protection Agency, Brisbane, Australia.

Noxious means harmful or injurious to health or physical well-being.

NTU means nephelometric turbidity units.

**Offensive** means causing offence or displeasure; is unreasonably disagreeable to the sense: disgusting, nauseous or repulsive.

**Range** means that the measured value of the quality characteristic or contaminant must not be greater than the higher release limit stated nor lower than the lower release limit stated.

**Receiving environment monitoring program** means a monitoring program designed to monitor and assess the potential impacts of controlled and/or uncontrolled releases of contaminants to the environment from the activity.

**Records** include breach notifications, written procedures, analysis results, monitoring reports and monitoring programs required under a condition of this authority.

#### Release of a contaminant into the environment means to:

- (a) deposit, discharge, emit or disturb the contaminant
- (b) cause or allow the contaminant to be deposited, discharged, emitted or disturbed
- (c) fail to prevent the contaminant from being deposited, discharged emitted or disturbed
- (d) allow the contaminant to escape
- (e) fail to prevent the contaminant from escaping.

**Secondary containment system** means a system designed, installed and operated to prevent any release of contaminants from the system, or containers within the system, to land, groundwater, or surface waters.



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**Sensitive place** includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place'

- 1. a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- 2. a motel, hotel or hostel; or
- 3. a kindergarten, school, university or other educational Institution; or
- 4. a medical centre or hospital; or
- 5. a protected area under the Nature Conservation Act 1992, the Marine Parks Act 1992 or a World Heritage Area; or
- 6. a public thoroughfare, park or gardens; or
- 7. for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2008.

**Short term 80th percentile** means not more than one (1) of the measured values are to exceed the stated release limit for any five (5) consecutive weekly samples where:

- 1. the consecutive samples are taken over a five (5) week period;
- 2. the consecutive samples are taken at approximately equal periods; and
- 3. the time interval between the taking of each consecutive sample is not less than six (6) days.

**Specific noise** means the component of the ambient noise (or total noise) that can be specifically identified by acoustical means and is associated with a specific source.

**Statistically significant** means a significant difference is identified at or above 0.05% level of significance using a test or method appropriate for the distribution of the data and with a statistical power of at least 80%.

**Suitably qualified person** means a person who has professional qualifications, training, skills and/or experience relevant to the nominated subject matter, who can give authoritative assessment, advice and analysis on performance relative to the subject matter using relevant protocols, standards, methods or literature.

**Total Nitrogen (TN)** means the sum of Organic Nitrogen. Ammonia Nitrogen, Nitrite plus Nitrate Nitrogen, expressed as mg/L as Nitrogen. This includes both the inorganic and organic fraction of nitrogen.

**Total Phosphorus (TP)** means the sum of the reactive phosphorus, acid-hydrolysable phosphorus and organic phosphorus, as mg/L of Phosphorus. This includes both the inorganic and organic fraction of phosphorus.

**Treated effluent** means aqueous waste flowing from sewage treatment plants, that has been subjected to screening, sedimentation, biological and chemical processes to improve its quality.

**Treated sewage wastewater** means effluent that exits the sewage treatment plant following treatment. Wastewater flow means the flow of untreated sewage to the sewage treatment plant.

*Water Quality Sampling Manual* means the following document or more recent additions or supplements to that document as such become available:

• Environmental Protection Agency. (1999). Water (Duality Sampling Manual Third Edition, Environmental Protection Agency. Brisbane, Australia.

**Waters** includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water, natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part thereof.

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**Weekly** means that a sample is collected each week and the subsequent sample must be taken on the seventh day following that day and is inclusive of Saturdays and Sundays (i.e. day rolling forward each week this week Monday, next week Tuesday).

Wet Weather Day means a day which is not a dry weather day.

**You** means the holder of the environmental authority. 60th percentile means that not more than fourteen (14) of the measured values of the quality characteristic are to exceed the stated release limit for any twenty-elght (28) consecutive samples.

# Part 5 (b) — Definitions for the Sites Listed Below

Environmentally relevant activities	Locations
ERA 63 Sewage treatment (1)(g) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— more than 100,000EP	<b>Cleveland Bay Sewage Treatment Plant</b> 1/426 Ron McLean Drive Stuart - Lot 1 Plan RP732944 and Lot 1 Plan RP732945

Approved place means the Cleveland Bay Purification Plant located west of Sandfly Creek

Yearly average dry weather flow means the sum of flows discharged from release point W1 during dry weather days divided by the number of dry weather days

Average Dry weather day for the purposes of calculating actual annual mass load of nitrogen or phosphorus means a day during which less than 5mm of rainfall is recorded at any rainfall measuring station recognised by the Commonwealth Bureau of Meteorology within the sewered area connected to the sewage treatment plant, or if no such measuring station exists, at the nearest such station to the sewage treatment plant. The term also excludes days during which recorded rainfall over the 35 preceding days exceeds a cumulative rainfall of 80mm.

Equivalent person (EP) means a wastewater flow of 230 litres per person per day.

## Part 5 (c) — Definitions for the Sites Listed Below

Environmentally relevant activities	Locations
ERA 63 Sewage treatment (1)(g) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— more than 100,000EP	Mt St John Sewage Treatment Plant Lot 1 Plan RP723447

**Approved place** means the Mt St John Sewage Treatment Plant located at 545 Ingham Road Townsville Queensland.

Average dry weather day for the purposes of calculating actual annual mass load of nitrogen or phosphorus means a day during which less than 5mm of rainfall is recorded at any rainfall measuring station recognised by the Commonwealth Bureau of Meteorology within the sewered area connected to the sewage treatment plant, or if no such measuring station exists, at the nearest such station to the sewage treatment plant. The term also excludes days during which recorded rainfall over the 35 preceding days exceeds a cumulative rainfall of 80mm.

Average dry weather flow means flow which occurs from the STP to the designated receiving water during a dry weather day.

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Equivalent person (EP) means a wastewater flow of 240 litres per person per day.

## Part 5 (d) — Definitions for the Sites Listed Below

Environmentally relevant activities	Locations	
ERA 63 Sewage treatment (1)(e) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— more than 10,000 but not more than 50,000EP	<b>Condon Sewage Treatment Plant</b> Bowhunters Road, Condon - Lot 52 Plan EP2176	
ERA 63 Sewage treatment (1)(b)(i) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— more than 100 but not more than 1,500EP— if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme - IT or IR	<b>Toomulla Sewage Treatment Plant</b> Edgecomb Court, Toomulla - Lot 1 Plan SP235124	

**Dry weather day** refers to a day during which no rain falls within the catchment of the sewage treatment plant for the commencement of measurement for that day. The term also excludes days during which measurement is made which occur within three days following cumulative rainfall of 100mm over the three preceding days.

# Part 5 (e) — Definitions for the Sites Listed Below

Environmentally relevant activities	Locations
ERA 63 Sewage treatment (1)(c) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— more than 1,500 but not more than 4,000EP	<b>Picnic Bay Sewage Treatment Plant</b> 65-73 West Point Road, Picnic Bay Lot 1 Plan RP742477

Equivalent person (EP) means a wastewater flow of 230 litres per person per day.

Place to which this Environmental Authority relates means: Lot 1 RP742477, County of Elphinstone, Parish of Magnetic - West Point Road, Cockle Bay, Magnetic Island

# Part 6: Attachments

### **Attachment 1 - Approved Plans**

- Nelly Bay Pump Station (PS M2), Emergency Release Point W1, Sooning Street, Nelly Bay, Magnetic Island QLD 4819 - Lot 34 SP155546, Drawing No: 17942-F3
- Picnic Bay Sewage Treatment Plant, 65-73 West Point Road, Picnic Bay, Magnetic Island QLD 4819 - Lot 1 RP 742477, Drawing No: 17942-F4
- Magnetic Island Transfer Station, 11-63 West Point Road, Picnic Bay, Magnetic Island QLD 4819 -Lot 2 Plan RP 721497, Drawing No: 5716-C50 B
- Picnic Bay STP Irrigation Areas (Lot 1 RP742477, Lot 2 RP721497, Lot 3 SP157592, Lot 1 P93835 and Lot 2 SP157592)

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### **Attachment 2 - Relevant Codes of Environmental Compliance**

• Code of environmental compliance for certain aspects of regulated waste transport (ERA 57) - Version 4.

The standard conditions of this superseded code of environmental compliance apply as the criteria of this code of environmental compliance were met and an approval was applied for from 31 March 2013 to 28 June 2018.

 Code of Environmental Compliance for certain aspects of sewage treatment activities (ERA 63) -Version 1.

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# Nelly Bay Pump Station (PS M2), Emergency Release Point W1 to Gustav Creek - Drawing No: 17942-F3



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# Picnic Bay Sewage Treatment Plant - Drawing No: 17942-F4



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# **Picnic Bay STP Irrigation Areas**



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#### END OF ENVIRONMENTAL AUTHORITY

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# **Code of environmental compliance**

ERA 57 — Regulated waste transport

# Superseded code of environmental compliance for certain aspects\* of regulated waste transport

# Version 4

(ERA 57)

The standard conditions of this code of environmental compliance are the conditions of an environmental authority where the criteria of this code of environmental compliance were met and an approval was applied for from 31 March 2013 to 28 June 2018.

These conditions do not apply for new applications for these activities. An ERA standard for regulated waste transport applies for new operations for these activities.

Note: A reference in this document to the Department of Environment and Heritage Protection should be read as a reference to the Department of Environment and Science.

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# Code of environmental compliance

#### ERA 57—Regulated waste transport

This code of environmental compliance (code) has been made under Schedule 3 of the Environmental Protection Regulation 2008. It contains the standard environmental conditions approved by the Minister, under section 549(2) of the Environmental Protection Act 1994, for carrying out the aspect of the environmentally relevant activity (ERA) specified in Section 2 of this code.

