Licence - 4460



MT OWEN PTY LIMITED ABN 83 003 827 361 ACN 003 827 361 PO BOX 320 SINGLETON NSW 2330

Attention: Ned Stephenson

Notice	Number	1566187
NOLICC	Number	1300107

File Number EF13/4405

Date 19-Sep-2019

NOTICE OF VARIATION OF LICENCE NO. 4460

The Proper Officer

BACKGROUND

- A. MT OWEN PTY LIMITED ("the Licensee") is the holder of Environment Protection Licence No. 4460 ("the Licence") issued under the *Protection of the Environment Operations Act 1997* ("POEO Act"). The licence authorises the carrying out of activities at HEBDEN ROAD, RAVENSWORTH, NSW, 2330 ("the Premises").
- B. On 6 June 2017 the Environment Protection Authority ("EPA") received an application for the variation of the Licence to consolidate Mt Owen and Ravensworth East Mines through variation of the Licence to expand the premises to include Ravensworth East Mine, and through surrender of Environment Protection Licence 10860.
- C. The Licensee requested that the EPA suspend processing of the application on 2 August 2017 to provide additional information.
- D. The Licensee provided updated plans and shape files and requested re-commencement of the variation on 23 April 2018.
- E. The EPA has reviewed the Licensee's application and varied the Licence to consolidate Ravensworth East Mine and Mt Owen Mine by adding blast monitoring locations, weather monitoring requirements, ambient water quality monitoring requirements, updating the premises plan and added the scheduled activities of crushing, grinding and separating and land based extraction, as requested.
- F. In addition to the Licensees application, the EPA has also reviewed the Licence and added standard conditions that are being applied across all coal mining licences. This is consistent with s45 of the POEO Act. These include bunding, sewage treatment system monitoring, maintenance and reporting, emergency response management and dust conditions.
- G. The EPA is also reviewing transfer and receival of wastes within quarries and mining premises and has added a condition limiting waste to be received on the premises and a waste table detailing the waste



that is lawfully able to be brought onto the premises. This is consistent with the Protection of the Environment Operations (Waste) Regulation 2014.

- H. The EPA has added a completed Pollution Reduction Program ("PRP") table to the licence and advise you that this information is already available on the EPA's Public Register.
- I. The EPA has added requirements for blast and noise exceedance notification and an annual noise and blast monitoring report to be provided with the Annual Return.
- J. The EPA has also added a requirement for a water quality monitoring report to be provided with the annual return which includes historical analysis to enable potential impacts of mine operation on surface waters to be identified and managed.
- K. The Licensee has provided the EPA with the report required by condition U1.1 Coal Mine Wind Erosion of Exposed Land Assessment. The report found that the area exposed to wind erosion was similar to the area predicted in the Licensee's Environmental Assessment. Consequently no further action was needed. This notice removes condition U1.1 from the licence as completed.
- L. The EPA has also removed condition E1 for the Hunter Valley Dust Risk Forecasting Trial Spring 2017 as the information has been provided to the EPA to complete the requirements of this condition.
- M. The EPA received updated plans, spatial files and noise monitoring groups and noise monitoring point information on 21 March 2019 and 5 July 2019 and has updated the Licence with limits that reflect consent SSD 5850 Mod 1 2017 and noise monitoring locations consistent with the Licensees acoustic report that justifies the location of noise monitoring for compliance purposes for the noise monitoring groups.
- N. The EPA received waste information from the Licensee on 21 March 2019 and has added the waste lawfully able to be received on the premises.
- O. The EPA has not added waste tyres as these cannot be brought onto the premises lawfully. The EPA has not included coarse reject for co-disposal as the Licensee does not have a specific resource recovery exemption for this which is explained in more detail in the cover letter with the revised draft Licence.
- P. The EPA has added a discharge point for mine water which is transferred to Ravensworth and Liddell Coal Mines under the Greater Ravensworth Area Water Sharing Scheme to ensure that mine water can be transferred lawfully between sites for re-use.
- Q. The Licensee provided submissions on the draft Licence and the EPA has updated the Licence to reflect the submission accordingly.
- R. This Licence Variation incorporates the former Ravensworth East Coal Mine, Environment Protection Licence 10860 which has been surrendered.
- S. Varying this Licence will not authorise a significant increase in environmental impact of the activity authorised or controlled by the licence.

VARIATION OF LICENCE NO. 4460

- 1. By this notice the EPA varies Licence No. 4460. The attached Licence document contains all variations that are made to the Licence by this notice.
- 2. The following variations have been made to the Licence:



Administrative Conditions

- A1.1 added crushing, grinding or separating and extractive activities as scheduled activities
- A1.2 added activity scale note
- A2.1 updated premises description with revised plan
- A3.1 added sewage treatment systems as an ancillary activity

Discharge Conditions

- P.1.1 updated reference to revised plan
- P1.3 added two sewage effluent discharge and monitoring points, nine ambient water quality monitoring points and two GRAWSS discharge points for mine water transfer.
- P1.4 updated reference to revised plan and added five new blast monitoring points, two meteorological monitoring points, four noise monitoring points and two supplementary noise monitoring points
- P1.5 P1.7 added condition about plan reference and datum

Limit Conditions

- L2.1 added waste limit table
- L3.1 updated noise limit table with noise monitoring points and sensitive receiver limits
- L3.2 L3.4 revised noise conditions

Operating Conditions

- O2.2 O2.6 added sewage treatment system maintenance conditions
- O3.2 O3.3 added trafficable dust condition and standard operating dust condition
- O4 added effluent application to land conditions
- O5 added emergency response condition
- O6 added bunding condition

Monitoring Conditions

- M2.3 added monitoring requirements for sewage treatment systems and ambient water quality monitoring
- M4.1 added weather monitoring requirements
- M9 added noise monitoring requirements

Reporting Conditions

- R4.1 added blast exceedance notification
- R4.2 added noise exceedance notification
- R5.1 added requirement for blast monitoring report
- R5.2 added requirement for noise monitoring report
- R5.3 added requirement for water quality monitoring report

- **EPA**
- R5.4 R5.5 added sewage treatment systems maintenance reporting

General Conditions

• G2.1 - added completed PRP table

Pollution Studies and Reduction Programs

• U1 - removed Coal Mine Wind Erosion of Exposed Land Assessment PRP as complete

Special Conditions

• E1 - removed Hunter Valley Dust Risk Forecasting Trial as complete

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Natasha Ryan Regional Operations Officer North - Hunter (by Delegation)

INFORMATION ABOUT THIS NOTICE

- This notice is issued under section 58(5) of the Act.
- Details provided in this notice, along with an updated version of the licence, will be available on the EPA's Public Register (<u>http://www.epa.nsw.gov.au/prpoeo/index.htm</u>) in accordance with section 308 of the Act.

