L4.4	When the deposition of waste to the **landfill unit** ceases, a final capping system to the **landfill unit** must be designed by an **appropriately qualified person** and installed to minimise: 1. infiltration of water into the **landfill unit** and water ponding on the surface; and 2. the likelihood of any erosion occurring to either the final capping system or the landfilled materials. A final capping system is not required where the deposition of waste to a **landfill unit** ceases temporarily for the purpose of using an alternative working face.
L4.5	Land that has been disturbed for activities conducted under this environmental authority must 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 3. the quality of water, including seepage, released from the site does not cause environmental harm 4. potential for environmental nuisance 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 capping layer are appropriate for the final land use and in accordance with the *'National Environmental Protection (Assessment of Soil Contamination) Measure 1999.'*
L4.6	Following cessation of deposition of waste in the **landfill unit**, post-closure care of the **landfill unit** must be conducted for a period of 30 years or until the **administering authority** determines, on the basis of correct information, that the **landfill unit** and surrounding site are stable and that no release of waste materials, **leachate**, landfill gas or other **contaminants** that may cause environmental harm is likely.
L4.7	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 capping 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.
Agency interest: Waste	
Condition number	**Condition**
W4.1	The registered operator must not allow waste to burn or be burnt at or on a place to which this approval relates.
W4.2	Waste streams accepted for temporary storage (including batteries, oils and other **general waste** streams) must be stored: (a) In a bunded impervious area and enclosed under roof to minimise **leachate** generation, odours, leaks an spills, environmental hazards; or (b) In an enclose container of a suitable design to minimise spills and leaks.
W4.3	If the registered operator becomes aware that regulated waste other than the regulated waste listed in Table W4.5 has been received at the site, the registered operator must take all reasonable and practicable **measures** to: (a) Identify the source of the waste and notify the person that unauthorised wastes have been received;

<table>
<tr><td></td><td>(b) As soon as practicable make arrangements for the waste to be remove from the site and transported to a facility that can lawfully accept such waste;
(c) Store the waste in an area specifically designate for the temporary storage of unauthorised waste; and
(d) Keep and maintain records of unauthorised waste.</td></tr>
<tr><td>W4.4</td><td>In the event of the registered operator of this approval becoming aware of prohibited waste being commingled in any waste stream the registered operator of this approval must:
(a) Cease the depositing of such waste;
(b) Remove the prohibited waste and store in a proper and efficient manner;
(c) Notify the person who sent the prohibited waste to the approved place of the detection of prohibited waste in the waste received
(d) As soon as practicable arrange for a person who can lawfully transport such waste to collect such waste;
(e) Arrange for the person transporting the prohibited waste to transport such waste to a facility that can lawfully accept such waste;
(f) Produce the following records:
i. Type of prohibited waste;
ii. Quantity of prohibited waste;
iii. Date of disposal;
iv. Name and address of the person(s) transporting the prohibited waste to the facility;
v. Name and address of the person(s) who generated the prohibited waste (if such person(s) can be reasonably identified).
For the purpose of this condition, "prohibited waste" means a waste that is not permitted to be accepted at that authorised place by condition of this approval.</td></tr>
<tr><td>W4.5</td><td>No regulated waste streams must be accepted at the authorised place which exhibits any of the hazard characteristics listed in Table W4.5
Table W4.5
<table>
<tr><th>Hazard Characteristic</th><th>Description of the Hazard Characteristic</th></tr>
<tr><td>Ignitability</td><td>Regulated wastes that are capable of causing a fire when ignited through friction, absorption of moisture, or spontaneous chemical changes under standard temperature and pressure</td></tr>
<tr><td>Corrosivity</td><td>Regulated wastes which on dissolution exhibit a pH of 2 or less or 12.5 or greater</td></tr>
<tr><td>Reactivity</td><td>Regulate wastes if they have any of the following properties:
• React violently with water; and/or
• Form potentially explosive mixtures with water and other substances likely to be disposed of in the authorised place; and /or
• Generate toxic gases, vapours, or fumes dangerous to human health or the environment when mixed with water and other substances likely to be disposed of in the authorised place; and/or
• Contain substances which generate toxic gases, vapours or fumes when exposed to pH conditions between 2 and 12.5; and /or
• Are capable of detonation or explosive reaction when subjected to a strong initiating source or if heated under confinement; and /or
Are readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.</td></tr>
<tr><td>Toxicity</td><td>Regulated wastes if they have:
• Contaminant concentrations in the waste exceeding the allowable levels in Table W4.7a; or
• Leaching contaminant levels in the waste when measured in accordance with Toxicity Characteristic Leaching Procedure (TCLP) exceeding the concentrations prescribed in Table W4.7b.
For any soil contaminate by radioactive material;
• The gross alpha and gross beta activity concentration in the Toxicity Characteristic Leaching Procedure (TCLP) extracts from the material are no more than one hundred (100) times the concentrations specified in the NHMRC/ARMCANZ Australian Drinking Water Guidelines, 1996.</td></tr>
</table>
In addition to other waste acceptance requirements the following waste streams must be excluded from disposal at the landfill:
(a) Liquescent waste streams or any waste capable of yielding free liquids that is not authorised in this approval except leachate and/or landfill gas condensate arising from gas collection generated within the authorised place;
(b) Infectious waste streams which have not been subjected to a proper and efficient treatment process to render them non-infectious;
(c) Material or equipment contaminated with infectious substances which have not been</td></tr>
</table>