# Code of environmental compliance for certain aspects\* of regulated waste transport (ERA 57)

# Version 4

From 31 March 2013, codes of environmental compliance no longer have effect, and an environmental authority is required for this ERA.

The eligibility criteria and standard conditions of this code are taken to be eligibility criteria and standard conditions for the ERA until new eligibility criteria and standard conditions take effect.

Any new operation commencing from 31 March 2013 that meets the eligibility criteria in Section 2 of this code and that can meet all of the standard conditions can apply for a standard approval to carry out this activity. The conditions that apply to the standard approval will be the standard conditions.

Where the operation cannot meet all the standard conditions of this code, a variation application for an environmental authority can be made. The environmental authority will include the standard conditions as modified by any approved variations.

Information on applying for an approval is at www.business.gld.gov.au.

Anyone holding a registration certificate to operate under this code before 31 March 2013 is automatically taken to have an environmental authority for the ERA. The registration certificate becomes an environmental authority and the standard environmental conditions of this code will be the conditions of the environmental authority as standard conditions. The anniversary day of the environmental authority is the anniversary day of the registration certificate.

\* This code only applies to the aspects of the ERA that meet with the criteria in section 2 of this code.



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#### 1. Introduction

The Department of Environment and Heritage Protection has introduced an improved environmental compliance framework for **environmentally relevant activities (ERAs)**<sup>1</sup> with a relatively low risk of environmental impact by introducing codes of environmental compliance (codes) that set out **standard environmental conditions**. Codes are appropriate for those activities that can achieve a good level of environmental protection through established practices and compliance with **standard environmental conditions**.

The codes also include advisory notes to help **operators** understand the condition or measures that may be taken to ensure compliance. The advisory notes are a guide only and do not limit the range of measures that may be taken to comply with a condition.

This use of codes simplifies and speeds up environmental approvals for the businesses involved, while retaining appropriate standards of environmental protection and performance.

The Minister responsible for the *Environmental Protection Act 1994* (EP Act), pursuant to section 549 of the EP Act, has approved the **standard environmental conditions** contained in this code. Approved codes are listed in Schedule 3 of the Environmental Protection Regulation 2008 (EP Reg).

#### 2. Scope of the code

This code applies to ERA 57 — Regulated waste transport, where the operation of the ERA will comply with all the criteria outlined in the following table:

#### Criteria

Regulated waste is transported by road vehicles only (not by train, boat, aircraft, pipeline or other means).

Where the operation of a particular ERA will not meet the above criteria, this code does not apply and a development approval is required to undertake the ERA.

The ERA – Regulated waste transport, is defined in Schedule 2 of the EP Reg as:

"ERA 57. Regulated waste transport consists of ---

- a) transporting on a non-commercial basis 250kg or more of regulated waste in a vehicle; or
- b) transporting on a commercial basis any quantity of regulated waste in a vehicle.

#### 3. When the code takes effect

This code applies immediately to all **operators** of ERA 57 (that meet the criteria in section 2 of this code) who commenced activities on or after 1 July 2006.

**Operators** who were carrying out ERA 57 under a development approval before 1 July 2006, and continued to carry out the **activity** had a 12 month transitional period to ensure their operations complied with the code. The code became effective for those **operators** on 1 July 2007.

Version 4 of this code contains new and amended **standard environmental conditions** that took effect on 9 November 2012. Version 4 of this code applies immediately to all **operators** of ERA 57 (that meet the criteria in section 2 of this code) who commenced activities on or after 9 November 2012.

Version 3 of this code continues to apply for 12 months to **operators** who were carrying out ERA 57 under version 3 of this code. Those **operators** who continue to carry out the **activity** have a 12 month transitional

<sup>1</sup> Terms used throughout this code that are defined in section 9 are shown in bold type.

period to ensure their operations comply with the new or amended **standard environmental conditions** of version 4 of this code.

#### 4. Enforcement of the code

This code contains **standard environmental conditions** for carrying out the aspects of ERA 57 that meet the criteria outlined in section 2 of this code. Failure to comply with the conditions is an offence under the EP Act and penalties apply. Enforcement guidelines published by the **department** are available at www.ehp.qld.gov.au.

#### 5. Other requirements

In addition to the conditions in this code, a person carrying out ERA 57 must comply with other requirements of the EP Act and any other relevant Commonwealth, State or local government legislative requirements. Without limiting statutory requirements that may apply, some additional obligations under the EP Act include:

- holding a "registration certificate" issued by the department under section 73F; and
- taking all reasonable and practicable measures to prevent or minimise environmental harm. This is referred to as the "general environmental duty".

It is the **operator's** responsibility to obtain any other approvals before carrying out the **activity**.

#### 6. Amendment of this code

The code may be amended from time to time by gazette notice advising that the Minister has approved new conditions. Proposed changes to the **standard environmental conditions**, other than changes to correct a clerical error, will be made in consultation with stakeholders. Where there is a significant change to the code, the **department** will notify persons affected by the change.

Version 2 did not amend any **standard environmental conditions**. Minor amendments were made to reflect the new description of the ERA as it appears in Schedule 2 of the EP Reg.

Version 3 contains a number of minor amendments that update references to departmental names, contact details for obtaining publications and more recent versions of standards referred to in the advisory notes, It does not amend any **standard environmental conditions**.

Version 4 of the code contains the following changes:

- amendment of condition 7 to allow for the transfer of grease trap and other oily wastes between road tank vehicles for the purpose of consolidating loads.
- addition of standard conditions 47 to 49 regarding the transfer of waste.
- addition of the definition of 'oily waste'.
- addition of the definition of 'sensitive place'.
- amendment of the definition of 'waters' to remove stormwater channel, stormwater drain, roadside gutter and stormwater run-off.
- minor administrative amendments to reflect the change in the department name to the Department of Environment and Heritage Protection (formerly known as the Department of Environmental and Resource Management and known as the Environmental Protection Agency prior to that), changes in other departmental names, contact details and condition numbering.

#### 7. Further information or enquiries

Further information is available at www.ehp.qld.gov.au or by contacting a regional office. General enquiries or suggestions for future amendments to the code should be directed to Permit and Licence Management (PALM) on telephone 13 QGOV (13 74 68) or by email at: palm@ehp.qld.gov.au.

#### 8. Standard environmental conditions and advisory notes

The following tables list groups of standard environmental conditions that apply to different aspects of regulated waste transport. Table 8.1 contains a general set of conditions that apply to all activities covered by this code. Advisory notes appear beside the conditions to provide guidance on compliance.

#### Table 8.1General conditions

#### Conditions applying to all regulated waste transport activities operating under this code.

Standard Environmental Conditions	Advisory Notes
<b>Condition 1 – Vehicle details</b> For new <b>operators</b> — details of all vehicles used to transport <b>regulated waste</b> must be provided to the <b>department</b> before commencing the <b>activity</b> .	This information may be provided to the <b>department</b> by completing and submitting the <i>Details of regulated waste vehicles</i> form. This is available from the department's website or by contacting PALM on 13 QGOV (13 74 68).
<ul> <li>Condition 2 – Change of details notification</li> <li>For existing operators — if any vehicle registration details change, or any vehicles are added to or removed from the fleet of vehicles used to transport regulated waste, details of these changes must be provided to the department: <ul> <li>a) as soon as practicable after the changes occur; or</li> <li>b) if transporting tyres — prior to each anniversary day (see section 9); or</li> <li>c) if transporting other regulated wastes — when paying the annual fee to the department for the registration certificate.</li> </ul> </li> </ul>	For <b>operators</b> transporting tyres, the <i>Details of</i> <i>regulated waste vehicles</i> form mentioned in the advisory note for condition 1 may be used for providing details of changes. For <b>operators</b> transporting other <b>regulated waste</b> an annual notice (including the <i>Details of regulated</i> <i>waste vehicles</i> form) may be sent to the <b>operator</b> when the <b>registration certificate's</b> annual fee is due.
Condition 3 – Incompatible wastes Incompatible wastes must not be: a) placed in the same container; or b) transported in such a way that mixing may occur.	In general, wastes are incompatible if they are likel to increase the risk to human health and/or the environment when mixed or brought into contact with each other e.g. acids and alkalis and mixing some solid wastes with liquid wastes. If a waste is classified as a dangerous good, the <i>Australian Code for the Transport of Dangerous</i> <i>Goods by Road and Rail</i> , 7th edition, ( <b>ADG Code</b> ) or more recent versions should also be observed.
Condition 4 – Design and compatibility Regulated waste must only be transported in suitably designed vehicles, tanks, containers or secondary containers that are appropriate for containing the waste being transported.	<ul> <li>Design should take into account at least the following matters:</li> <li>the relevant design requirements prescribed in Schedule 8 of the Environmental Protection (Waste Management) Regulation 2000 (see Appendix 1 of this code);</li> <li>the corrosive nature of the waste being transported (e.g. acid waste must be transported in acid resistant containers);</li> <li>the physical state of the waste (e.g. liquids should only be transported in drums, tanks or tankers);</li> </ul>

