



Licence number	L8678/2012/1
Licensee	Atlas Iron Limited
ACN	110 396 168
Registered business address	Level 18, 300 Murray Street PERTH WA 6000
Date of amendment	23 May 2017
Prescribed Premises	Category 5: Processing or beneficiation of metallic or non-metallic ore Category 85: Sewage facility
Premises	Mt Dove DSO Project Mining Tenement M47/1449 and L45/248 INDEE WA 6721

Amendment

The Department of Environment Regulation (DER) has amended the above licence in accordance with section 59 of the *Environmental Protection Act 1986* as set out in this Amendment Notice.

Date signed: 23 May 2017

Alana Kidd
Manager Licensing – Resource Industries

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Amendment Notice

This Notice is issued under section 59 of the *Environmental Protection Act 1986* (EP Act) to amend the licence issued under the EP Act for a prescribed premises as set out below. This notice of amendment is given under section 59B(9) of the EP Act.

The following DER Guidance Statements have informed the decision made on this amendment:

- *Guidance Statement: Setting Conditions (October 2015)*
- *Guidance Statement: Decision Making (February 2017)*
- *Guidance Statement: Risk Assessments (February 2017)*
- *Guidance Statement: Environmental Siting (November 2016)*

Amendment Description

This Amendment Notice is the result of a Licensee initiated amendment to replace the existing 35 m³/day wastewater treatment plant (WWTP) with a new 47.5 m³/day WWTP in the same location. The replacement WWTP is required due to a planned camp expansion that will add an additional 57 rooms. New infrastructure will consist of:

- Balance tank;
- Balance pump;
- Primary 1 tank;
- Primary 2 tank;
- Aeration tank, with media;
- Blower;
- Clarifier, including airlift return activated sludge;
- Chlorine analyser and automated chlorine dosing;
- Pump out chamber;
- Control panel;
- Audible and visual pump fault alarm;
- Treated water tank;
- Irrigation pump;
- Discharge flowmeter;
- Access ladders and walkway; and
- Sprinklers, fencing and signage of sprayfield.

The existing WWTP is to be decommissioned and taken offsite.

The existing 0.85 hectare (ha) irrigation area will be utilised and expanded to 1.3 ha and include an additional three sprinklers.

The Licensee is also proposing to install a Reverse Osmosis plant that will produce 36 m³/day of brine that will be combined with the treated effluent from the WWTP and discharged to the irrigation area.

Location, environmental siting and potential receptors

Table 1: Relevant human receptors in the vicinity of the prescribed premises.

Residential and Sensitive Premises	Distance from Prescribed Premises Boundary
Mt Dove Camp (excluded as a sensitive premises as accommodates employees, visitors or contractors of the Licensee)	150 m
Indee Homestead	20 km

Table 2: Relevant environmental receptors in the vicinity of the prescribed premises.

Environmental receptor	Distance from Prescribed Premises Boundary
Yule River Water Reserve Nol.31427	10 km
Turner River	12.2 km
Depth to groundwater	Approximately 8 m

There is no significant vegetation in the area of tributaries. The closest significant flora is 5.5km away and is not connected to the receiving environment of the sprayfield.

Risk assessment

Tables 3 and 4 below apply a risk assessment to the potential emissions which may arise from the amendment application. Both tables identify whether these emissions present a material risk requiring regulatory controls.

Table 4 also contains a risk assessment of redundant conditions that have been removed during this assessment.