	subjected to a proper and effective treatment process to render them non-infectious; (d) Cytotoxic wastes; (e) Substances listed under the *Health (Drugs and Poisons) Regulation 1996;* (f) Soils or substances contaminated by radioactive material, unless it meets the requirements specified in the current *Radiation Safety Act 1999* and *Radiation Safety Regulation 2010;* (g) Pyrophoric wastes, where co-disposed with other potentially combustible materials; (h) Explosives and ammunition (excepting spent ammunition cartridges which no longer contain explosives, pyrotechnics, or propellants, apart from trace residues which are no longer capable of supporting combustion or an explosive reaction); (i) Any regulated waste or sludges (other than a regulated waste or sludge that may be disposed at this licensed place as permitted by this approval); (j) Paper product sludges except those with a moisture content of less than 30%; (k) Metals with the exception of minor amounts of metal incidental to or commingled with other waste; (l) Tyres; (m) Garden and /or green waste with the exception of minor amounts of garden and/or green waste incidental to comingled with other waste.
W4.6	Subject to such waste or contaminated soils not exhibiting characteristics described in approval conditions, the following **general waste**, limited regulated waste or contaminated soils are permitted to be disposed of at the **authorised place**: (a) Residual municipal, commercial and industrial, construction and demolition waste streams that cannot be practicably recycled or reused ; (b) Other limited regulated waste streams including: i. Asbestos; ii. Fish processing wastes (dewatered solids only); iii. Food processing wastes (dewatered solids only); iv. Poultry processing wastes (dewatered solids only); v. Abattoir waste (dewatered solids only); vi Grease Interceptor trap effluent and residues; vii. Dewatered bacterial sludge (water treatment plant, septic tank and sewage treatment plant); (c) Shredded tyres; (d) Low level contaminated soil.
W4.7	The quality of any low level contaminated soil, treated waste or reprocessed waste streams used as a daily cover or interim capping material at the waste disposal facilities must comply with the soil quality characteristics specified in Table W4.7a and allowable leaching **contaminant** levels when measured in accordance with Toxicity Characteristics Leaching Procedures (**TCLP**) in Table W4.7b.

Table W4.7a – Maximum Contaminants Level in Soils

Substance	mg/kg
Arsenic (total)	200
Beryllium	40
Cadmium	40
Chromium (III)	240,000
Chromium (VI)	200
Copper	2,000
Lead	600
Manganese	3,000
Methyl Mercury	20
Mercury (inorganic)	30
Nickel	600
Zinc	14,000
CONTAMINANT ANALYSIS	**mg/kg**
Monocyclic Aromatic Hydrocarbons (MAH)	**mg/kg**
Benzene	10
Ethyl Benzene	500

Toluene	300
Total MAH	500
Polycyclic Aromatic Hydrocarbons (PAH)	**mg/kg**
Total PAH	500
Phenolic Contaminants	**mg/kg**
Non halogenated compounds	
Phenol	100
m-cresol	250
o-cresol	250
p-cresol	250
Total non-halogenated phenol	250
Halogenated compounds	
Chlorophenol	1
Trichlorophenol	5
Pentachlorophenol	5
Total halogenated phenol	5
Chlorinated Hydrocarbons	**mg/kg**
Poychlorinated Biphenyl	2
Chlorinated Allphatic Compounds	
Carbon tetrachloride	5
1,2 Dichloroethane	10
1,1 Dichloroethene	1
Tetrachloroethene	10
Trichloroethene	25
Total Chlorinated Aliphatic Compounds	50
Chlorinated Aromatic Compounds	
Chlorobenzene	100
Hexachlorobenzene	1
Total Chlorinated Aromatic Compounds	100
Pesticides	**mg/kg**
Total organochlorine	5
Total herbicides	25
Total carbamates	25
Total organophosphorus	10
Petroleum Hydrocarbons	**mg/kg**
Total petroleum hydrocarbons(C6-C9)	500
Total petroleum hydrocarbons(C10-C14)	5,000
Total petroleum hydrocarbons(C15-C28)	10,000
Total petroleum hydrocarbons(C29-C36)	10,000

Table W4.7b – Allowable Leaching Contaminant Levels

Contaminant Analysis	**mg/L**
Non-specific Contaminants	**mg/L**
Biochemical Oxygen Demand	20,000
Total Organic Carbon	10,000
Petroleum Hydrocarbons	25
Microtox LC50	*No levels set at this time
Metals/Non-metals	**mg/L**
Antimony	0.5
Arsenic	0.5
Barium	10
Cadmium	0.05
Chromium	0.5
Cobalt	0.5
Copper	10
Lead	0.5
Mercury	0.01
Molybdenum	0.1
Nickel	0.5
Selenium	0.1
Silver	0.5
Thallium	0.1
Tin	0.3
Vanadium	0.5
Zinc	50
Inorganic Anions	**mg/L**
Bromide	5