### Code of environmental compliance ERA 57—Regulated waste transport

Standard Environmental Conditions	Advisory Notes
	<ul> <li>the requirements outlined in the ADG Code; and</li> <li>any relevant Australian Standards.</li> </ul>
<ul> <li>Condition 5 – Maintenance and cleaning</li> <li>All vehicles, tanks, containers and secondary containers used to transport regulated waste:</li> <li>a) must be maintained in a good condition at all times to prevent any spillage or leakage of regulated waste or other contaminants; and</li> <li>b) kept free of regulated waste residues at all times when not in use.</li> </ul>	Regular inspections, cleaning and maintenance programs should be documented and implemented. For example, tankers and tanks used for transporting liquid wastes should have appropriate integrity tests conducted at regular intervals. The <b>operator</b> will also need to comply with any workplace health and safety requirements in relation to this matter. Contact the Department of Justice and Attorney-General (Division of Workplace Health and Safety Queensland) for advice on telephone 1300 369 915.
Condition 6 – Partitioning of load A solid impervious partition must be provided to separate the load compartment/area of the <b>regulated</b> <b>waste</b> transport vehicle from the driver's compartment.	The partition will need to be of suitable design and, construction to prevent the load characteristics from affecting its performance and prevent wastes from entering the driver's compartment.
<ul> <li>Condition 7 – Disposal</li> <li>Regulated waste must not be removed or released from any vehicle other than:</li> <li>a) at a facility that can lawfully receive the regulated waste; or</li> <li>b) for the purpose of consolidation grease trap and/or other oily wastes in a larger road tank vehicle where access to the waste source is restricted to smaller road tank vehicles.</li> </ul>	Check with the operator of the receiving facility or the <b>department</b> to ensure that the receiving facility can lawfully accept the <b>regulated waste</b> . The transfer of waste between tankers is to be undertaken in accordance with conditions 47-49 of Table 8.7 Road tank vehicle conditions.
Condition 8 – Prevention of spillage Regulated waste must not leak or spill from the vehicle.	Adequate containment devices (e.g. spill trays or sumps) that are inspected and cleaned regularly should be fitted to prevent spills from leaving the vehicle.
<b>Condition 9 – Clean up of spills</b> Notwithstanding condition 8, any leakage or spillage of <b>regulated wastes</b> must be contained immediately, recovered and disposed of to a facility that can lawfully accept the waste.	Any leakages or spillages should be contained, recovered and disposed of appropriately, not washed into the stormwater system, <b>waters</b> or onto the ground.

Standard Environmental Conditions	Advisory Notes
Condition 10 – Spill kit	
An appropriate spill kit, personal protective equipment and relevant instructions for the management of the <b>regulated wastes</b> transported must be maintained and kept in each vehicle.	A designated storage area within or on the vehicle and easily accessible in an emergency should be provided for this purpose.
Condition 11 – Notification of spills (interstate)	
If operating interstate, any spillage, leak, escape or other loss of <b>regulated waste</b> from the vehicle must be reported as soon as practicable to the relevant <b>regulatory agency</b> of the State or Territory in which the vehicle is travelling when the incident occurs.	Details for the relevant agencies should be kept in the vehicle, or be readily available through communication with the <b>operator's</b> head office, or operations base.
Condition 12 – Notification of spills (Queensland)	
When operating in Queensland, any <b>release</b> of contaminants not in accordance with the conditions of this code must be reported by telephone to the <b>department's</b> Pollution Hotline or regional office located in the area where the <b>release</b> occurred. Any such <b>release</b> must be reported as soon as practicable, but no later than 24 hours (depending on the level of risk to the environment), after becoming aware of the <b>release</b> .	The <b>department</b> may need to respond quickly to some spills that have the potential to cause environmental harm. Priority should be given to notifying the <b>department</b> of these spills immediately after they occur. The Pollution Hotline number is 1300 130 372. Notification of spills under this section does not remove the duty to notify environmental harm in sections 320 to 320G of the EP Act.
Condition 13 – Information about spills	
A written notice detailing the following information must be provided to the <b>department</b> within 14 days of any advice provided in accordance with condition 12:	This written advice should be provided to the <b>department's</b> regional office located in the area where the <b>release</b> occurred.
a) the name of the <b>operator</b> , including the operator's <b>registration certificate</b> number;	
<li>b) the name and telephone number of a designated contact person;</li>	
c) substance and quantity released;	
<ul> <li>d) vehicle and vehicle registration details;</li> <li>a) person(a involved (driver and any othera);</li> </ul>	
<ul> <li>f) the location and time of the release:</li> </ul>	
<ul><li>g) the suspected cause of the release;</li></ul>	
h) a description of the effects of the <b>release</b> ;	
<li>i) the results of any sampling performed in relation to the release;</li>	
)) actions taken to mitigate the risk or extent of environmental harm caused by the <b>release</b> ;	
<ul> <li>k) the success of any actions taken to mitigate the risk or extent of environmental harm; and</li> <li>l) proposed actions to prevent a recurrence of the release.</li> </ul>	

Standard Environmental Conditions	Advisory Notes
Condition 14 – Insurance	
All vehicles used to transport <b>regulated wastes</b> (that are not classified as dangerous goods, or as a placard load of dangerous goods), must be covered by a policy of insurance or other form of indemnity, for a sum that is not less than \$100,000, in respect of:	If the <b>regulated waste</b> is classified as a placard load of dangerous goods, consult with the Dangerous Goods Unit in the Department of Transport and Main Roads and the <b>ADG Code</b> regarding any additional levels of insurance that
<ul> <li>a) personal injury, death, property damage and other damage (except consequential economic loss) arising out of fire, explosion, leakage or spillage of dangerous goods in, on or from the vehicle or a container on the vehicle; and</li> </ul>	may be required.
<ul> <li>b) costs incurred by or on behalf of a Commonwealth, State or Territory government authority in a clean-up resulting from any event of the kind referred to in subparagraph a) of this condition.</li> </ul>	
Condition 15 – Records	
All records required by this code must be kept for 5 years and be made available to an authorised officer of the <b>department</b> when requested.	Records should verify the provision of training programs and schedules of routine inspections.
Condition 16 – Waste records	
<ul> <li>A record of all regulated waste (excluding trackable waste) must be kept detailing the following information for every load of waste transported:</li> <li>a) date of pickup of waste;</li> <li>b) description of waste;</li> </ul>	Trackable wastes, as listed in Schedule 1 of the Environmental Protection (Waste Management) Regulation 2000, are covered by recording as required in that Regulation instead of this condition. The regulation is available for viewing at www.legislation.qld.gov.au.
<ul> <li>c) quantity of waste;</li> <li>d) origin of the waste; and</li> <li>e) destination of the waste.</li> </ul>	Recording requirements for trackable wastes (under the waste tracking system established under the above Regulation) are similar to this condition.
Condition 17 – Documentation	
<ul> <li>At all times, a copy of:</li> <li>a) the registration certificate issued by the department for regulated waste transport activities; and</li> </ul>	<ul> <li>Standards Australia publish numerous guides, including:</li> <li>HB 76-2004 Dangerous Goods – Initial emergency response guide; and</li> </ul>
<ul> <li>b) the appropriate emergency guides in relation to the waste transported</li> </ul>	<ul> <li>emergency procedure guides (AS1678 series);</li> <li>which are available from SAI Global Business</li> <li>Publishing<sup>2</sup>.</li> </ul>
must be carried in the cabin of each vehicle used to transport <b>regulated waste</b> and when requested, be presented to an authorised officer of the <b>department</b> or relevant <b>regulatory agency</b> of the State or Territory in which the vehicle is travelling.	The <b>ADG Code</b> may require additional documents to be carried if the <b>regulated waste</b> is also classified as a dangerous good.

<sup>&</sup>lt;sup>2</sup> SAI Global can be contacted on 131 242 or via their website <u>www.saiglobal.com/shop</u>.

Standard Environmental Conditions	Advisory Notes
<ul> <li>Condition 18 – Training</li> <li>All vehicle drivers must: <ul> <li>a) have access to a copy of this code in the vehicle, or through direct communication with the vehicle depot or operations base; and</li> <li>b) be trained in the requirements of this code, including the use of all equipment and procedures necessary to comply with the conditions of this code, and document all training undertaken.</li> </ul> </li> </ul>	A copy of this <b>code of environmental compliance</b> should be available for reference at a vehicle depot, operations base or place where the vehicle is garaged. If permanent communication is not available to someone with this code, a copy of this code should be kept in the cabin of the vehicle. Details of training provided should be documented by the registered operator to demonstrate compliance with this condition.
<ul> <li>Condition 19 – Complaint response</li> <li>The following details must be recorded: <ul> <li>a) time, date, name and contact details of the complainant;</li> <li>b) reasons for the complaint;</li> <li>c) any investigations undertaken;</li> <li>d) conclusions formed; and</li> <li>e) any actions taken.</li> </ul> </li> </ul>	This information should be made available to the <b>department</b> on request. If the complainant does not provide their name and contact details, record this as an anonymous complaint.

#### Table 8.2Asbestos conditions

Additional conditions applying to the transport of asbestos waste under this code.

	Standard Environmental Conditions	Advisory Notes
	<ul> <li>Standard Environmental Conditions</li> <li>Condition 20 – Asbestos containment</li> <li>All asbestos transported must be: <ul> <li>a) double bagged and sealed in heavy-duty polythene bags (minimum 200 μm thickness); or</li> <li>b) contained in sealed drums or bins that are lined with heavy-duty plastic (minimum 200 μm thickness); or</li> <li>c) where the volume or size of asbestos waste (e.g. large asbestos cement sheets) is greater than the volume or size of a bag, drum or bin:</li> <li>i) for friable asbestos waste, sealed in double lined heavy-duty plastic sheeting (minimum 200 μm thickness) prior to being placed into a waste skip, vehicle trav or similar container:</li> </ul> </li> </ul>	Advisory Notes Refer to the Work Health and Safety Act 2011, Work Health and Safety Regulation 2011 and Work Health and Safety (Codes of Practice) Notice 2011 for any additional requirements that may apply. These are available from the Office of the Queensland Parliamentary Counsel website www.legislation.qld.gov.au. In addition, the requirements of the Safe Work Australia Code of Practice on How to Safely Remove Asbestos 2011 or the Safe Work Australia Code of Practice on How to Manage and Control Asbestos in the Workplace 2011 or any subsequent versions, may also apply. These are available on the Safe Work Australia website
2	<ul> <li>or</li> <li>ii) for non-friable asbestos waste, kept damp and contained in a waste skip, vehicle tray or similar container that has been double lined with heavy duty plastic sheeting (minimum 200 μm thickness) and then completely</li> </ul>	www.safeworkaustralia.gov.au. Additional requirements may apply under the <b>ADG</b> <b>Code</b> .