Risk Assessment

Table 3. Identification of emissions, pathway and receptors during construction

Risk Events					Continue to detailed Risk Assessment	Reasoning	
Sources/Activities	Potential Emissions	Potential Receptors	Potential Pathway	Potential Adverse Impacts			
Construction, mobilisation and positioning of infrastructure	Vehicle movements on unsealed access roads	Noise	No residences or other sensitive receptors in proximity. Residential premises located 20km from the premises	Air / wind dispersion	Health and amenity	No	No receptor present
		Dust			Health and amenity	No	No receptor present
	Construction of new buildings, plant and infrastructure	Noise	No residences or other sensitive receptors in proximity. Residential premises located 20km from the premises	Air / wind dispersion	Health and amenity	No	No receptor present
		Dust			Health and amenity	No	No receptor present

Table 4: Identification of emissions, pathway and receptors during operation

Risk Events					Continue to detailed Risk Assessment	Reasoning	
Sources/Activities	Potential Emissions	Potential Receptors	Potential Pathway	Potential Adverse Impacts			
Waste Water Treatment Plant and Reverse Osmosis Plant	Treatment of sewage	Odour	No residences or other sensitive receptors in proximity. Residential premises located 20km from the premises	Air / wind dispersion	Health and amenity	No	No receptor present and tanks will be fully enclosed
	Sewage pipes and holding tanks	Sewage and/or brine discharge to land from rupture of pipes / overtopping of	Vegetation adjacent to discharge area	Direct discharge	Soil contamination inhibiting vegetation growth and survival	No	The Delegated Officer has considered the following management measures are to be implemented by the Licensee: <ul style="list-style-type: none"> The new WWTP will be placed within an earthen bund to capture overflow;

Risk Events					Continue to detailed Risk Assessment	Reasoning
Sources/Activities	Potential Emissions	Potential Receptors	Potential Pathway	Potential Adverse Impacts		
		holding tanks				<ul style="list-style-type: none"> • Audible and visual alarms fitted; • Infrastructure will be inspected daily and maintained in accordance with manufacturer's specifications; • Contingency tanks will be in place to allow two days additional storage. These tanks can also be used for the Reserve Osmosis plant if there were issues; and • Sludge will be removed by a controlled waste carrier. <p>Groundwater is approximately 8 m below ground level so contamination is not expected to infiltrate, particularly with the high evaporation rates in the Pilbara region.</p> <p>The Delegated Officer considers that impacts from the rupture of pipes / overtopping of holding tanks will be slight as the WWTP and pipelines are all located onsite (so offsite impacts are not expected) and impacts would be expected to be minimal. The Delegated Officer has considered the operator controls (audible and visual alarms) and considers the likelihood of an occurrence to be unlikely. The risk rating for rupture of pipes / overtopping of holding tanks is therefore low.</p>
	Irrigation of treated effluent and brine	Treated effluent and brine to land			No	<p>The Delegated Officer has considered the following expected treated effluent quality proposed by the Licensee:</p> <p>Biochemical Oxygen Demand <20 mg/L</p> <p>Total Suspended Solids <30 mg/L</p> <p>Total Nitrogen <30 mg/L (loading rate 400kg/ha/yr)</p> <p>Total Phosphorus <8 mg/L (loading rate 107kg/ha/yr)</p> <p>E.Coli <1,000 cfu/100mL</p>

Risk Events					Continue to detailed Risk Assessment	Reasoning
Sources/Activities	Potential Emissions	Potential Receptors	Potential Pathway	Potential Adverse Impacts		
						<p>pH 6.5-8.5 pH units</p> <p>Chlorine 0.2-2.0 mg/L</p> <p>The Delegated Officer considers the proposed nutrient loading rates to be sustainable given the soil and climate (high evaporation) characteristics of the site. The Delegated officer notes that the proposed application rates are consistent with the recommended maximum nutrient rates outlined in the Department of Water's Water Quality Protection Note 22 of 480 kg/ha/yr Total Nitrogen and 120 kg/ha/yr Total Phosphorus for fine grained soils draining to waters with a D risk of eutrophication.</p> <p>The Delegated Officer has considered the following expected brine quality proposed by the Licensee:</p> <p>pH 8.1</p> <p>Electrical Conductivity 2,000 µS/cm</p> <p>Total Dissolved Solids 1,200 mg/L</p> <p>Total Suspended Solids <5 mg/L</p> <p>Biochemical Oxygen Demand <5 mg/L</p> <p>Total Nitrogen 8.9 mg/L</p> <p>Total Phosphorus 0.2 mg/L</p> <p>Quarterly monitoring of treated effluent and brine combined will be conducted. The brine and effluent will be mixed in a tank prior to discharge.</p> <p>As the brine is being combined with the treated effluent, it is anticipated that the salinity of the brine will be diluted by the treated effluent. Stratification of the brine and effluent is unlikely as the brine is not highly saline. The pumping of brine and treated effluent into the final storage tank should ensure suitable mixing. Electrical conductivity of 2,000 µS/cm is classed as medium salinity on a scale of low, medium, high</p>