Chloride	6,000
Cyanide (total_	1
Fluoride	15
Sulphate	2,500
Nitrate	100
Monocyclic Aromatic Hydrocarbon (MAH)	**mg/L**
Benzene	0.1
Ethyl benzene	5
Toluene	3
Xylene	2
Total MAH	5
Polycyclic Aromatic Hydrocarbon (PAH)	**mg/L**
Anthracene	0.07
Benz (a) anthracene	0.005
Benz (c) phenanthrene	0.005
Benzo (a) pyrene	0.002
Benzo (b) fluoranthene	0.005
Benzo (k) fluoranthene	0.005
Chrysene	0.1
Dibenz (a,h) anthracene	0.002
Dibenz (a,h) pyrene	0.01
Dimethylobenz (a) anthracene	0.005
Fluoranthene	0.02
Indeno (1,2,3-cd) pyrene	0.01
Naphthalene	0.07
Phenanthrene	0.01
Pyrene	0.07
Total PAH	0.1
Phenolic Contaminants	**mg/L**
Non-halogenated compounds	
Phenol	1
m-cresol	2
o-cresol	2
p-cresol	2
Halogenated phenols	
Chlorophenol	0.01
Trichlorophenol	0.1
Pentachlorophenol	0.1
Chlorinated Hydrocarbons	**mg/L**
Chlorinated Aliphatic Compounds	
Carbon tetrachloride	0.03
1,2 Dichloroethane	0.1
1,1 Dichloroethene	0.003
Tetrachloroethene	0.1
Trichloroethene	0.3
Chlorinated Aromatic Compounds	
Chlorobenzene (total)	1
Hexachlorobenzene	0.002
Pesticides	**mg/L**
Aldrin	0.001
Chlordane	0.006
Chlorpyritos	0.01
Dieldrin	0.001
DDT	0.003
Endrin	0.001
Heptachlor	0.003
Lindane	0.1
Methoxychlor	0.1
Toxaphene	0.005
Herbicides	
2,4-D	0.1
2,4-DB	0.2
MCPA	0.2
2,4,6-T	0.002
Carbamates	
Carbaryl	0.06
Carbofuran	0.03
Organophosphorus	

	Diazinon	0.01
	Parathion	0.03
	Methyl Parathion	0.006
	Triazines	
	Alrazine	0.01
	Simazine	0.01
W4.8	The following waste must be handled and disposed of as a special burial of waste: (a) Infectious substances properly and effectively treated to render them non-infectious; (b) Material or equipment contaminated with infectious substances properly and effectively treated to render them non-infectious; (c) Grease interceptor trap effluent and residues; (d) Waste, which if not buried as soon as practicable, would be likely to cause environmental harm when placed in an exposed position (for example, odorous **putrescible waste**, quarantine waste, chemically fixed waste streams excluding alkaline stabilised sewage sludge).	
W4.9	Any soil contaminated by radioactive material must be contained within the **landfill unit** at a minimum distance of two (2) metres from the surface and flanks of the **landfill unit**, excluding any final cover system required as a condition of this approval.	
W4.10	All chemical forms of asbestos waste must be: (a) Disposed to a designated asbestos **landfill unit** that is separate to other waste disposal units; (b) Confined to a designated asbestos **landfill unit** where no excavation takes place following the initial disposal of asbestos waste within that designated asbestos **landfill unit**; (c) Placed at the bottom of the working face in the designated asbestos **landfill unit** and immediately covered with a minimum of 200mm of consolidated earth or equivalent cover material; (d) Contained within a final designated asbestos **landfill unit** at a minimum distance of 2 metres from the surface and flanks of the **landfill unit**, excluding any final cover system required as a condition of this approval (where final designated asbestos **landfill unit** means that deposition to the **landfill unit** as ceased); and (e) Managed so that in relation to the deposition of asbestos waste, the registered operator of the approval records the accurate location (accuracy not less than 0.5 metre for depth and area coordinates) of the designated asbestos **landfill unit**(s).	
W4.11	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.	

Part 5: Site Specific Conditions – Sewage Treatment

Environmentally relevant activities	Locations
63-(1d) Sewage treatment >4000 to 10000EP	Biloela Sewage Treatment Plant Quarrie Road BILOELA QLD 4715 - Lot 3 Plan SP137058
63-(1c) Sewage treatment >1500 to 4000EP	Moura Sewage Treatment Plant 121 Davey Street MOURA QLD 4718 - Lot 91 Plan FN493
63-(1b)(i) Sewage treatment >100 to 1500EP - IT or IR	Theodore Sewage Treatment Plant Leichhardt Highway THEODORE QLD 4719 - Lot 232 Plan DW346