### Code of environmental compliance ERA 57—Regulated waste transport

sealed with the plastic sheeting and adhesive tape.	
<ul> <li>Condition 21 – Asbestos handling</li> <li>All asbestos transported must be: <ul> <li>a) labelled with a warning statement to indicate the presence of asbestos and that dust creation and inhalation needs to be avoided;</li> <li>b) securely loaded and stowed on the vehicle during transit in such a way that does not cause the packaging to rupture;</li> <li>c) off loaded carefully to prevent the packaging from rupturing; and</li> <li>d) repackaged immediately if rupturing of the packaging does occur.</li> </ul> </li> </ul>	The Safe Work Australia Code of Practice on How to Safely Remove Asbestos provides the following example of a warning statement which might be used: "Caution – Asbestos Do not damage or open bag Do not inhale dust Cancer and lung disease hazard" If repackaging is required due to rupturing, workplace health and safety requirements will apply. Contact the Department of Justice and Attorney- General (Division of Workplace Health and Safety Queensland) for advice on 1300 369 915.

#### Table 8.3Lead conditions

Additional conditions applying to the transport of particulate lead waste under this code.

Co	ndition 22 – Lead	
All	particulate lead waste must be:	Particulate lead waste is waste that is capable of
a)	double bagged and sealed in heavy duty polythene bags (minimum 200 µm thickness), and	becoming airborne or unable to be easily recovered if a spill occurs during transport.
b)	placed in containers on the vehicle;	Examples of particulate lead wastes include waste from foundry filters and lead based paint residues
0)	appropriate lead <b>risk</b> and <b>safety phrases</b> (see definitions " <b>risk phrase</b> " and " <b>safety phrase</b> " in section 9 of this code);	Please refer to the <i>Workplace Health and Safety</i> <i>Regulation 2008 (Qld)</i> (or any subsequent versior for any additional requirements that may apply.
c)	securely loaded and stowed on the vehicle during transit in such a way that does not cause the packaging to rupture;	If the lead is a dangerous good, additional requirements may apply under the <b>ADG Code</b> .
d)	off loaded carefully to prevent the packaging from rupturing; and	
e)	repackaged immediately if rupturing of the packaging does occur.	

#### Table 8.4 Clinical and related waste conditions

#### Additional conditions applying to the transport of clinical and related waste under this code.

Standard Environmental Conditions	Advisory Notes
Condition 23 – Vehicle compartment	
All <b>clinical</b> and <b>related wastes</b> must be transported in a fully enclosed load compartment of a vehicle that: a) is bunded or otherwise designed to contain any	Refer to Appendix 1 of this code for specific design rules as required by the <i>Environmental Protection</i> (Waste Management) Regulation 2000.
<ul> <li>spills and leaks;</li> <li>b) is lockable; and</li> <li>c) has internal surfaces which are rigid and seamless to facilitate cleaning and disinfection.</li> </ul>	For interstate transport, refer to Australian Standard 3816:1998 — Management of Clinical and Related Waste (or subsequent versions) for any additional requirements that may apply.
	For radioactive wastes, contact the Queensland Health Radiation Health Unit on (07) 3328 9987 for any licensing requirements that may apply under the <i>Radiation Safety Act 1999</i> .
	For wastes also classified as dangerous goods, refer to the <b>ADG Code</b> .
Condition 24 – Security	
Vehicles and load compartments must be locked when unattended.	This is required to prevent unauthorised access.
Condition 25 – Secondary containment	
All <b>clinical</b> and <b>related wastes</b> must be provided with rigid secondary containment during transport.	Secondary containment may be achieved if the waste is fully contained in:
	<ul> <li>appropriate bags that comply with the design rules in Appendix 1 of this code (primary containment); and</li> </ul>
15	• a rigid-walled waste container that complies with the design rules in Appendix 1 of this code (secondary containment).
3. SIPPION SILE	Additional requirements may apply if the waste is also classified as a dangerous good (refer to the Dangerous Goods Unit in the Department of Transport and Main Roads or other relevant authority in the State or Territory in which the vehicle is travelling).
Condition 26 – Cleaning and disinfection	
Secondary containers used for the transportation of <b>clinical</b> and <b>related wastes</b> must be effectively cleaned and disinfected before reuse.	The local council should be consulted prior to the disposal of any effluent to sewer. The <b>operator</b> will also need to comply with any workplace health and safety requirements in relation to this matter. Contact the Department of Justice and Attorney-General (Division of Workplace Health & Safety Queensland) for advice on 1300 369 915.

Standard Environmental Conditions	Advisory Notes
Condition 27 – Compaction systems	
<b>Clinical</b> and <b>related wastes</b> must not be transported in vehicles fitted with compaction systems.	Compaction may cause rupturing of containers and leakage of <b>clinical</b> and <b>related wastes</b> . These wastes need to be transported in totally enclosed, intact, and leak proof containers for treatment and disposal in accordance with the <i>Environmental</i> <i>Protection (Waste Management) Regulation 2000.</i>
Condition 28 – Odour nuisance	
Noxious or offensive odours must not be released from any vehicle transporting <b>clinical</b> or <b>related</b>	Refrigeration may be necessary to comply with this condition.
wastes.	When determining if the waste should be refrigerated during transport, consideration should be given to any Queensland Health and workplace health & safety requirements and other factors such as:
	<ul> <li>specific type of clinical and related waste being transported;</li> </ul>
	time held in transit;
	temperature;
50	distance travelled; and
	state of the waste when received.

### Table 8.5 Polychlorinated biphenyl (PCB) conditions

Additional conditions applying to the transport of PCB waste under this code.

Standard Environmental Conditions	Advisory Notes
Condition 29 – PCB management The transport of wastes containing PCBs that are also classified as scheduled wastes under the Australian and New Zealand Environment and Conservation Council (ANZECC) <i>Polychlorinated Biphenyls</i> <i>Management Plan</i> – <i>July 1999</i> must comply with the requirements of that Plan.	<ul> <li>The Polychlorinated Biphenyls Management Plan – July 1999 includes the requirement for:</li> <li>PCBs to be transported in accordance with the ADG Code; and</li> <li>the development of emergency containment and clean up procedures for the accidental release of PCBs into the environment.</li> <li>A copy of the ANZECC Polychlorinated Biphenyls Management Plan is available from the Commonwealth Department of Sustainability, Environment, Water, Population and Communities website www.environment.gov.au.</li> </ul>

Condition 30 – PCB trained personnel	
Personnel suitably trained in methods of handling and containing spilled PCBs must accompany any vehicle transporting waste containing PCBs.	As required by condition 18, details of training provided should be documented to demonstrate compliance with this condition.

#### Table 8.6 Rigid vehicle conditions

Additional conditions applying to the transport of regulated waste in rigid vehicles and trailers under this code.

Standard Environmental Conditions	Advisory Notes
<ul> <li>Condition 31 – Vehicle tray</li> <li>When transporting regulated waste in rigid vehicles and trailers, the tray of the vehicles must be:</li> <li>a) constructed of an impervious material;</li> <li>b) maintained in a sound condition; and</li> <li>c) designed to contain any spills on the tray.</li> </ul>	Trays should be inspected regularly and any corrosion or other defect should be attended to so that the integrity of the tray is maintained. Any containment system or sump should be designed to facilitate the collection and removal of spilt waste (e.g. by pumping liquids or shovelling solids).
Condition 32 – Covers When transporting regulated waste in rigid vehicles and trailers, any waste not fully contained within weatherproof packages must be covered during transport to contain the load and protect it from wind and rain.	The covers should be designed to prevent particulate matter becoming airborne and to prevent ingress of rain into the waste, which may result in dangerous reactions, or the runoff of contaminants.
Condition 33 – Securing of load When transporting regulated waste in rigid vehicles and trailers, all regulated waste containers must be: a) mounted securely to the vehicle; and b) contained within the tray of the vehicle.	All loads should be restrained in accordance with the requirements of the National Transport Commission and Road & Traffic Authority NSW; <i>Load Restraint Guide, 2<sup>nd</sup> Edition</i> (or subsequent versions). The guide is available from the National Transport Commission website at www.ntc.gov.au Additional requirements may apply under the <b>ADG</b> <b>Code</b> if the waste is classified as a dangerous good.
<ul> <li>Condition 34 – Containment</li> <li>When transporting regulated waste in rigid vehicles and trailers, the vehicle must be fitted with:</li> <li>a) adequate cargo securing devices; and</li> <li>b) in the case of vehicles transporting packaged regulated waste (see definitions in section 9 of this code), rigid sides or gates that contain the load while in transit.</li> </ul>	These must be appropriate for the type of containers or cargo being transported and suitable to withstand the rigours of transport and heavy braking.

V

Standard Environmental Conditions	Advisory Notes
Condition 35 – Height of load	
When transporting <b>packaged regulated waste</b> in <b>rigid vehicles</b> and trailers, the top of any container must not protrude above the sides or gates of the vehicle by more than 30% of the height of the container.	This is intended to prevent toppling of the load if the primary restraint fails.

#### Table 8.7 Road tank vehicle conditions

Additional conditions applying to the transport of liquescent and dry particulate regulated waste in road tank vehicles under this code.