Appeals against this decision

• You can appeal to the Land and Environment Court against this decision. The deadline for lodging the appeal is 21 days after you were given notice of this decision.

When this notice begins to operate

- The variations to the licence specified in this notice begin to operate immediately from the date of this notice, unless another date is specified in this notice.
- If an appeal is made against this decision to vary the licence and the Land and Environment Court directs that the decision is stayed the decision does not operate until the stay ceases to have effect or the Land and Environment Court confirms the decision or the appeal is withdrawn (whichever occurs first).



Licence - 4460

E P A

This Summary serves merely to highlight changes made to areas of this licence. Changes made to tables within the licence are indicated using underline (for additions) and Strikethrough (for deletions). While changes to conditions are indicated under subheadings such as 'New condition', 'Old condition', 'Replaced by', and ' Removed condition.

The attached licence document contains all the changes made to this licence by the attached variation notice.

1 Administrative Conditions

What the licence authorises and regulates

Scheduled Activity	Fee Based Activity	Scale
Crushing, grinding or separating	Crushing, grinding or separating	> 100000 - 500000 T annual processing capacity
Extractive activities	Extractive activities	> 100000 - 500000 T annual capacity to extract or process

New condition:

In relation to this licence, the licensee must comply with:

a) the activity scale limits imposed by this licence;

b) the activity scale limits which apply for the reporting period specified in this licence; and

c) the activity scale limits imposed by other legal instruments, such as approvals currently in force under the *Environmental Planning and Assessment Act 1979*.

2 Discharges to Air and Water and Applications to Land

Location of monitoring/discharge points and areas

Point no	Type description	Location description
-8	Particulate Matter Monitoring	TEOM "Mt Owen Upstream" at coordinates 318861-6416825- (Easting Northing) as shown on plan titled "Mt Owen Complex- Dust Monitoring Locations" dated 02/12/2016 DOC16/616669.
<u>8</u>	Particulate Matter Monitoring	TEOM "SX13 D8" identified as 8 at coordinates 318877, 6416848 (Easting Northing) on Figure 1
Point no	Type description	Location description
Point no	Type description Particulate Matter Monitoring	Location description TEOM "Mt Owen Downstream" at coordinates 324736- 6411628 (Easting Northing) as shown on plan titled "Mt Owen- Complex Dust Monitoring Locations" dated 02/12/2016 DOC16/616669.

Licence - 4460



Point no	Type description	Location description
-10	Particulate Matter Monitoring	TEOM "Ravensworth East Downstream" at coordinates 323926 6407964 (Easting Northing) as shown on plan titled "Mt Owen Complex Dust Monitoring Locations" dated- 02/12/2016. DOC16/616669.
<u> 10 </u>	Particulate Matter Monitoring	TEOM "SX13 D9" identified as 10 at coordinates 323944, 6407999 (Easting Northing) on Figure 1

Point no	Type description	Location description
<u>_18</u>	Effluent quality monitoring Discharge to utilisation area	STP discharge at coordinates 320358, 6414174 (Easting, Northing) identified as 18 on Figure 1
Point no	Type description	Location description
<u>_19</u>	Effluent quality monitoring	STP discharge at coordinates 318081, 6413860 (Easting, Northing) identified as 19 on Figure 1
Point no	Type description	Location description
20	Ambient water quality monitoring	Monitoring location BMC 1 at coordinates 316960, 6415938 (Easting, Northing) identified as 20 on Figure 1
Point no	Type description	Location description
<u>21</u>	Ambient water quality monitoring	Monitoring location BMC 2 at coordinates 316641, 6415622 (Easting, Northing) identified as 21 on Figure 1
Point no	Type description	Location description
<u>22</u>	Ambient water quality monitoring	Monitoring location BMC 3 at coordinates 316340, 6414467 (Easting, Northing) identified as 22 on Figure 1
Point no	Type description	Location description
23	Ambient water quality monitoring	Monitoring location YC 1 at coordinates 319356, 6415138 (Easting, Northing) identified as 23 on Figure 1
Point no	Type description	Location description
<u>24</u>	Ambient water quality monitoring	Monitoring location YC2 at coordinates 318678, 6414514 (Easting, Northing) identified as 24 on Figure 1
Point no	Type description	Location description
<u>25</u>	Ambient water quality monitoring	Monitoring location YC 3 at coordinates 317387, 6411430 (Easting, Northing) identified as 25 on Figure 1
Point no	Type description	Location description
<u>_26</u>	Ambient water quality monitoring	Monitoring location SC 1 at coordinates 322554, 6415745 (Easting, Northing) identified as 26 on Figure 1
Point no	Type description	Location description
<u>27</u>	Ambient water quality monitoring	Monitoring location SC2 at coordinates 320558, 6416049 (Easting, Northing) identified as 27 on Figure 1
Point no	Type description	Location description
<u>_28</u>	Ambient water quality monitoring	Monitoring location SC 3 at coordinates 319470, 6410400 (Easting, Northing) identified as 28 on Figure 1
Point no	Type description	Location description

Licence - 4460



<u>_29</u>	Discharge to pipe Water Quality Monitoring	Discharge of mine water to Liddell Mine via GRAWSS pipe at Co-ordinates 316423, 6415400 (Easting, Northing) identified as Liddell discharge on Figure 2.
Point no	Type description	Location description

New condition:

For the purposes of Condition P1.1, P1.3 and P1.4 Figure 1 refers to the plan titled "Mt Owen Complex Mt Owen Mine Monitoring Locations" dated 20/3/2019 EPA Reference DOC18/688098-2.

New condition:

For the purposes of Condition P1.3 and P1.4 Figure 2 refers to the plan titled "Mt Owen Complex Mt Owen Mine NMG and NML Locations" dated 5/7/2019 EPA Reference DOC18/688098-10.

New condition:

The datum for grid references in this Licence is the Geodetic Datum of Australia 1994 (GDA94), Zone 56.

3 Limit Conditions

Waste

Code	Waste	Description	Activity	Other Limits
<u>NA</u>	Coal washery rejects	For emplacement in coal mining voids as part of the GRAWTS, as approved in Development Consent (s).	As specified in each particular resource recovery exemption	The Licensee must comply with The Coal Washery Rejects Exemption 2014 and The Coal Washery Rejects (coal mine void) Exemption 2014

New condition:

The Licensee is authorised to receive mine water under the Greater Ravensworth Area Water Sharing Scheme from Liddell Coal Mine, Glendell Coal Mine, Ravensworth Coal Mine and Integra Underground Coal Mine for storage and use in activities authorised by the Licence.