Risk Events					Continue to detailed Risk Assessment	Reasoning
Sources/Activities	Potential Emissions	Potential Receptors	Potential Pathway	Potential Adverse Impacts		
						<p>and extreme according to the Department of Sustainability and Environment, Department of Primary Industries, Water salinity tolerance of different crops and stock, 2006 guideline.</p> <p>When the brine (36 m³/day) is combined with the treated effluent (47.5 m³/day), it is anticipated that the salinity will be less than 800 µS/cm, which sensitive plants are able to tolerate according to the guideline. Electrical Conductivity and Total Dissolved Solids have been added into the monitoring campaign.</p> <p>The irrigation area is pre-disturbed and sparsely vegetated with <i>Triodia</i> and <i>Acacias</i>, which are well represented in the region. Visual monitoring for vegetation health, weeds and eradication will be conducted as required. Sprinklers will be above ground cast iron hammer type with a radius of 17.5 m and will operate once per day.</p> <p>The Delegated Officer considers that impacts from the irrigation of treated effluent and brine will be slight as the irrigation area is located onsite (so offsite impacts are not expected) and impacts would be expected to be minimal. The likelihood of the occurrence is possible. The risk rating for impacts from the irrigation of treated effluent and brine is therefore low.</p>
Processing and ore transport	Movement of ore through conveyors, train loadouts and at stockyards and vehicles on roadways	Dust	No residences or other sensitive receptors in proximity. Residential premises located 20km from the premises	Air / wind dispersion	Potential suppression of photosynthetic and respiratory functions	<p>No</p> <p>The Delegated Officer has considered the following management measures implemented by the Licensee:</p> <ul style="list-style-type: none"> • Visual observations of vegetation health (to monitor potential impacts from fugitive dust emissions and any erosion that occurs as a result of the Project) in accordance with mine management procedures; • The application of chemical crusting agents to further reduce windblown dust emissions from susceptible areas will be

Risk Events					Continue to detailed Risk Assessment	Reasoning	
Sources/Activities	Potential Emissions	Potential Receptors	Potential Pathway	Potential Adverse Impacts			
						<p>considered;</p> <ul style="list-style-type: none"> • Unsealed heavily trafficked roads, such as haul roads and access tracks, watered regularly to suppress dust emissions; • Dust suppression incorporates the use of sprinklers and water trucks across cleared infrastructure, access roads and stockpile areas and around areas of Project activity; • The mobile crushing and screening plant is equipped with water sprays; • Road trains have covered trailers to minimise dust emissions during the product transport; and • Vehicle speeds are restricted in the Project area and on public roads to minimise dust being suspended by traffic. <p>The Delegated Officer considers that impacts from dust emissions will be slight.</p> <p>There are not substantial activities to result in dust emissions and based on the large mine site area all emissions would be expected to stay onsite (so offsite impacts are not expected). Impacts would be expected to be minimal. The likelihood of occurrence is considered unlikely.</p> <p>The Delegated Officer considers the risk rating for dust emissions is therefore low.</p> <p>Previous redundant condition 1 has been removed from the licence.</p>	
Stormwater management	Rainfall events resulting in water ingress to processing areas	Contaminated water	Ecosystems in the vicinity of, and downstream of, the mine site	Direct discharge	Soil contamination inhibiting vegetation growth and survival and health impacts to	No	The Delegated Officer considers that stormwater containing contaminants is not expected due to the following management measures implemented by the Licensee:

Risk Events					Continue to detailed Risk Assessment	Reasoning
Sources/Activities	Potential Emissions	Potential Receptors	Potential Pathway	Potential Adverse Impacts		
	and contamination			fauna		<ul style="list-style-type: none"> • Appropriate management of surface water flows within and around the Project to reduce the potential for contaminants (such as hydrocarbons and dangerous goods) to enter surface water flows; • Storm water diversion structures to divert 'clean' runoff around cleared areas (including the open pit and waste rock dump) where required; • The ROM pad is raised above the surrounding natural surface to prevent surface water flows from coming into contact with the ROM pad surface; • The ROM pad has settlement ponds for water that precipitates directly into the ROM pad area; • Potentially contaminated runoff from the contractor area (which includes refuelling and workshop areas) is stored within a low permeability sump then treated through an oily water separator; <p>Groundwater is approximately 8 m below ground level so contamination is not expected to infiltrate, particularly with the high evaporation rates in the Pilbara region.</p> <p>The Delegated Officer considers that impacts from stormwater containing contaminants will be slight as based on the large mine site area all emissions would be expected to stay onsite (so offsite impacts are not expected).</p> <p>The likelihood of the occurrence is considered unlikely given the Licensee's controls.</p> <p>The Delegated Officer considers the risk rating for stormwater containing contaminants is therefore low.</p> <p>Previous redundant conditions 2 and 3 have</p>

Risk Events					Continue to detailed Risk Assessment	Reasoning
Sources/Activities	Potential Emissions	Potential Receptors	Potential Pathway	Potential Adverse Impacts		
						<i>been removed from the licence.</i>
<i>Dust suppression water sourced from the oily water separator (located at the washbay) and discharged into the turkeys nest</i>	<i>Contaminated water</i>	<i>Ecosystems in the vicinity of the mine site</i>	<i>Direct discharge</i>	<i>Soil contamination inhibiting vegetation growth and survival and health impacts to fauna</i>	No	<p><i>The Delegated Officer considers that dust suppression water containing elevated levels of total recoverable hydrocarbons are not expected given the following management measures implemented by the Licensee:</i></p> <ul style="list-style-type: none"> <i>• Potentially contaminated water is treated via the oily water separator; and</i> <i>• Water quality testing of the turkeys nest storing the dust suppression water is conducted for total recoverable hydrocarbons.</i> <p><i>Water testing conducted during the 2015 reporting period and provided in the Annual Environmental Report show results well under the limit that is set on the licence of 15 mg/L (reported 0.2 mg/L). No testing was conducted during the 2016 reporting period as the wash bay was decommissioned.</i></p> <p><i>Groundwater is approximately 8 m below ground level so contamination is not expected to infiltrate, particularly with the high evaporation rates in the Pilbara region.</i></p> <p><i>The Delegated Officer considers that impacts from the dust suppression water will be slight as the dust suppression water will only be used onsite (so offsite impacts are not expected). Impacts are expected to be minimal.</i></p> <p><i>The likelihood of occurrence is considered unlikely as this will not occur in most circumstances.</i></p> <p><i>The Delegated Officer considers the risk rating for dust suppression water to therefore be low.</i></p> <p><i>Previous redundant condition 4 has been</i></p>