Standard Environmental Conditions	Advisory Notes
Condition 36 – Vehicle stability Road tank vehicles must be constructed to minimise instability and risk of rollover.	As a guide, refer to Australian Standard 2809.1— 2008 Road Tank Vehicles for Dangerous Goods – General requirements for all road tank vehicles (or subsequent versions). This provides information about design features requiring particular attention, e.g. centre of gravity, tyre track, suspension, effect of prime mover, steering geometry and axle
Condition 37 – Roll-over protection Road tank vehicles must be provided with roll-over protection to protect all tanks, components and fittings on the upper and side surfaces of the tank in the event of the vehicle rolling over or becoming inverted.	<ul> <li>alignment, tyres and brakes.</li> <li>As a guide, refer to the Australian Standard 2809 series. For example, this includes requirements for certain tanks to be fitted with roll-over protection with the following characteristics: <ul> <li>a guard in the form of inverted U-coamings, (the thickness of which depends on the type of tank and construction material, e.g. large-compartment made of low carbon steel, must not be less than 5mm in thickness);</li> <li>any guard, dome or coaming shall project at least 25mm above the top of the fitting, which it protects.</li> </ul> </li> </ul>
<ul> <li>Condition 38 – Transfer equipment</li> <li>Waste transfer equipment, including discharge point and pipe-work on road tank vehicles, must be:</li> <li>a) fitted to the vehicle so as to not extend beyond the outer body line of the vehicle; or</li> <li>b) designed to provide sufficient inherent resistance to damage; or</li> <li>c) provided with protection to prevent damage.</li> </ul>	Transfer couplings should be located in a position on the tank(s) that will minimise the risk of the couplings being damaged or severed by an impact. For further information, refer to the Australian Standard 2809 series.

Standard Environmental Conditions	Advisory Notes
Condition 39 – Sampling points Road tank vehicles used for the transport of liquid regulated waste must have sampling points on the top of each compartment that are readily accessible for the purposes of a roadside inspection.	Where appropriate, additional sampling valves may need to be provided at the bottom of the compartments.
Condition 40 – Transfer hoses	
<b>Regulated waste</b> material must not leak or spill from waste transfer hoses to the ground while the <b>road tank vehicle</b> is in transit.	Waste transfer hoses should be cleared before disconnection and maintained in good condition so as to prevent spillage or leakage of <b>regulated waste</b> .
	<ul> <li>The following are examples of how hoses can be transported to minimise the risk of spills:</li> <li>carry them in spill proof compartments on the vehicle;</li> <li>fit them with leak proof caps with captive chains; or</li> <li>connect them end-to-end.</li> </ul>
ersed	In addition, the <b>ADG Code</b> may include the requirement for hose assemblies to be:
	<ul> <li>Inspected at least monthly; and</li> <li>hydrostatically tested at least yearly.</li> </ul>
Condition 41 – Road clearance	
All tank filling and discharge points on <b>road tank</b> <b>vehicles</b> must have adequate ground clearance and be rigidly connected to the tank.	As a guide, refer to Australian Standard 2809.1:2008 — <i>Road Tank Vehicles for Dangerous</i> <i>Goods – General requirements</i> for all <b>road tank</b> <b>vehicles</b> (or subsequent versions), which includes the following requirements:
25	• Tank filling and discharge connections should not extend lower than 40mm below the plane through the centre-line of the axles.
3.00rove	• Tank components and protection devices should not be less than 250mm within 1 metre of any axle, or 350mm from any other location when the vehicle is unladen.
Condition 42 – Vacuum system	
<ul><li>All road tank vehicle vacuum pump systems must be fitted with operational:</li><li>a) pressure and/or vacuum relief valves; and</li></ul>	Testing of the system should be carried out regularly and the results recorded, including details of any repairs and/or maintenance conducted.
b) pump shut-off valves.	

Advisory Notes
Sight glasses are an example of a mechanism for volume measurement.
Depending on the type of <b>regulated waste</b> , sufficient <b>ullage</b> space should be provided (e.g. 10% or more of the tank capacity) to allow for thermal expansion of the waste during transport.
As a guide, refer to the Australian Standard 2809 series, which specifies a minimum diameter of 400mm for certain types of cargo.
The <b>operator</b> will also need to comply with any workplace health and safety requirements in relation to this matter. Contact the Department of Justice and Attorney-General (Division of Workplace Health and Safety Queensland) for advice on 1300 369 915 or via their website www.deir.qld.gov.au/workplace/.
Road conditions, vibration and heavy braking are some considerations that should be taken into account when determining what is suitable.
<ul> <li>As a guide, see Australian Standard 2809.1:2008 — <i>Road Tank Vehicles for Dangerous Goods</i> – <i>General requirements</i> for all <b>road tank vehicles</b> (or subsequent versions). This has a requirement for rear impact protection to be fitted so that:</li> <li>the inner surface is not less than 150mm from the tank or any component or fitting;</li> <li>the width is not less than the width of the tank; and</li> <li>it is attached to the sub-frame or the chassis of the vehicle or trailer.</li> </ul>
The person supervising the transfer of waste must be trained in the use of a spill response kit. Spill response kits should be easily accessible to allow for a quick response.

<ul> <li>Condition 48 – Location of transfer</li> <li>The transfer of grease trap waste and/or oily wastes must: <ul> <li>a) not take place at a sensitive place;</li> <li>b) not take place on a road adjacent to a sensitive place;</li> <li>c) not cause odour nuisance at a sensitive place.</li> </ul> </li> <li>The transfer of grease trap waste and/or oily wastes must take place at least 10 metres up gradient from any waters or stormwater drain inlet.</li> </ul>	It is an offence under the <i>Environmental Protect</i> <i>Act 1994</i> to cause an environmental nuisance a to deposit waste in (or in a place where the was can move into) <b>waters</b> , a roadside gutter or stormwater drainage. This 10 metres is a minimal buffer and does no negate the need to use temporary bunding whe there may be a <b>release</b> to any <b>waters</b> or stormwater drain inlet.
Condition 49 – Temporary bunding Where practicable the transfer of waste must be conducted on a bunded, hardstand area to minimise any releases of contaminants to land or water if a spill occurs. Where there is potential for a release to waters or stormwater during a transfer, temporary bunding and/or containment devices must be used to minimise the potential for release.	In particular, bunding/containment devices must used where the transfer takes place near a road gutter or stormwater drainage infrastructure. The type and size of bunding and containment device should be sufficient to contain a spill and be plac close to the vehicles to minimise the clean up at a spill occurs. Variables to consider when assessing whether not there is potential for a <b>release</b> to <b>waters</b> or stormwater during a transfer include distance fr any <b>waters</b> or stormwater, slope, surface type at waste viscosity. Examples of where there is no potential for a <b>release</b> to <b>waters</b> or stormwater include where transfer is carried out: a) on a bunded hardstand area; b) on a large flat grassed area; or c) in a hollow
#### Table 8.8Operating 36 or more vehicles.

Additional conditions applying to an activity that involves the operation of 36 or more regulated waste transport vehicles (i.e. ERA 57(2)(c)) under this code.

#### 9. Definitions

<u>Note</u>: If a word or phrase is not defined it must be given the meaning it has under the EP Act or its subordinate legislation, as amended from time to time. If a word or phrase is not defined in this code or the EP Act or its subordinate legislation, it has its ordinary meaning.

Activity means the environmentally relevant activity, or aspect of the ERA to which this code relates.

ADG Code means the Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th edition, or more recent versions as they become available. The ADG Code is available for purchase from Canprint — Telephone: (02) 6293 8383 or from the National Transport Commission website at www.ntc.gov.au

Anniversary day, for a registration certificate is defined in Schedule 4 of the EP Act.

Asbestos-containing material means any material, object, product or debris that contains asbestos.

Asbestos waste means all removed asbestos-containing materials and disposable items used during the asbestos removal work, such as plastic sheeting used for an enclosure or to cover surfaces in the asbestos work area, disposable coveralls, disposable respirators and rags used for cleaning etc.

Clinical waste means waste that has the potential to cause disease including, for example, the following:

- a) animal waste;
- b) discarded sharps;
- c) human tissue waste; and
- d) laboratory waste.

**Code of environmental compliance** means a code of environmental compliance approved or made under a regulation of the EP Act.

Department means the Department of Environment and Heritage Protection or its successor.

Environmentally relevant activity (ERA) means an activity prescribed by regulation as an ERA.

**Friable asbestos** means **asbestos-containing material** which, when dry, is or may become crumbled, pulverised or reduced to powder by hand pressure.

Note: This may include asbestos containing materials that have been subjected to conditions, such as weathering, physical damage, water damage etc., that leave them in a state where they meet the above definition.

**Incompatible wastes** means wastes that are likely to interact and increase the risk to human health and/or the environment when mixed or brought into contact.

Liquescent waste means waste tending toward a liquid state; waste that is not spadeable.

**Oily waste** means hydrocarbons and water mixtures or emulsions, including oil and water mixtures or emulsions, which is the **regulated waste** item 37 of Schedule 7 of the Environmental Protection Regulation 2008. **Oily waste** does not include mineral oil (item 34) that is not in a mixture or emulsion with water. Vegetable oil (item 63) is also excluded.

**Operator** means the person carrying out the ERA.

Packaged regulated waste means regulated waste in a container with:

- a) a capacity of not more than 450 litres; and
- b) a nett mass of not more than 400 kilograms.

**Registration certificate** means a **registration certificate** given under section 73F of the EP Act to the **operator** of an ERA.

Regulated waste means waste that—

- 1. a) is commercial or industrial waste, whether or not it has been immobilised or treated; and
  - b) is of a type, or contains a constituent of a type, mentioned in schedule 7.
- 2. Waste prescribed under subsection (1) includes
  - a) for an element—any chemical compound containing the element; and
  - b) anything that contains residues of the waste.

**Regulatory agency** means the agency of a State or Territory that has responsibility for regulating the transport of regulated wastes in that State or Territory.

**Related waste** means waste that constitutes, or is contaminated with, chemicals, cytotoxic drugs, human body parts, pharmaceutical products or radioactive substances.