Noise limits

Old condition:

Noise generated at the premises must not exceed the noise limits presented in the table below.

Licence - 4460



*Property reference numbers used in this table correspond to those used in the *Mount Owen Operations Environmental Impact Statement* prepared by Umwelt dated December 2003.

Replaced by:

Noise generated at the premises must not exceed the noise limits presented in the table below.

Residences referenced in this table are from the consent SSD 5850 Mod 1 2017 and summarised in EPA Reference DOC18/688098-10

Old table:

Location	Day LAcq(15 minute)	Evening LAcq(15- minute)	Night LAcq(15- minuto)	Night LA1(1 minute)
29 - SP Nagle/ PL	37	37	37	45
Partridge				
55 GG Bodiam				
40 - GL Holmes	36	36	36	4 5
53 RC Cullian/ BA				
Cullian				
54 JT Reid/ HJ				
Reid				
90 - BG Wilson/ DJ				
Wilson				
93 - BW Scott/ YE				
Scott				
All other privately- owned residences-	35	35	35	4 5
except those listed				
in Table 1 of the				
"Acquisition Upon-				
Request" section of				
Development-				
Consent-				
DA-14-1-2004 (apart-				
from 91 Lancaster)				

Replaced by:

Location	<u>Day LAeq(15</u> <u>minute)</u>	<u>Evening LAeq(15</u> <u>minute)</u>	<u>Night LAeq(15</u> <u>minute)</u>	Night LA1(1 minute)
EPA Point 31 & 39	<u>35</u>	<u>35</u>	<u>35</u>	<u>45</u>
EPA Point 33	<u>45</u>	<u>45</u>	<u>42</u>	<u>45</u>
EPA Point 34	<u>42</u>	<u>42</u>	<u>42</u>	<u>50</u>
EPA Point 37	<u>39</u>	<u>39</u>	<u>35</u>	<u>45</u>
EPA Point 44	<u>37</u>	<u>37</u>	<u>37</u>	<u>45</u>
Residence 41,48	<u>36</u>	<u>35</u>	<u>35</u>	<u>45</u>
Residence 91	<u>37</u>	<u>37</u>	<u>36</u>	<u>45</u>
Residence 14, 92	<u>37</u>	<u>37</u>	<u>37</u>	<u>45</u>
Residence 10, 11	<u>37</u>	<u>37</u>	<u>37</u>	<u>46</u>
Residence 13	<u>38</u>	<u>38</u>	<u>38</u>	<u>45</u>
<u>Residence 12, 94, </u> <u>95, 112</u>	<u>38</u>	<u>38</u>	<u>38</u>	<u>46</u>
Residence 111	<u>39</u>	<u>39</u>	<u>36</u>	<u>45</u>

Licence - 4460



Residence 19	<u>39</u>	<u>39</u>	<u>39</u>	<u>45</u>
Residence 93	<u>40</u>	<u>40</u>	<u>40</u>	<u>46</u>
<u>Other</u> privately-owned residences	<u>35</u>	<u>35</u>	<u>35</u>	<u>45</u>

Old condition:

For the purposes of Condition L4.1:

a) Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays,

b) Evening is defined as the period from 6pm to 10pm, and

c) Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays

Replaced by:

For the purposes of Condition L3.1:

a) Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays,

b) Evening is defined as the period from 6pm to 10pm, and

c) Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays

Removed condition:

Noise from the premises is to be measures at the most affected point or within the residential boundary or at the most affected point within 30m of the dwelling (rural situations) where the dwelling is more than 30m from the boundary to determine compliance with the LAeq(15 minute) noise limits in condition L4.1.

Where it can be demonstrated that direct measurement of noise from the premises is impractical, the EPA may accept alternative means of determining compliance. See Chapter 11 of the NSW Industrial Noise Policy.

The modification factors presented in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.

Removed condition:

To determine compliance with condition(s) L4.1 noise must be measured at, or computed for, 1 metre from the dwelling facade. A modifying factor correction must be applied for tonal, impulsive or intermittent noise in accordance with the "Environmental Noise Management - NSW Industrial Noise Policy (January 2000)".

Removed condition:

The noise emission limits identified in this licence apply under all meteorological conditions except: a) during rain and wind speeds (at 10m height) greater than 3m/s; and b) under "non cignificant weather conditions".

b) under "non-significant weather conditions".

Licence - 4460



Removed condition:

Field meteorological indicators for non-significant weather conditions are described in the NSW Industrial Noise Policy, Chapter 5 and Appendix E in relation to wind and temperature inversions.

New condition:

The noise limits set out in condition L3.1 apply under all meteorological conditions except for the following:

a) Wind speeds greater than 3 metres/second at 10 metres above the ground level;

b) Stability category F temperature inversion conditions and wind speeds greater than 2 metres/second at 10 metres above ground level; or

c) Stability category G temperature inversion conditions.

New condition:

For the purposes of condition L3.3:

a) Data recorded by the closest and most representative meteorological station installed on the premises at EPA Identification Point 16 or 17 must be used to determine meteorological conditions; and

b) Temperature inversion conditions (stability category) are to be determined by the methods referred to in Fact Sheet D of the Noise Policy for Industry (2017).

Blasting

Old condition:

The airblast overpressure level from blasting operations in or on the premises must not exceed: 115 dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period; at either monitoring point 6 or 7 in Condition P1.3.

Replaced by:

The airblast overpressure level from blasting operations in or on the premises must not exceed: 115 dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period; at either monitoring point 6, 7, 11, 12 or 13 in Condition P1.4.

Old condition:

The airblast overpressure level from blasting operations in or on the premises must not exceed: 120 dB (Lin Peak) at any time;

at either monitoring point 6 or 7 in Condition P1.3.

Replaced by:

The airblast overpressure level from blasting operations in or on the premises must not exceed: 120 dB (Lin Peak) at any time;

at either monitoring point 6, 7, 11, 12 or 13 in Condition P1.4.

Old condition:

The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed:

5 mm/second for more than 5% of the total number of blasts during each reporting period;

Licence - 4460



at either monitoring point 6 or 7 in Condition P1.3.

Replaced by:

The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed:

5 mm/second for more than 5% of the total number of blasts during each reporting period; at either monitoring point 6, 7, 11, 12 or 13 in Condition P1.4.

Old condition:

The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed:

10 mm/second at any time;

at either monitoring point 6 or 7 in Condition P1.3.

Replaced by:

The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed:

10 mm/second at any time;

at either monitoring point 6, 7, 11, 12 or 13 in Condition P1.4.

4 Operating Conditions

Maintenance of plant and equipment

New condition:

Sewage Treatment System

New condition:

The licensee is responsible for the correct operation of the sewage treatment system on the premises.