Risk Events					Continue to detailed Risk Assessment	Reasoning
Sources/Activities	Potential Emissions	Potential Receptors	Potential Pathway	Potential Adverse Impacts		
						removed from the licence.
Bulk storage of chemicals	<i>Bulk fuel storage</i>	<i>Breach of containment causing hydrocarbon discharge to land</i>	<i>Ecosystems adjacent to storage area</i>	<i>Direct discharge</i>	<i>Soil contamination inhibiting vegetation growth and survival and health impacts to fauna</i>	<p>No</p> <p><i>The Delegated Officer considers that the discharge of hydrocarbons to land is not expected given the following management measures implemented by the Licensee:</i></p> <ul style="list-style-type: none"> <i>• Only one 110,000 diesel tank is present on site for the refuelling of road trains at the McAleese park-up bay;</i> <i>• Smaller quantities of hydrocarbons are stored in intermediate bulk containers within bunded areas;</i> <i>• A Hydrocarbon Management Procedure is in place; and</i> <i>• Any spills are captured in the incident reporting system with appropriate clean-up taken.</i> <p><i>During the previous reporting report it was reported in the Annual Environmental Report that there were two minor hydrocarbons spills of 10L and 15L.</i></p> <p><i>Groundwater is approximately 8 m below ground level so contamination is not expected to infiltrate, particularly with the high evaporation rates in the Pilbara region.</i></p> <p><i>The Delegated Officer considers that impacts from the discharge of hydrocarbons to land will be slight. There are low volumes of hydrocarbons stored and all hydrocarbons are located onsite (so offsite impacts are not expected) and impacts would be expected to be minimal.</i></p> <p><i>The Delegated Officer considers that the risk event will probably not occur in most</i></p>

Risk Events					Continue to detailed Risk Assessment	Reasoning
Sources/Activities		Potential Emissions	Potential Receptors	Potential Pathway		
						<p>circumstances, hence is an unlikely occurrence.</p> <p>The Delegated Officer considers the risk rating for discharge of hydrocarbons is therefore low.</p> <p>Previous redundant conditions 5, 6 and 7 have been removed from the licence.</p>

Decision

The Delegated Officer has determined that the key emissions associated with the replacement of the WWTP with a new WWTP to be discharges to land. The Delegated Officer considers that the risks associated with these emissions are low due to the quality of the treated effluent and the Licensee's controls in place.

No additional conditions are required on the licence.

Administrative Changes require the removal of conditions that do not meet the requirements for conditions in DER's *Guidance Statement: Setting Conditions, October 2015*. During this amendment redundant conditions were removed following a risk assessment (<https://www.der.wa.gov.au/our-work/licences-and-works-approvals/307-administrative-changes-implemented-within-the-department-of-environment-regulation-der>).

Definitions and reporting conditions have been updated in line with recent administrative changes implemented within DER.

Amendment History

Instrument	Issued	Amendment
L8678/2012/1	06/06/2013	Licence amended to include category 85 sewage facility
L8678/2012/1	23/05/2017	Replacement of WWTP and irrigation area expansion, installation of RO plant.

Amendments

1. Premises Production and Design Capacity on page 1 of the licence for Category 85 has been amended from 35 m³/day to 47.5 m³/day as per bold underline below:

CATEGORY NUMBER	CATEGORY DESCRIPTION	CATEGORY PRODUCTION OR DESIGN CAPACITY	PREMISES PRODUCTION OR DESIGN CAPACITY
5	Processing or beneficiation of metallic or non-metallic ore	50,000 tonnes or more per year	2.4 Million tonnes per annum (Mtpa)
85	Sewage facility	More than 20 but less than 100 cubic metres per day	35 <u>47.5</u> cubic metres per day

2. Definitions have been updated with the deletion of text in strikethrough below and addition of bold text shown in underline for section 1.1.2:

'Act' means the Environmental Protection Act 1986;

'Anniversary Date' means 28 February of each year;

'Annual Audit Compliance Report' means a report in a format approved by the CEO as presented by the Licensee or as specified by the CEO from time to time and published on the Department's website;

'Annual Period' means a 12 month period commencing from 1 March until 28 February in the following year (29 February during a leap year);

'AS/NZS 5667.1' means the Australian Standard AS/NZS 5667.1 Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples;

'AS/NZS 5667.10' means the Australian Standard AS/NZS 5667.10 Water Quality – Sampling – Guidance on sampling of waste waters;

~~"Australian Standard 1940-2004" means the relevant parts of Australian Standard 1940-2004: The Storage and Handling of Flammable and Combustible Liquids;-~~

~~"Australian Standard 5667" means the most recent version and relevant part of AS/NZS 5667;~~

'CEO' means Chief Executive Officer of the Department of Environment Regulation

'CEO' for the purposes of notification means:

**Chief Executive Officer
Department Div.3 Pt.V EP Act
Locked Bag 33 Cloisters Square
Perth WA 6850
info@der.wa.gov.au**

'cfu/100mL' means colony forming units per 100 millilitres;

'Department' means the department established under s.35 of the Public Sector Management Act 1994 and designated as responsible for the administration of Division 3 Part V of the Environmental Protection Act 1986.