Release of a contaminant into the environment, includes:

- a) to deposit, discharge, emit or disturb the contaminant;
- b) to cause or allow the contaminant to be deposited, discharged, emitted or disturbed;
- c) to allow the contaminant to escape; and
- d) to fail to prevent the contaminant from escaping.

**Rigid vehicle** means a vehicle the load carrying area of which is fixed to the vehicle's chassis or frame (as defined in the ADG Code).

**Risk phrase** means a phrase stated in the National Occupational Health and Safety Commission's (NOHSC's) document entitled *National Code of Practice for the Labelling of Workplace Substances [NOHSC:2012(1994)]*, or more recent versions, that gives information about the substance's hazards.

**Road tank vehicle** means a truck, trailer or semi-trailer or unit in a road train, incorporating a tank, or having a tank or tanks mounted thereon, either permanently or temporarily (as defined in AS 2809.1–2008 — *Road Tank Vehicles for Dangerous Goods*).

**Safety phrase** means a phrase stated in National Occupational Health and Safety Commission's document entitled *National Code of Practice for the Labelling of Workplace Substances [NOHSC:2012(1994)]*, or more recent versions, that gives information about:

- a) the safe use of the substance; or
- b) the personal protective equipment for the substance.

#### Sensitive place means—

- (a) a dwelling (including residential allotment, mobile home or caravan park, residential marina or other residential premises, motel, hotel or hostel);
- (b) a library, childcare centre, kindergarten, school, university or other educational institution;
- (c) a medical centre, surgery or hospital; or
- (d) a public park or garden that is open to the public (whether or not on payment of money) for use other than for sport or organised entertainment.

Standard environmental conditions for a code of environmental compliance, means the standard environmental conditions approved for the ERA, or aspect of the ERA, under section 549 of the EP Act.

**Ullage** means a vapour space which is left above the liquid surface after filling, to permit a degree of thermal expansion of the liquid without loss of cargo (as defined in AS 2809.1–2008 — *Road Tank Vehicles for Dangerous Goods*)

**Waters** includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water, natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), and groundwater and any part thereof.

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### Appendix 1 — Design rules

#### General rules applicable to rigid-walled waste containers and waste transport vehicles

It must be designed in a way that ensures:

- a) it performs the intended function when used in accordance with the manufacturer's instructions; and
- b) waste does not spill from it during usual usage or servicing; and
- c) it is not adversely affected by environmental conditions, including, for example, heat, humidity or 28 June 20' sunlight; and
- d) it is not adversely affected by the cleaning procedures specified by the manufacturer.

The inner surfaces must be smooth, free of recesses and be able to be readily cleaned.

The inner surfaces must be designed to allow easy removal of waste.

If it has internal seams, the seams must be fully welded.

The following matters must be taken into account in designing it:

- a) the type of waste to be collected, removed or conveyed;
- b) the likelihood of abrasion by solid waste;
- c) the likelihood of chemical attack;
- d) the need to exclude rain or other liquid that may be likely to leach a contaminant from the waste.

It must be constructed of a material that will not undergo a change that impairs its life or performance when it comes into contact with waste.

If it is constructed from plastic, the plastic must be UV resistant for the container's life.

If it is a waste container or waste transport compartment within a waste transport vehicle, it must be constructed:

- a) of a durable material that is capable of withstanding normal operating conditions; and
- b) in a way that ensures it minimises the entry of insects and vermin.

If it is a container designed for use to transport waste, it must be designed in a way that provides a permanent way of securing the lid so that waste is not released during transportation.

#### Specific design principles for waste transport vehicles

If the vehicle is to be used for transporting waste in containers, the vehicle design must include a permanent method of securing the containers in an upright position.

If the vehicle incorporates a tanker body, the vehicle must be designed in a way that ensures:

- a) each discharge point on the body is protected from possible damage; and
- b) each discharge point is capable of being locked in the off position; and
- c) it is fitted with signs detailing the direction and movement needed to shut the discharge and loading valves; and
- d) effective covers are provided for all manholes; and
- e) the manhole covers are capable of being secured at all times when the manholes are not being used; and
- a storage area is provided for the vehicle's hoses. f)

#### Specific design principles for plastic bags used for clinical and related waste

It must have sufficient strength to safely contain the waste it is designed to hold.

It must be designed to allow for secure final closure when the bag is filled to a maximum of two-thirds of its capacity or 6kg, whichever is the lesser.

It must not be designed with closure devices that have sharp protuberances, including, for example, staples.

# **Code of environmental compliance**

### ERA 63(2)—Sewage treatment

This code of environmental compliance (code) continues to apply under s.191 of the Environmental Protection Regulation 2019. It contains the standard environmental conditions approved by the Minister, under section 549(2) of the Environmental Protection Act 1994, for carrying out the aspects of the environmentally relevant activity (ERA) specified in Section 3 of this code.

# Code of environmental compliance for certain aspects\* of sewage treatment activities (ERA 63)

# Version 1

From 31 March 2013, codes of environmental compliance no longer have effect, and an environmental authority is required for this ERA.

The eligibility criteria and standard conditions of this code are taken to be eligibility criteria and standard conditions for the ERA until new eligibility criteria and standard conditions take effect.

Any new operation commencing from 31 March 2013 that meets the eligibility criteria in Section 3 of this code and that can meet all of the standard conditions can apply for a standard approval to carry out this activity. The conditions that apply to the standard approval will be the standard conditions.

Where the operation cannot meet all the standard conditions of this code, a variation application for an environmental authority can be made. The environmental authority will include the standard conditions as modified by any approved variations.

Information on applying for an approval is at www.business.gld.gov.au.

Anyone holding a registration certificate to operate under this code before 31 March 2013 is automatically taken to have an environmental authority for the ERA. The registration certificate becomes an environmental authority and the standard environmental conditions of this code will be the conditions of the environmental authority as standard conditions. The anniversary day of the environmental authority is the anniversary day of the registration certificate.

This code has been updated to reflect the commencement of the Environmental Protection Regulation 2019.

\* This code only applies to the aspects of the ERA that meet the criteria in Section 3 of this code.

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#### 1. Introduction

The Department of Environment and Science (DES) has simplified the environmental compliance framework for environmentally relevant activities (ERAs) where environmental outcomes can be achieved by developing codes of environmental compliance (codes) that set out standard environmental conditions. The use of codes expedites environmental approval processes whilst still ensuring that there are appropriate standards of environmental management and protection.

Codes are appropriate for those activities that can achieve a good level of environmental protection through established, well understood practices. The standard environmental conditions are based on these practices and require the registered operator to take the necessary measures to prevent or minimise environmental harm.

Key terms and/or phrases used in this code are bolded and defined at the end of this code. Where a term is not defined in this code, the definition in the *Environmental Protection Act 1994* (EP Act), its regulations or Environmental Protection Policies must be used. If a word remains undefined it has its ordinary meaning.

#### 2. Authorisation of the code

The Minister responsible for the EP Act, pursuant to section 549, approved the standard environmental conditions contained in this code on 4 July 2012. Approved codes are listed in s.191 of the Environmental Protection Regulation 2019 (EP Reg).

#### 3. Scope of the code

This code applies only to certain aspects of ERA 63 — Sewage treatment activities.

The aspects of ERA 63 — Sewage treatment activities, that this code applies to is threshold 2 which is outlined below (for the full definition see Schedule 2 of the EP Reg).

ERA 63	Sewage treatment activities
Threshold 2	Operating a sewage pumping station with a total design capacity of more than 40kL in an hour, if the operation of the pumping station is not an essential part of the operation of sewage treatment works to which ERA 63(1) applies.

The operation of the ERA under this code must comply with all of the criteria set out in the following table at all times:

# Criteria

Operating a sewage pumping station with a total design capacity of more than 40kL in an hour.

Where the operation of a particular ERA will not meet the above criteria, this code does not apply and a development approval is required to undertake the ERA.

#### 4. When the code takes effect

This code applies immediately to registered operators who commenced activities on or after 9 November 2012.

Registered operators who were carrying out ERA 63(2) under a development approval issued before 9 November 2012, and who continue to carry out the activity have a 12 month transitional period in which to ensure their operations comply with the code. The code becomes effective for those registered operators on 9 November 2013.

#### 5. Enforcement of the code

This code contains standard environmental conditions for carrying out the activities that meet the criteria set out in Section 3 of this code. Failure to comply with the criteria or conditions of the code is an offence and penalties apply. A development approval is required where an ERA 63(2) activity is not self-assessable under this code— It is an offence to undertake an activity without a development approval and penalties apply. Enforcement Guidelines published by the administering authority are available at www.des.gld.gov.au.

#### 6. Other requirements

In addition to the conditions in this code, the registered operator carrying out ERA 63(2) must comply with all other relevant Commonwealth, State or local government legislative requirements. Without limiting the requirements that may apply, some additional obligations under the EP Act include:

- being a registered suitable operator approved by the administering authority under section 318G; and
- taking all reasonable and practicable measures to prevent or minimise environmental harm. This is referred to as the 'general environmental duty'.

#### 7. Amendment of this code

This code may be amended from time to time by gazette notice advising that the Minister has approved new conditions. Proposed changes to the standard environmental conditions, other than changes to correct a clerical error, will be made in consultation with stakeholders. Where there is a significant change to the code, the administering authority will notify registered operators affected by the change.

#### 8. Further information or enquiries

Further information is available at <u>www.des.qld.gov.au</u> or by contacting the relevant regional office of the administering authority.

General enquiries or suggestions for future amendments to the code should be directed to Permit and Licence Management, Implementation Support Unit on telephone 13 QGOV (13 74 68) or by email at <a href="mailto:palm@des.qld.gov.au">palm@des.qld.gov.au</a>.