New condition:

Correct operation involves regular supervision and system maintenance. The licensee must be aware of the system management requirements and must ensure that the necessary service contracts are in place.

New condition:

The sewage treatment system must be serviced by a suitably qualified and experienced wastewater technician at least once in each quarterly period and a minimum of four times per year.

New condition:

The licensee must record each inspection and any actions required or recommended by the technician including all results of tests performed on the sewage treatment system by the technician as required in Condition O2.4.

Licence - 4460



New condition:

The licensee must prepare a sewage treatment system maintenance program. The program must include:

a) Certification from the system provider that the sewage treatment system is operating within its capacity;

b) Date, time and results of all routine maintenance procedures undertaken to the sewage treatment system; and

c) Provide written records of each quarterly inspection.

Dust

New condition:

All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.

New condition:

All trafficable areas, coal storage areas and vehicle manoeuvring areas in or on the premises must be maintained, at all times, in a condition that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.

Effluent application to land

New condition:

The licensee must ensure that the effluent discharge utilisation area perimeter is fenced and signposted and controlled in a manner to ensure exclusion of persons from that area.

New condition:

The licensee must ensure that sprays or mists from irrigation do not drift beyond the boundary of the effluent discharge utilisation area and that no ponding occurs.

New condition:

Application of wastewaters must only be applied at a rate that can be assimilated by the effluent discharge utilisation area and its evapotranspiration capacity.

Emergency response

New condition:

The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises. The licensee must keep the incident response plan on the premises at all times. The incident response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. The licensee must develop a Pollution Incident Response Management Plan in accordance with the requirements in Part 5.7A of the Protection of the Environment Operations (POEO) Act 1997 and POEO regulations.



Other operating conditions

New condition:

All above-ground tanks containing material that is likely to cause environmental harm must be bunded or have an alternative spill containment system in place.

5 Monitoring and Recording Conditions

Requirement to monitor concentration of pollutants discharged

POINT 18,19			
Pollutant Name	Unit of Measure	Frequency	Sampling Method
Faecal Coliforms	<u>colony forming units per 100</u> <u>millilitres</u>	Quarterly	Grab sample
<u>рН</u>	<u>рН</u>	Quarterly	Grab sample
POINT 20,21,22,	,23,24,:		
Pollutant Name	Unit of Measure	Frequency	Sampling Method
Electrical conductivity	microsiemens per centimetre	Monthly	Grab sample
<u>рН</u>	<u>рН</u>	Monthly	Grab sample
TSS	milligrams per litre	Monthly	Grab sample

Blasting

Old condition:

To determine compliance with conditions L3.1, L3.2, L3.3 and L3.4:

a) Airblast overpressure and ground vibration levels must be measured and electronically recorded for monitoring points 6 and 7 for the parameters specified in Column 1 of the table below; and
b) The licensee must use the units of measure, sampling method, and sample at the frequency specified opposite in the other columns.

Replaced by:

To determine compliance with conditions L4.1, L4.2, L4.3 and L4.4:

a) Airblast overpressure and ground vibration levels must be measured and electronically recorded for monitoring points 6, 7, 11, 12 and 13 for the parameters specified in Column 1 of the table below; and b) The licensee must use the units of measure, sampling method, and sample at the frequency specified opposite in the other columns.

Old table:

Parameter	Units of Measure	Frequency	Sampling Method
Airblast Overpressure	Decibels (Linear Peak)	All Blasts	Australian Standard AS-
			2187 2 2006

Licence - 4460



Ground Vibration Peak	millimetres/second	All Blasts	Australian Standard AS-
Particle Velocity			2187.2-2006

Replaced by:

Parameter	Units of Measure	Frequency	Sampling Method
Airblast Overpressure	<u>Decibels (Linear Peak)</u>	All Blasts	Australian Standard AS 2187.2-2006
Ground Vibration Peak Particle Velocity	millimetres/second	All Blasts	Australian Standard AS 2187.2-2006

Other monitoring and recording conditions

New condition:

Requirement to Monitor Particulate Matter

Old condition:

Requirement to Monitor Particulate Matter

The Licensee must record the average PM₁₀ concentration at Monitoring Points 8, 9 and 10 at intervals of 10 minutes. This data must be made available upon request by any Authorised Officer of the EPA.

Replaced by:

The Licensee must record the average PM₁₀ concentration at Monitoring Points 8, 9 and 10 at intervals of 10 minutes. This data must be made available upon request by any Authorised Officer of the EPA.

Noise monitoring

New condition:

Special Frequency 1 refers to a requirement to undertake monitoring in accordance with Condition M9.3b).

New condition:

To assess compliance with condition L3.1, attended noise monitoring must be undertaken in accordance with Conditions L3.2 to L3.4:

a) at the EPA points 31, 33, 34 and 39 identified in P1.4; and

b) at the secondary locations EPA points 37 and 44 where a definitive judgement of compliance cannot be made at the primary locations; and

c) occur every calendar month in a reporting period; and

d) occur during one night time period as defined in the Noise Policy for Industry 2017 for a minimum of 30 minutes at each location from a), and when relevant b) during the night.

New condition:

For the purposes of compliance monitoring and determining the noise generated at the premises the modification factors in the EPA's Fact Sheet C of the Noise Policy for Industry (2017) must be applied, as appropriate, to the noise levels measured by noise monitoring equipment.

Licence - 4460



Definitions

Noise refers to 'sound pressure levels' for the purpose of conditions L3.1 to L.3.4 and condition M9.

New condition:

Where required in writing by the EPA, the Licensee must carry out attended monitoring at sensitive receivers in addition the monitoring required by Condition M9.3.

6 **Reporting Conditions**

Other notifications

New condition: Blast Exceedance Notification

New condition:

The licensee must report any exceedance of licence blasting limits to the EPA Hunter at <u>hunter.region@epa.nsw.gov.au</u> as soon as practicable after the exceedance becomes known to the licensee or to one of the licensee's employees or agents.

New condition:

Noise Exceedance Notification

New condition:

The licensee must report any exceedance of licence noise limits to the EPA Hunter at <u>hunter.region@epa.nsw.gov.au</u> as soon as practicable after the exceedance becomes know to the licensee or to one of the licensee's employees or agents

Other reporting conditions

New condition: Blast Monitoring Reporting

New condition:

The results of the blast monitoring required by the licence must be submitted to the EPA, with each Annual Return, at the end of each reporting period. The monitoring results must identify any exceedance of licence limits.

New condition:

Noise Monitoring Report

Licence - 4460



New condition:

The Licensee must provide the EPA with its Annual Return an annual noise compliance assessment report prepared by an appropriately qualified acoustic consultant. The report must include an assessment of any exceedance of noise limits and justification that the noise monitoring points identified in Condition P1.4 are still representative of the sensitive receivers within the noise monitoring groups on Figure 2.