~~"Director" means Director, Environmental Regulation Division of the Department of Environment Regulation for and on behalf of the Chief Executive Officer as delegated under Section 20 of the *Environmental Protection Act 1986*;~~

~~"Director" for the purpose of correspondence means-~~

~~Regional Leader, Pilbara Region
Department of Environment Regulation
PO Box 835 Telephone: 9182 2000
KARRATHA WA 6714 Facsimile: 9144 1118;-~~

~~"environmentally hazardous material" means material (either solid or liquid raw materials, materials in the process of manufacture, manufactured products, products used in the manufacturing process, by products and waste) which if~~

~~discharged into the environment from or within the premises may cause pollution or environmental harm.~~

'Licence' means this Licence numbered L8678/2012/1 and issued under the Act;

'Licensee' means the person or organisation named as Licensee on page 1 of the Licence;

~~"NATA" means National Association of Testing Authorities;~~

'NATA' means the National Association of Testing Authorities, Australia;

'NATA accredited' means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis;

'Premises' means the area defined in the Premises Map in Attachment 1 and listed as the Premises address on page 1 of the Licence;

'quarterly' means the 4 inclusive periods from 1 March to 31 May, 1 June to 31 August and in the following year, 1 September to 30 November and 1 December to 28 February;

~~"Standard Methods for Examination of Water and Wastewater-APHA-AWWA-WEF" means the best current practice of American water analysts developed by the American Public Health Association (APHA), the American Water Works Association (AWWA), and the Water Environment Federation (WEF).~~

'WWTP' means wastewater treatment plant.

3. Removal of previous condition 1 regarding dust control as shown below in strikethrough.
 1. ~~The licensee shall ensure that all areas on the premises from which dust may be generated are maintained so that no visible dust is discharged beyond the boundary of the premises.~~
4. Removal of previous conditions 2, 3 and 4 regarding stormwater management and a limit for total recoverable hydrocarbon concentration in dust suppression wastewater, as shown in strikethrough below.
 2. ~~The licensee shall ensure that the premises are drained such that, except for severe rainfall events, all surface water run-off is retained on the premises.~~
 3. ~~The licensee shall ensure stormwater drains on the premises are kept clear of waste to allow for their effective use.~~
 4. ~~The licensee shall ensure that the quality of any wastewater discharged at the premises for use in dust suppression contains a total recoverable hydrocarbon concentration of less than 15mg/L.~~
5. Removal of previous conditions 5, 6 and 7 regarding the storage and management of environmentally hazardous materials, as shown in strikethrough below.

~~5. The licensee shall store environmentally hazardous chemicals including fuel, oil or other hydrocarbons (where the cumulative volume of each substance stored in separate areas on the premises exceeds 250 litres) within low permeability (10^{-9} metres per second or less) compound(s) designed to contain not less than 110% of the volume of the largest storage vessel or inter-connected system, and at least 25% of the total volume of substances stored in the compound.~~

~~6. The licensee shall ensure that the compound(s) described in condition 5 shall:~~

~~(a) be graded or include a sump to allow recovery of liquid;~~

~~(b) be chemically resistant to the substances stored;~~

~~(c) include valves, pumps and meters associated with transfer operations wherever practical. Otherwise the equipment shall be adequately protected (eg. bollards) and contained in an area designed to permit recovery of chemicals released following accidents or vandalism;~~

~~(d) be designed such that jetting from any storage vessel or fitting will be captured within the bunded area [see for example Australian Standard 1940-2004 Section 5.9.3 (g)];~~