Standard environmental condition	Advice
Condition 1 – Flooding The operator must ensure that new pumping stations are constructed to ensure that essential operational components of the pumping station are not impacted in a way which results in a failure of these components by flooding below the one in 100 year flood level. The operator must, when considering major upgrades of existing pumping stations, undertake a review of the construction of the essential operational components of the pumping station that may fail as a result of flooding below the one in 100 year flood level. The operator must consider moving these components above the one in 100 year flood level.	When constructing <b>new pumping stations</b> in a flood prone area, the switch gear should be located above the <b>one in 100</b> <b>year flood level</b> , as identified at the time of the construction. When upgrading <b>existing pumping</b> <b>stations</b> in a flood prone area, the <b>operator</b> should consider relocating any switch gear that is below the <b>one in 100 year flood</b> <b>level</b> , as identified at the time of the upgrade. Any upgrades should be included within the sewage overflow abatement plan as required by condition 7 of this <b>approval</b> .
Condition 2 – Flooding The operator must ensure that new pumping stations are constructed so that storm and flood waters can not enter the pump well. The operator must, when considering major upgrades of existing pumping stations, undertake a review of the construction and consider improvements to reduce the potential for storm and flood waters to enter the pump well.	When constructing <b>new pumping stations</b> openings to the well (such as maintenance holes) should not be lower than the <b>one in</b> <b>100 year flood level</b> , as identified at the time of the construction. When upgrading <b>existing pumping</b> <b>stations</b> in a flood prone area, the <b>operator</b> should consider upgrades to restrict water from entering the well if located below the <b>one in 100 year flood level</b> , as identified at the time of the upgrade. Any upgrades should be included within the sewage overflow abatement plan as required by condition 7 of this <b>approval</b> .
Condition 3 – Maintenance of measures, plant and equipment	
The <b>operator</b> must:	
<ul> <li>(a) maintain all measures, plant and equipment in an effective condition and keep records of the maintenance</li> </ul>	
<ul><li>(b) operate such measures, plant and equipment in an effective manner.</li></ul>	

### 9. Standard environmental conditions

Standard environmental condition	Advice
<ul> <li>Condition 4 - Integrated environmental management system</li> <li>For new pumping stations the operator must document and comply with an integrated environmental management system (IEMS) prior to the commencement of this activity.</li> <li>For existing pumping stations the operator must document and comply with an IEMS within 12 months of the date this approval takes effect.</li> <li>The IEMS must identify all causes of environmental harm including, but not limited to, the actual and potential release of any contaminants, the nature of the environmental harm and the actions that will be taken to prevent environmental harm being caused.</li> <li>The IEMS must achieve the following outcomes: <ul> <li>(a) environmental aspects and potential impacts are identified</li> <li>(b) a contingency plan and emergency response plan are in place</li> <li>(c) a network plan of the sewage collection system including connected pumping stations and likely overflow points is maintained</li> <li>(d) control measures that minimise the potential for environmental harm are in place</li> <li>(e) organisational structures, accountability and responsibilities are recorded</li> <li>(f) effective, practical communication arrangements, including documentation of such</li> <li>(g) all contaminant releases, and an estimate of their impact on the receiving environment are recorded</li> <li>(h) staff are trained and aware of the requirements of this approval.</li> </ul> </li> </ul>	<ul> <li>The IEMS is a commitment to complying with the approval. It is generally for the benefit of the operator in helping them to clarify and comply with the approval requirements.</li> <li>The IEMS may not necessarily be site specific. It should provide guiding principles to help plan ways to manage risks and minimise any potential environmental harm. For example, by identifying: <ul> <li>what contaminants could be released</li> <li>where any contaminants released would go and their impact</li> <li>that actions could be taken to contain any release</li> <li>what precautions could be taken to prevent a release.</li> </ul> </li> <li>This information can then be used to include procedures for prioritising responses to overflow events based on the risk to the receiving environment and the extent of the release.</li> <li>An IEMS may be used for a sewage network. However, any IEMS used for a network must be updated to reflect a new activity to which this approval applies.</li> <li>An IEMS may also be used to demonstrate compliance with the general environmental duty for other pumping stations which are not licensed but may still have the potential to cause environmental harm.</li> </ul>

Standard environmental condition	Advice
<ul> <li>Condition 5 – Contingency plan</li> <li>For new pumping stations the operator must document and comply with a contingency plan prior to the commencement of this activity.</li> <li>For existing pumping stations the operator must document and comply with a contingency plan within 24 months of the date this approval takes effect.</li> <li>The contingency plan must provide for: <ul> <li>(a) standard connections for emergency by-pass pumping</li> <li>(b) standard connections for mobile generators, or a back-up power source that automatically starts in the event of power failure</li> <li>(c) stand-by pumping equipment and associated controls</li> <li>(d) identification of critical components and a system to ensure adequate and timely access to spare parts</li> <li>(e) access for maintenance and emergency activities</li> <li>(f) testing and validation of any relevant equipment used or related to the contingency plan as necessary.</li> </ul> </li> </ul>	The detail of the contingency plan should reflect the complexity and risk of the <b>activity</b> at the site specific location. Where an IEMS has been developed for a sewage network there may be a contingency plan applicable to many pumping stations within the network based on the level of risk posed by the pumping stations. In this instance the one contingency plan can be used but must be updated to reflect the addition of the new <b>activity</b> to which this <b>approval</b> applies. While this condition requires the contingency plan to include provision for certain requirements, these are not intended to be restrictive. Where these requirements can be met in an alternative way or might not be relevant to a site specific <b>activity</b> this should be clearly documented. If you are proposing alternative arrangements you should consult the <b>administering authority</b> .
<ul> <li>date this approval takes effect.</li> <li>The contingency plan must provide for: <ul> <li>(a) standard connections for emergency by-pass pumping</li> <li>(b) standard connections for mobile generators, or a back-up power source that automatically starts in the event of power failure</li> <li>(c) stand-by pumping equipment and associated controls</li> <li>(d) identification of critical components and a system to ensure adequate and timely access to spare parts</li> <li>(e) access for maintenance and emergency activities</li> <li>(f) testing and validation of any relevant equipment used or related to the contingency plan as necessary.</li> </ul> </li> </ul>	on the level of risk posed by the pumping stations. In this instance the one contingency plan can be used but must be updated to reflect the addition of the new <b>activity</b> to which this <b>approval</b> applies. While this condition requires the contingency plan to include provision for certain requirements, these are not intended to be restrictive. Where these requirements can be met in an alternative way or might not be relevant to a site specific <b>activity</b> this should be clearly documented. If you are proposing alternative arrangements you should consult the <b>administering authority</b> .

Standard environmental condition	Advice
<ul> <li>Condition 6 - Emergency response plan</li> <li>For new pumping stations the operator must document and comply with an emergency response plan prior to the commencement of this activity.</li> <li>For existing pumping stations the operator must document and comply with an emergency response plan within 24 months of the date this approval takes effect.</li> <li>The emergency response plan must provide for: <ul> <li>(a) an implementation manual</li> <li>(b) staff training</li> <li>(c) identification of the part of the environment to which a sewage release may occur (for example, for water bodies, a description of where contaminants may enter the particular water body)</li> <li>(d) remediation and clean up of areas affected by sewage releases</li> <li>(e) receiving environment (surface waters/land) monitoring program for all notifiable releases to examine and assess environmental impacts</li> <li>(f) ongoing investigation and review to establish the cause of sewage releases, initiate corrective and/or preventative measures, and report on the effectiveness of such corrective and/or preventative measures.</li> </ul> </li> </ul>	The detail of the emergency response plan should reflect the complexity and risk of the <b>activity</b> at the site specific location. Where an IEMS has been developed for a sewage network there may be an emergency response plan applicable to many pumping stations within the network based on the level of risk posed by the pumping stations. In this instance the one emergency response plan can be used but must be updated to reflect the addition of the new <b>activity</b> to which this <b>approval</b> applies. While this condition requires the emergency response to include provision for certain requirements, these are not intended to be restrictive. Where these requirements can be met in an alternative way or might not be relevant to a site specific <b>activity</b> this should be clearly documented. If you are proposing alternative arrangements you should consult the <b>administering</b> <b>authority</b> . A receiving environment monitoring program must be sufficient to demonstrate the extent of the contamination and the time taken for the receiving environment to return to normal. For a release to waters, upstream and downstream monitoring may be required.
<ul> <li>Condition 7 – Sewage overflow abatement plan</li> <li>For new pumping stations the operator must document and comply with a sewage overflow abatement plan within 12 months of the date this approval takes effect.</li> <li>For existing pumping stations the operator must document and comply with a sewage overflow abatement plan within 24 months of the date this approval takes effect.</li> <li>The sewage overflow abatement plan must consider the existing performance and trends, and the potential receiving environment of the pumping station. It must: <ul> <li>(a) identify where the greatest risks of causing environmental harm are</li> <li>(b) identify and evaluate measures in place to reduce the incidence of overflows</li> <li>(c) develop a program of works with a timetable for implementation</li> <li>(d) assess performance and trends for any implemented works.</li> </ul> </li> </ul>	The detail of the sewage overflow abatement plan should reflect the complexity and risk of the <b>activity</b> at the site specific location. Where an IEMS has been developed for a sewage network there may be a sewage overflow abatement plan applicable to many pumping stations within the network based on the level of risk posed by the pumping stations. In this instance the one sewage overflow abatement plan can be used but must be updated to reflect the addition of the new <b>activity</b> to which this <b>approval</b> applies. Where flooding issues have been identified (as outlined in conditions 1 and 2), upgrades must be included within the sewage overflow abatement plan.