New condition:

Water Quality Monitoring Report

New condition:

The licensee must provide the EPA with its Annual Return an annual water quality monitoring report prepared by an appropriately qualified and experienced person that includes the following:

a) for the monitoring required by the licence during the reporting period to which the Annual Return relates:

(i) a summary of results for all ambient water quality monitoring required by the licence in table form and graphical form;

(ii) total daily rainfall records from the premises meteorological monitoring required by the licence on the day that the sampling was undertaken in table form;

(iii) total daily continuous rainfall records in graphical form; and

(iv) a plan with the monitoring locations.

b) A graphical presentation of the trends of monitoring results required by the licence for the reporting period to which the Annual Return relates and the preceeding data for the period of record the licensee has monitoring results for the licensed location.

c) A graphical representation of total daily continuous rainfall records required by the licence for the record that matches the ambient water quality results, if available.

New condition:

Sewage Treatment Systems

New condition:

The sewage treatment system maintenance program required by Condition O2.6 must be submitted annually to the EPA with the Annual Return.

New condition:

The licensee must retain a copy of each report required by Condition O2.5 for 3 years from the date each record is made.

Removed condition:

Blast Exceedence Reporting

The licensee must report any exceedence of the licence blasting limits to the regional office of the EPA as soon as practicable after the exceedence becomes known to the licensee or to one of the licensee's

Environment Protection Authority - NSW

Licence - 4460



employees or agents.

7 General Conditions

Other general conditions

PRP No	PRP	Description	Completed Date
<u>7</u>	Coal Mine Wind Erosion of Exposed Land Assessment	Assessment of predicted vs actual exposed lands.	<u>05-Jun-2015</u>

Licence - 4460

Licence Details				
Licence Details	4400			
Number:	4460			
Anniversary Date:	01-July			
<u>Licensee</u>				
MT OWEN PTY LIMITED				
PO BOX 320				
SINGLETON NSW 2330				
<u>Premises</u>				
MT OWEN MINE				
HEBDEN ROAD				
RAVENSWORTH NSW 2330				
Scheduled Activity				
Coal works				
Crushing, grinding or separating				
Extractive activities				
Mining for coal	Mining for coal			

Fee Based Activity	Scale
Coal works	> 5000000 T annual handing capacity
Crushing, grinding or separating	> 100000-500000 T annual processing capacity
Extractive activities	> 100000-500000 T annual capacity to extract or process
Mining for coal	> 5000000 T annual production

capacity

Region

North - Hunter Ground Floor, NSW Govt Offices, 117 Bull Street **NEWCASTLE WEST NSW 2302** Phone: (02) 4908 6800

Fax: (02) 4908 6810

PO Box 488G

NEWCASTLE NSW 2300



Licence - 4460



INFC	DRMATION ABOUT THIS LICENCE	4
Dic	tionary	4
Re	sponsibilities of licensee	4
Var	riation of licence conditions	4
Du	ration of licence	4
Lice	ence review	4
Fee	es and annual return to be sent to the EPA	4
Tra	Insfer of licence	5
Pul	blic register and access to monitoring data	5
1	ADMINISTRATIVE CONDITIONS	6
A1	What the licence authorises and regulates	6
A2	Premises or plant to which this licence applies	6
A3	Other activities	7
A4	Information supplied to the EPA	7
2	DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND	7
P1	Location of monitoring/discharge points and areas	7
3	LIMIT CONDITIONS	10
L1	Pollution of waters	10
L2	Waste	10
L3	Noise limits	11
L4	Blasting	12
4	OPERATING CONDITIONS	13
01	Activities must be carried out in a competent manner	13
02	Maintenance of plant and equipment	13
O3	Dust	13
04	Effluent application to land	14
O5	Emergency response	14
06	Other operating conditions	14
5	MONITORING AND RECORDING CONDITIONS	14
M1	Monitoring records	14
M2	Requirement to monitor concentration of pollutants discharged	15
М3	Testing methods - concentration limits	16
M4	Weather monitoring	16
M5	Recording of pollution complaints	17

Licence - 4460

M6	Telephone complaints line	17
M7	Blasting	17
M8	Other monitoring and recording conditions	18
M9	Noise monitoring	18
6	REPORTING CONDITIONS	19
R1	Annual return documents	19
R2	Notification of environmental harm	20
R3	Written report	20
R4	Other notifications	21
R5	Other reporting conditions	21
7	GENERAL CONDITIONS	22
G1	Copy of licence kept at the premises or plant	22
G2	Other general conditions	22
DICT	IONARY	24
Gen	eral Dictionary	24



Licence - 4460



Information about this licence

Dictionary

A definition of terms used in the licence can be found in the dictionary at the end of this licence.

Responsibilities of licensee

Separate to the requirements of this licence, general obligations of licensees are set out in the Protection of the Environment Operations Act 1997 ("the Act") and the Regulations made under the Act. These include obligations to:

- ensure persons associated with you comply with this licence, as set out in section 64 of the Act;
- control the pollution of waters and the pollution of air (see for example sections 120 132 of the Act);
- report incidents causing or threatening material environmental harm to the environment, as set out in Part 5.7 of the Act.

Variation of licence conditions

The licence holder can apply to vary the conditions of this licence. An application form for this purpose is available from the EPA.

The EPA may also vary the conditions of the licence at any time by written notice without an application being made.

Where a licence has been granted in relation to development which was assessed under the Environmental Planning and Assessment Act 1979 in accordance with the procedures applying to integrated development, the EPA may not impose conditions which are inconsistent with the development consent conditions until the licence is first reviewed under Part 3.6 of the Act.

Duration of licence

This licence will remain in force until the licence is surrendered by the licence holder or until it is suspended or revoked by the EPA or the Minister. A licence may only be surrendered with the written approval of the EPA.

Licence review

The Act requires that the EPA review your licence at least every 5 years after the issue of the licence, as set out in Part 3.6 and Schedule 5 of the Act. You will receive advance notice of the licence review.

Fees and annual return to be sent to the EPA

For each licence fee period you must pay:

- an administrative fee; and
- a load-based fee (if applicable).





The EPA publication "A Guide to Licensing" contains information about how to calculate your licence fees. The licence requires that an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints), be submitted to the EPA. The Annual Return must be submitted within 60 days after the end of each reporting period. See condition R1 regarding the Annual Return reporting requirements.

Usually the licence fee period is the same as the reporting period.

Transfer of licence

The licence holder can apply to transfer the licence to another person. An application form for this purpose is available from the EPA.