~~(e) be designed such that chemicals which may react dangerously if they come into contact, are in separate bunds in the same compound or in different compounds; and~~

~~(f) be controlled such that the capacity of the bund is maintained (eg. regular inspection and pumping of trapped uncontaminated rainwater).~~

~~7. The licensee shall immediately recover, or remove and dispose of, any liquid resulting from spills or leaks of chemicals including fuel, oil or other hydrocarbons, whether inside or outside the low permeability compound(s).~~

6. Removal of previous conditions 9 and 10 regarding WWTP effluent discharged to land and maintaining a device for measuring monthly cumulative volumes of effluent.

~~9. The licensee shall ensure that all effluent discharged to land consists only of treated wastewater.~~

~~10. The licensee shall maintain devices for measuring monthly cumulative volumes for all effluent that is discharged for the purpose of irrigation.~~

7. Inclusion of cumulative volume of effluent discharged into Table 14 of previous condition 12 (now condition 1, Table 1 of the licence) as shown in bold underline below:

1. The Licensee shall ensure that water quality monitoring occurs during the operation of the WWTP and **Reverse Osmosis Plant**, such that water quality of the effluent **and brine from the Reverse Osmosis Plant** is monitored at the frequency stated in Column 2 of Table 1 for the parameters in Column 1 of Table 1.

Table 1: WWTPs and Reverse Osmosis Plant Reverse water quality monitoring requirements

Column 1	Column 2
Parameters	Monitoring Frequency
<u>Cumulative volume (m³/day)</u>	<u>Continuous</u>
pH	Quarterly

Biochemical Oxygen Demand (mg/L)	Quarterly
Total Suspended Solids (mg/L)	Quarterly
<u>Electrical Conductivity (µS/cm)</u>	<u>Quarterly</u>
<u>Total Dissolved Solids (mg/L)</u>	<u>Quarterly</u>
Total Nitrogen (mg/L)	Quarterly
Total Phosphorus (mg/L)	Quarterly
E.coli (cfu/100 mL)	Quarterly

8. Replacement of previous condition 13 (now condition 2 of the licence) as shown in strikethrough and bold underline below:

~~13. The licensee shall collect all water samples required by Condition 12 in accordance with the relevant parts of AS/NZS 5667 and the analyses shall be conducted by an organisation with NATA accreditation for the specified parameters in accordance with the current "Standard Methods for Examination of Water and Wastewater-APHA-AWWA-WEF".~~

2. The Licensee shall ensure that:

- (a) **all water samples are collected and preserved in accordance with AS/NZS 5667.1, unless indicated otherwise in the relevant table;**
- (b) **all wastewater sampling is conducted in accordance with AS/NZS 5667.10; and**
- (c) **all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.**

9. Inclusion of the following condition (now condition 3 of the licence) as shown in bold underline below:

3. The Licensee shall ensure that quarterly monitoring is undertaken at least 45 days apart.

10. Removal of previous condition 14 that compared the effluent quality of the WWTP to targets as shown in strikethrough below. The risk assessment is provided in Table 4.

~~14. The licensee shall compare the results of the water quality monitoring required by Condition 12, to the targets stated in Column 2 of Table 2, for the parameters in Column 1 of Table 2 and present this information in the Annual Environmental Report and report any exceedences of these targets in the Annual Audit Compliance Report.~~

Table 2: WWTPs effluent quality criteria

Column 1	Column 2
Parameter	Target Discharge
Biochemical Oxygen Demand (mg/L)	<20
Total Suspended Solids (mg/L)	<5
pH (pH value)	6.5-8.5
Total Nitrogen (mg/L)	<20
Total Phosphorus (mg/L)	<8
E.coli (cfu/100 mL)	<10

11. Replacement of previous condition 15 (now condition 4 of the licence) Annual Audit

Compliance Report as shown in strikethrough and bold underline below:

~~15. The licensee shall by 30 April in each year, provide to the Director an Annual Audit Compliance Report in the form in Attachment 2 to this licence, signed and certified in the manner required by Section C of the form, indicating the extent to which the licensee has complied with the conditions of this licence, and any previous licence issued under Part V of the Act for the premises, during the period beginning 1 March the previous year and ending on 28 February in that year.~~

4. The Licensee must submit to the CEO within 90 days after the Anniversary Date, an Annual Audit Compliance Report indicating the extent to which the Licensee has complied with the Conditions in this Licence for the Annual Period.