Standard environmental condition	Advice
Condition 8 – Records The operator must record, compile and keep all maintenance and monitoring results, plans and documents required by this approval and present this information to an <b>authorised</b> person or the administering authority when requested.	Records should verify the provision of training programs and schedules of routine inspections.
Condition 9 – Records	
All records required by this <b>approval</b> must be kept for five years.	
<b>Condition 10 – Release to land and waters</b> The <b>operator</b> must ensure that contaminants are not released to land or waters (including the bed and banks of any waters) as a result of the <b>activity</b> .	The <b>administering authority</b> acknowledges that a typical design for sewerage system capacity is three to five times average daily dry weather flow and that overflows may occur in wet weather when the design capacity of the sewerage system is exceeded.
<ul> <li>Condition 11 – Notifiable release</li> <li>The operator must notify the administering authority via the 24 hour Pollution Hotline or the district office no later than three hours after becoming aware of a sewage release that: <ul> <li>(a) poses a threat to public health (for example, contamination of waters with primary recreation values);</li> <li>(b) results in any observable environmental impact (for example, fish kill, distress to wildlife, marine plants or other aquatic life);</li> <li>(c) discharges to, or is likely to impact, a sensitive environment (for example, Ramsar wetland, marine park, or area designated as a conservation zone under a relevant planning scheme); or</li> <li>(d) is 10 000 L or more during dry weather.</li> </ul> </li> </ul>	The administering authority may need to respond quickly to some spills with the potential to cause environmental harm. Priority should be given to notifying the administering authority of these spills immediately after they occur. The 24 hour Pollution Hotline number is 1300 130 372. Where an event has occurred that causes or threatens serious or material environmental harm the duty to notify environmental harm requirements as per ss. 320-320G of the EP Act will also apply. Where reporting under ss. 320-320G is provided and satisfies the notification conditions of this approval, it is not necessary to report again against this approval. The administering authority's district office is the office responsible for the local government area where the release has occurred. Where the volume of the release is unknown an estimate is to be provided.

Standard environmental condition	Advice
<b>Condition 12 – Notifiable release</b> Within 24 hours after becoming aware of a notifiable release in accordance with condition 11, email or written notification of the release must be submitted to the <b>administering authority</b> outlining the event, its nature and the circumstances in which it happened.	Where there has been a threat to public health this notification should include evidence that owners or occupiers of the affected land have been notified. This can be by public notification.
<b>Condition 13 – Notifiable release</b> A final report must be provided to the <b>administering</b> <b>authority</b> within 14 business days of the conclusion of the spill response and remediation of a notifiable release, but no later than 20 business days after the commencement of the release.	Any additional information such as sampling results maybe added to the report in the form of attachments at any time. If the commencement of the release is unknown, an estimation of the time and date of the commencement of the release is to be provided.
<b>Condition 14 – General release reporting</b> All releases must be reported to the <b>administering authority</b> in the form of an annual report by 30 September covering the period 1 July – 30 June of the previous year.	All discharges include notifiable releases and all other releases from the pumping station. These should be clearly identified in the report. Where the <b>activity</b> is part of a sewage network, annual reporting for the network may be provided to satisfy this condition.
<ul> <li>Condition 15 – General release reporting</li> <li>Annual reports outlining all releases in accordance with condition 14 must clearly identify: <ul> <li>(a) the waste water treatment plant which the pumping station is connected to</li> <li>(b) the number of releases</li> <li>(c) the volume (or estimate of the volume) of each release</li> <li>(d) the location of each release by suburb post code</li> <li>(e) if the release was reported under ss. 320-320G of the <i>Environmental Protection Act 1994</i>.</li> </ul> </li> </ul>	Reporting should be provided in a way in which the data is easy to handle and review. It would be beneficial to also include the reason for the release when reporting. An example would be in an excel spreadsheet.
<b>Condition 16 – Monitoring</b> The <b>operator</b> must ensure that all monitoring, assessments and reports required by this <b>approval</b> are conducted by a person with appropriate experience and/or qualifications. Water monitoring must be undertaken in accordance with the <b>administering authority's</b> Water Quality Sampling Manual and other relevant standards.	

Standard environmental condition	Advice
<b>Condition 17 – Trained/experienced operator(s)</b> The <b>operator</b> must ensure that the daily <b>operation</b> and maintenance of the pumping station is carried out by a person with experience and/or qualifications appropriate to ensuring the effective operation of the pumping station.	
<b>Condition 18 – Equipment calibration</b> The <b>operator</b> must ensure that all instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this <b>approval</b> are calibrated, operated and maintained in accordance with the manufacturer's specifications.	
<ul> <li>Condition 19 – Complaint response</li> <li>The operator must record the following details for all complaints received and this information must be provided to an authorised person or the administering authority on request: <ul> <li>(a) time, date, name and contact details of the complainant</li> <li>(b) reasons for the complaint</li> <li>(c) any investigation undertaken</li> <li>(d) conclusions formed</li> <li>(e) any actions taken.</li> </ul> </li> </ul>	If the complainant does not wish to have their name and contact details recorded, note this as an anonymous complaint.
Condition 20 – Air nuisance The operator must ensure that the release of odours or airborne contaminants resulting from the activity do not cause environmental nuisance at a nuisance sensitive place or commercial place.	
<b>Condition 21 – Noise nuisance</b> The <b>operator</b> must ensure that noise resulting from the <b>activity</b> does not cause <b>environmental nuisance</b> at a nuisance <b>sensitive place</b> or <b>commercial place</b> .	

Standard environmental condition	Advice
<ul> <li>Condition 22 – Noise monitoring</li> <li>When requested by the administering authority, the operator must undertake noise monitoring to investigate any complaint of noise nuisance. The monitoring must be undertaken and results must be notified to the administering authority in the format and within the time specified by the administering authority. Monitoring must include: <ul> <li>(a) measurement of LA90, adj, 15 mins</li> <li>(b) measurement of LA10, adj, 10 mins</li> <li>(c) measurement of LAeq, adj, 10 mins</li> <li>(d) the level and frequency of occurrence of impulsive or tonal noise</li> <li>(e) atmospheric conditions including wind speed and direction</li> <li>(f) effects due to extraneous factors such as traffic noise</li> <li>(g) the location, date and time of monitoring.</li> </ul> </li> </ul>	
<b>Condition 23 – Noise monitoring</b> The <b>operator</b> must ensure that the method of measurement and reporting of noise levels complies with the latest edition of the <b>administering authority</b> 's Noise Measurement Manual.	The <b>administering authority</b> 's Noise Measurement Manual is available at <u>www.des.qld.gov.au</u> .
<b>Condition 24 – Responding to potential releases</b> The <b>operator</b> must ensure that there are appropriate physical systems in place to anticipate a potential release.	This may include an alarm system using one or more of the following; pump-failure alarms or level alarms for sewage contained in the pump well.
<b>Condition 25 – Responding to potential releases</b> Any system developed in line with condition 24 must be able to operate for a sufficient time to allow for notification of the potential release to the <b>operator</b> and an appropriate response.	This may include having back up power available or providing additional detention capacity.
<b>Condition 26 – Responding to potential releases</b> Any identification of a potential release must be responded to by the <b>operator</b> .	Response times should consider the potential for <b>environmental harm</b> based on site specific details and the potential volume of release from the pumping station.

#### 10. Definitions

Words and phrases used throughout this guideline are defined below. Where a definition for a term used in this guideline is sought and the term is not defined the administering authority may be contacted to provide clarification.

**One in 100 year flood level** means the level reached by a flood event with an annual recurrence interval of one in 100 years.

Activity means ERA 63 (2).

Administering authority means the Department of Environment and Science, or the department responsible for administering the *Environmental Protection Act 1994*.

Authorised person means a person authorised under the Environmental Protection Act 1994.

Approval means this code of environmental compliance.

Commercial place means a place used as an office or for business or commercial purposes.

**Environmental harm** (as defined in Section 14 of the *Environmental Protection Act 1994*) is any adverse effect, or potential adverse effect (whether temporary or permanent and of whatever magnitude, duration or frequency) on an environmental value, and includes **environmental nuisance**. **Environmental harm** may be caused by an activity:

- a) whether the harm is a direct or indirect result of the activity
- b) whether the harm results from the activity alone or from the combined effects of the activity and other activities or factors.

**Environmental nuisance** (as defined in Section 15 of the *Environmental Protection Act 1994*) means— 'unreasonable interference or likely interference with an environmental value' caused by:

- a) aerosols, fumes, light, noise, odour, particles or smoke
- b) an unhealthy, offensive or unsightly condition because of contamination
- c) another way prescribed by regulation.

Existing pumping stations means pumping stations that were constructed before 1 January 2009.

L<sub>A 90, adj, 15 mins</sub> means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 90 per cent of any 15 minute measurement period, using fast response.

L<sub>A 10, adj, 10 mins</sub> means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 10 per cent of any 10 minute measurement period, using fast response.

L<sub>Aeq</sub> means the equivalent continuous A-weighted sound pressure level of the residual noise determined over a specified time interval.

**Major upgrades** means upgrades which will involve expenditure in excess of \$150 000. This figure is relevant as of 1 January 2012 and will increase by three per cent as of 1 January hereafter.

New pumping stations means pumping stations that were constructed on or after 1 January 2009.

Operation means the development approved under this approval.

Operator means any of the following:

a) a person having the benefit of this **approval** 

- b) the holder of a registration certificate for this approval
- c) anyone undertaking the activity to which this approval relates

Note: it is an offence to carry out work under an **approval** without a relevant registration certificate.

#### Sensitive place means:

- a) a dwelling (including residential allotment, mobile home or caravan park, residential marina or other residential premises, motel, hotel or hostel
- b) a library, childcare centre, kindergarten, school, university or other educational institution
- c) a medical centre, surgery or hospital
- d) a protected area
- e) a public park or garden that is open to the public (whether or not on payment of money) for use other than for sport or organised entertainment.

**Waters** means all Queensland waters and includes rivers, streams, lakes, lagoons, ponds, swamps, wetlands, surface waters, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), any ground water and any part thereof.