Public register and access to monitoring data

Part 9.5 of the Act requires the EPA to keep a public register of details and decisions of the EPA in relation to, for example:

- licence applications;
- licence conditions and variations;
- statements of compliance;
- load based licensing information; and
- load reduction agreements.

Under s320 of the Act application can be made to the EPA for access to monitoring data which has been submitted to the EPA by licensees.

This licence is issued to:

MT OWEN PTY LIMITED

PO BOX 320

SINGLETON NSW 2330

subject to the conditions which follow.

Licence - 4460



1 Administrative Conditions

A1 What the licence authorises and regulates

A1.1 This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.

Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.

Scheduled Activity	Fee Based Activity	Scale
Coal works	Coal works	> 5000000 T annual handing capacity
Crushing, grinding or separating	Crushing, grinding or separating	> 100000 - 500000 T annual processing capacity
Extractive activities	Extractive activities	> 100000 - 500000 T annual capacity to extract or process
Mining for coal	Mining for coal	> 5000000 T annual production capacity

Note: In relation to this licence, the licensee must comply with:

a) the activity scale limits imposed by this licence;

b) the activity scale limits which apply for the reporting period specified in this licence; and

c) the activity scale limits imposed by other legal instruments, such as approvals currently in force under the *Environmental Planning and Assessment Act* 1979.

A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
MT OWEN MINE
HEBDEN ROAD
RAVENSWORTH
NSW 2330
PREMISES BOUNDARY DEFINED BY SHAPE FILES AND PLAN TITLED "MT OWEN COMPLEX PROPOSED EPL BOUNDARIES - MT OWEN MINE BOUNDARY" DATED 20/3/2019 EPA REFERENCE DOC18/688098-2

Licence - 4460



A3 Other activities

A3.1 This licence applies to all other activities carried on at the premises, including:

Ancillary Activity
Railway Systems
Sewage Treatment Systems

A4 Information supplied to the EPA

A4.1 Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.

In this condition the reference to "the licence application" includes a reference to:

a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and

b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.

2 Discharges to Air and Water and Applications to Land

P1 Location of monitoring/discharge points and areas

P1.1 The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.

		Air	
EPA identi-	Type of Monitoring	Type of Discharge	Location Description
fication no.	Point	Point	
8	Particulate Matter Monitoring		TEOM "SX13 D8" identified as 8 at coordinates 318877, 6416848 (Easting Northing) on Figure 1
9	Particulate Matter Monitoring		TEOM "SX13 D10" identified as 9 at coordinates 324739, 6411628 (Easting Northing) on Figure 1
10	Particulate Matter Monitoring		TEOM "SX13 D9" identified as 10 at coordinates 323944, 6407999 (Easting Northing) on Figure 1

P1.2 The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.

Licence - 4460



P1.3 The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.

		Water and land	
EPA Identi- fication no.	Type of Monitoring Point	Type of Discharge Point	Location Description
18	Effluent quality monitoring Discharge to utilisation area	Effluent quality monitoring Discharge to utilisation area	STP discharge at coordinates 320358, 6414174 (Easting, Northing) identified as 18 on Figure 1
19	Effluent quality monitoring	Effluent quality monitoring	STP discharge at coordinates 318081, 6413860 (Easting, Northing) identified as 19 on Figure 1
20	Ambient water quality monitoring		Monitoring location BMC 1 at coordinates 316960, 6415938 (Easting, Northing) identified as 20 on Figure 1
21	Ambient water quality monitoring		Monitoring location BMC 2 at coordinates 316641, 6415622 (Easting, Northing) identified as 21 on Figure 1
22	Ambient water quality monitoring		Monitoring location BMC 3 at coordinates 316340, 6414467 (Easting, Northing) identified as 22 on Figure 1
23	Ambient water quality monitoring		Monitoring location YC 1 at coordinates 319356, 6415138 (Easting, Northing) identified as 23 on Figure 1
24	Ambient water quality monitoring		Monitoring location YC2 at coordinates 318678, 6414514 (Easting, Northing) identified as 24 on Figure 1
25	Ambient water quality monitoring		Monitoring location YC 3 at coordinates 317387, 6411430 (Easting, Northing) identified as 25 on Figure 1
26	Ambient water quality monitoring		Monitoring location SC 1 at coordinates 322554, 6415745 (Easting, Northing) identified as 26 on Figure 1
27	Ambient water quality monitoring		Monitoring location SC2 at coordinates 320558, 6416049 (Easting, Northing) identified as 27 on Figure 1
28	Ambient water quality monitoring		Monitoring location SC 3 at coordinates 319470, 6410400 (Easting, Northing) identified as 28 on Figure 1

Licence - 4460



29	Discharge to pipe Water Quality Monitoring	Discharge to pipe Water Quality Monitoring	Discharge of mine water to Liddell Mine via GRAWSS pipe at Co-ordinates 316423, 6415400 (Easting, Northing) identified as Liddell discharge on Figure 2.
30	Discharge to pipe Water Quality Monitoring	Discharge to pipe Water Quality Monitoring	Discharge of mine water to Glendell via GRAWSS pipe at co-ordinates 319277, 6410560 (Easting, Northing) identified as Ravensworth discharge on Figure 2.

P1.4 The following points referred to in the table below are identified in this licence for the purposes of weather and/or noise monitoring and/or setting limits for the emission of noise from the premises.

	Noise/weather	
EPA identi- fication no.	Type of monitoring point	Location description
6	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor MOC 1 at coordinates 325585, 6409026 (Easting, Northing) identified as 6 on Figure 1
7	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor MOC 2 at coordinates 332330, 6408023 (Easting, Northing) identified as 7 on Figure 1
11	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor MOC 3 at coordinates 320425, 6405768 (Easting, Northing) identified as 11 on Figure 1
12	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor MOC 5 at coordinates 326657, 6409954 (Easting, Northing) identified as 12 on Figure 1
13	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor MOC 4 identified at coordinates 326106, 6409957 (Easting, Northing) identified as 13 on Figure 1.
16	Meteorological Station – to determine meteorological conditions for noise monitoring	Weather station Sx13 M1 at coordinates 317883, 6409485(Easting, Northing) identified as 16 on Figure 1
17	Meteorological Station – to determine meteorological conditions for noise monitoring	Meteorological monitoring station SX13 M2 at co-ordinates 318081, 6413860 (Easting, Northing) identified as 17 on Figure 1
31	Noise monitoring	Monitoring at co-ordinates 326670, 6414520 (Easting, Northing) identified as N1 on Figure 2 within NMG Area 1.
33	Noise monitoring	Monitoring at co-ordinates 325118, 6409818 (Easting, Northing) identified as N3 on Figure 2 in NMG 2.
34	Noise monitoring	Monitoring at co-ordinates 323900, 6408220 (Easting, Northing) identified as N4 on Figure 2 in NMG 3.