12. Replacement of previous condition 16 (now condition 5 and 6 of the licence) Annual Environmental Report as shown in strikethrough and bold underline below:

~~14. The licensee shall submit to the Director, by 30 April, an Annual Environmental Report containing data collected over the period beginning 1 March the previous year and ending 28 February in that year. The report shall contain but not be limited to:~~

- ~~(i) a summary of any complaints received about emissions from the Premises including the date, time, the complaints address (street name and suburb only), a description of the complaint, the likely cause and findings of any investigations;~~
- ~~(ii) a summary of any issues raised by the Department of Environment Regulation (e.g. arising from inspections) during the reporting period, details on how these have been addressed or rectified or, if the required work has yet to be completed, how and when they will be rectified or completed; and~~
- ~~(iii) number of spills or discharges of environmental hazardous materials which occurred otherwise than in accordance with the conditions of this licence and the actions taken to address these spills or discharges and future preventative measures.~~

5. The Licensee shall submit to the CEO an Annual Environmental Report within 90 calendar days after the end of the Anniversary Date. The report shall contain the information listed in Table 2 in the format or form specified in that table.

Table 2: Annual Environmental Report		
<u>Condition or table (if relevant)</u>	<u>Parameter</u>	<u>Format or form¹</u>
<u>:</u>	<u>Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken</u>	<u>None specified</u>
<u>Table 1</u>	<u>Biochemical Oxygen Demand, Total Suspended Solids, Electrical Conductivity, Total Dissolved Solids, pH, Total Nitrogen, Total Phosphorus, E.coli</u>	<u>None specified</u>

6. The Licensee shall ensure that the Annual Environmental Report also contains an assessment of the information contained within the report against previous monitoring results, Licence limits and any impacts detected as a result of activities on the Premises.

13. Inclusion of condition 7 shown in bold underline text below:

- 7. The Licensee shall construct the WWTP and Reverse Osmosis Plant in accordance with the requirements specified in the infrastructure requirements detailed in Table 3. The Licensee must not depart from the design and construction requirements specified in Table 3 except:**
- (a) where such departure is minor in nature and does not materially change or affect the infrastructure; or**
 - (b) where such departure improves the functionality of the infrastructure and does not increase risks to public health, public amenity or the environment;**
 - (c) and all other conditions in this Licence are still satisfied.**

<u>Table 3: Infrastructure requirements</u>	
<u>Infrastructure</u>	<u>Requirements (Design and construction)</u>
<u>WWTP and RO Plant</u>	<ul style="list-style-type: none"> - <u>WWTP placed within an earthen bund to capture overflow;</u> - <u>Audible and visual alarms fitted;</u> - <u>Contingency tanks in place to allow two days additional storage; and</u> - <u>Final storage tank to allow for mixing of brine and effluent prior to discharge.</u>

Note 1: Where the details and commitments of the documents listed in condition 7 are inconsistent with any other condition of this Licence, the conditions of this Licence shall prevail.

14. Inclusion of condition 8 shown in bold underline below:

- 8. The Licensee shall submit a compliance document to the CEO, following the construction of the WWTP and Reverse Osmosis Plant. The compliance document/s shall:**
- (a) be certified by a suitably qualified engineer and certify that the works were constructed in accordance with the construction requirements specified in Table 3;**
 - (b) provide a list of departures from the specified works certified by a suitably qualified engineer; and**
 - (c) be signed by a person authorised to represent the Licensee and contain the printed name and position of that person within the company.**