Noise/Weather

Licence - 4460



37	Noise monitoring	Monitoring at co-ordinates 321670, 6405140 (Easting, Northing) identified as N11 on Figure 2 in NMG3 (supplementary monitoring).
39	Noise monitoring	Monitoring at co-ordinates 316265, 6419397 (Easting, Northing) identified as N17 on Figure 2 in NMG 4.
44	Noise monitoring	Monitoring at co-ordinates 326186, 6409143 (Easting, Northing) identified as N15 on Figure 2 in NMG 2 (Supplementary Monitoring).

- P1.5 For the purposes of Condition P1.1, P1.3 and P1.4 Figure 1 refers to the plan titled "Mt Owen Complex Mt Owen Mine Monitoring Locations" dated 20/3/2019 EPA Reference DOC18/688098-2.
- P1.6 For the purposes of Condition P1.3 and P1.4 Figure 2 refers to the plan titled "Mt Owen Complex Mt Owen Mine NMG and NML Locations" dated 5/7/2019 EPA Reference DOC18/688098-10.
- P1.7 The datum for grid references in this Licence is the Geodetic Datum of Australia 1994 (GDA94), Zone 56.

3 Limit Conditions

L1 Pollution of waters

L1.1 Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.

L2 Waste

L2.1 The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled "Waste" and meeting the definition, if any, in the column titled "Description" in the table below.

Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column titled "Activity" in the table below.

Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled "Other Limits" in the table below.

This condition does not limit any other conditions in this licence.

Code	Waste	Description	Activity	Other Limits
NA	Coal washery rejects	For emplacement in coal mining voids as part of the GRAWTS, as approved in Development Consent (s).	As specified in each particular resource recovery exemption	The Licensee must comply with The Coal Washery Rejects Exemption 2014 and The Coal Washery Rejects

Licence - 4460



(coal mine void) Exemption 2014

L2.2 The Licensee is authorised to receive mine water under the Greater Ravensworth Area Water Sharing Scheme from Liddell Coal Mine, Glendell Coal Mine, Ravensworth Coal Mine and Integra Underground Coal Mine for storage and use in activities authorised by the Licence.

L3 Noise limits

L3.1 Noise generated at the premises must not exceed the noise limits presented in the table below.

Residences referenced in this table are from the consent SSD 5850 Mod 1 2017 and summarised in EPA Reference DOC18/688098-10

Location	Day LAeq(15 minute)	Evening LAeq(15 minute)	Night LAeq(15 minute)	Night LA1(1 minute)
EPA Point 31 & 39	35	35	35	45
EPA Point 33	45	45	42	45
EPA Point 34	42	42	42	50
EPA Point 37	39	39	35	45
EPA Point 44	37	37	37	45
Residence 41,48	36	35	35	45
Residence 91	37	37	36	45
Residence 14, 92	37	37	37	45
Residence 10, 11	37	37	37	46
Residence 13	38	38	38	45
Residence 12, 94, 95, 112	38	38	38	46
Residence 111	39	39	36	45
Residence 19	39	39	39	45
Residence 93	40	40	40	46
Other privately-owned residences	35	35	35	45

L3.2 For the purposes of Condition L3.1:

a) Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays,

b) Evening is defined as the period from 6pm to 10pm, and

c) Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays

L3.3 The noise limits set out in condition L3.1 apply under all meteorological conditions except for the

Licence - 4460



following:

- a) Wind speeds greater than 3 metres/second at 10 metres above the ground level;
- b) Stability category F temperature inversion conditions and wind speeds greater than 2 metres/second at
- 10 metres above ground level; or
- c) Stability category G temperature inversion conditions.
- L3.4 For the purposes of condition L3.3:
 - a) Data recorded by the closest and most representative meteorological station installed on the premises at EPA Identification Point 16 or 17 must be used to determine meteorological conditions; and

b) Temperature inversion conditions (stability category) are to be determined by the methods referred to in Fact Sheet D of the Noise Policy for Industry (2017).

L4 Blasting

- L4.1 The airblast overpressure level from blasting operations in or on the premises must not exceed: 115 dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period; at either monitoring point 6, 7, 11, 12 or 13 in Condition P1.4.
- L4.2 The airblast overpressure level from blasting operations in or on the premises must not exceed: 120 dB (Lin Peak) at any time; at either monitoring point 6, 7, 11, 12 or 13 in Condition P1.4.
- L4.3 The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed:
 5 mm/second for more than 5% of the total number of blasts during each reporting period; at either monitoring point 6, 7, 11, 12 or 13 in Condition P1.4.
- L4.4 The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed:
 10 mm/second at any time; at either monitoring point 6, 7, 11, 12 or 13 in Condition P1.4.
- L4.5 Offensive blast fume must not be emitted from the premises.

Definition:

Offensive blast fume means post-blast gases from the detonation of explosives at the premises that by reason of their nature, duration, character or quality, or the time at which they are emitted, or any other circumstances:

1. are harmful to (or likely to be harmful to) a person that is outside the premises from which it is emitted, or

2. interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted.

Licence - 4460



4 Operating Conditions

O1 Activities must be carried out in a competent manner

O1.1 Licensed activities must be carried out in a competent manner. This includes:

a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and

b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

O2 Maintenance of plant and equipment

- O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity: a) must be maintained in a proper and efficient condition; and
 - b) must be operated in a proper and efficient manner.

Sewage Treatment System

- O2.2 The licensee is responsible for the correct operation of the sewage treatment system on the premises.
- O2.3 Correct operation involves regular supervision and system maintenance. The licensee must be aware of the system management requirements and must ensure that the necessary service contracts are in place.
- O2.4 The sewage treatment system must be serviced by a suitably qualified and experienced wastewater technician at least once in each quarterly period and a minimum of four times per year.
- O2.5 The licensee must record each inspection and any actions required or recommended by the technician including all results of tests performed on the sewage treatment system by the technician as required in Condition O2.4.
- O2.6 The licensee must prepare a sewage treatment system maintenance program. The program must include:

a) Certification from the system provider that the sewage treatment system is operating within its capacity;

b) Date, time and results of all routine maintenance procedures undertaken to the sewage treatment system; and

c) Provide written records of each quarterly inspection.

O3 Dust

O3.1 All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.

O3.2 The premises must be maintained in a condition which minimises or prevents the emission of dust from

Licence - 4460



the premises.

O3.3 All trafficable areas, coal storage areas and vehicle manoeuvring areas in or on the premises must be maintained, at all times, in a condition that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.

O4 Effluent application to land

- O4.1 The licensee must ensure that the effluent discharge utilisation area perimeter is fenced and signposted and controlled in a manner to ensure exclusion of persons from that area.
- O4.2 The licensee must ensure that sprays or mists from irrigation do not drift beyond the boundary of the effluent discharge utilisation area and that no ponding occurs.
- O4.3 Application of wastewaters must only be applied at a rate that can be assimilated by the effluent discharge utilisation area and its evapotranspiration capacity.

O5 Emergency response

O5.1 The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises. The licensee must keep the incident response plan on the premises at all times. The incident response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. The licensee must develop a Pollution Incident Response Management Plan in accordance with the requirements in Part 5.7A of the Protection of the Environment Operations (POEO) Act 1997 and POEO regulations.

O6 Other operating conditions

O6.1 All above-ground tanks containing material that is likely to cause environmental harm must be bunded or have an alternative spill containment system in place.

5 Monitoring and Recording Conditions

M1 Monitoring records

M1.1 The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.

M1.2 All records required to be kept by this licence must be:

- a) in a legible form, or in a form that can readily be reduced to a legible form;
- b) kept for at least 4 years after the monitoring or event to which they relate took place; and
- c) produced in a legible form to any authorised officer of the EPA who asks to see them.

Licence - 4460



- M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:
 - a) the date(s) on which the sample was taken;
 - b) the time(s) at which the sample was collected;
 - c) the point at which the sample was taken; and
 - d) the name of the person who collected the sample.

M2 Requirement to monitor concentration of pollutants discharged

- M2.1 For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:
- M2.2 Air Monitoring Requirements

POINT 8,9,10

Pollutant	Units of measure	Frequency	Sampling Method
PM10	micrograms per cubic metre	Continuous	AM-22

M2.3 Water and/ or Land Monitoring Requirements

POINT 18,19

Pollutant	Units of measure	Frequency	Sampling Method
Faecal Coliforms	colony forming units per 100 millilitres	Quarterly	Grab sample
рН	рН	Quarterly	Grab sample

POINT 20,21,22,23,24,25,26,27,28

Pollutant	Units of measure	Frequency	Sampling Method
Electrical conductivity	microsiemens per centimetre	Monthly	Grab sample
pН	рН	Monthly	Grab sample
TSS	milligrams per litre	Monthly	Grab sample
Turbidity	nephelometric turbidity units	Monthly	Grab sample

Licence - 4460



M3 Testing methods - concentration limits

M3.1 Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:

a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or

b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or

c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.

- Note: The *Protection of the Environment Operations (Clean Air) Regulation 2010* requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".
- M3.2 Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.

M4 Weather monitoring

M4.1 At the point(s) identified below, the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1 of the table below, using the corresponding sampling method, units of measure, averaging period and sampling frequency, specified opposite in the Columns 2, 3, 4 and 5 respectively.

POINT 16,17

Parameter	Sampling method	Units of measure	Averaging period	Frequency
Wind Direction at 10 metres	AM-2 & AM-4	Degrees	15 minutes	Continuous
Wind Speed at 10 metres	AM-2 & AM-4	metres per second	15 minutes	Continuous
Sigma Theta	AM-2 & AM-4	Degrees	15 minutes	Continuous
Rainfall	AM-4	millimetres	15 minutes	Continuous
Temperature at 10 metres	AM-4	degrees Celsius	15 minutes	Continuous
Relative humidity	AM-4	percent	15 minutes	Continuous

Licence - 4460



M5 Recording of pollution complaints

- M5.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.
- M5.2 The record must include details of the following:
 - a) the date and time of the complaint;
 - b) the method by which the complaint was made;

c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;

d) the nature of the complaint;

e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and

f) if no action was taken by the licensee, the reasons why no action was taken.

- M5.3 The record of a complaint must be kept for at least 4 years after the complaint was made.
- M5.4 The record must be produced to any authorised officer of the EPA who asks to see them.

M6 Telephone complaints line

- M6.1 The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.
- M6.2 The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.
- M6.3 The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.

M7 Blasting

M7.1 To determine compliance with conditions L4.1, L4.2, L4.3 and L4.4:
a) Airblast overpressure and ground vibration levels must be measured and electronically recorded for monitoring points 6, 7, 11, 12 and 13 for the parameters specified in Column 1 of the table below; and b) The licensee must use the units of measure, sampling method, and sample at the frequency specified opposite in the other columns.

Parameter	Units of Measure	Frequency	Sampling Method
Airblast Overpressure	Decibels (Linear Peak)	All Blasts	Australian Standard AS 2187.2-2006
Ground Vibration Peak Particle Velocity	millimetres/second	All Blasts	Australian Standard AS 2187.2-2006

Licence - 4460



M8 Other monitoring and recording conditions Requirement to Monitor Particulate Matter

M8.1 The Licensee must record the average PM₁₀ concentration at Monitoring Points 8, 9 and 10 at intervals of 10 minutes. This data must be made available upon request by any Authorised Officer of the EPA.

M9 Noise monitoring

M9.1 To assess compliance with the noise limits specified within this licence, the licensee must undertake operator attended noise monitoring at each specified noise monitoring point in accordance with the table below.

POINT 31,33,34,39

POINT

Assessment period	Minimum frequency in a reporting period	Minimum duration within assessment period	Minimum number of assessment period
Night	Monthly	30 minutes	1 operation day
37,44			
Assessment period	Minimum frequency in a	Minimum duration within	Minimum number of

Assessment period	Minimum frequency in a reporting period	Minimum duration within assessment period	Minimum number of assessment period
Night	Special Frequency 1	30 minutes	1 operation day

- M9.2 Special Frequency 1 refers to a requirement to undertake monitoring in accordance with Condition M9.3b).
- M9.3 To assess compliance with condition L3.1, attended noise monitoring must be undertaken in accordance with Conditions L3.2 to L3.4:
 - a) at the EPA points 31, 33, 34 and 39 identified in P1.4; andb) at the secondary locations EPA points 37 and 44 where a definitive judgement of compliance cannot be made at the primary locations; and
 - c) occur every calendar month in a reporting period; and
 - d) occur during one night time period as defined in the Noise Policy for Industry 2017 for a minimum of 30 minutes at each location from a), and when relevant b) during the night.
- M9.4 For the purposes of compliance monitoring and determining the noise generated at the premises the modification factors in the EPA's Fact Sheet C of the Noise Policy for Industry (2017) must be applied, as appropriate, to the noise levels measured by noise monitoring equipment.

Definitions

Licence - 4460



Noise refers to 'sound pressure levels' for the purpose of conditions L3.1 to L.3.4 and condition M9.

M9.5 Where required in writing by the EPA, the Licensee must carry out attended monitoring at sensitive receivers in addition the monitoring required by Condition M9.3.

6 Reporting Conditions

R1 Annual return documents

R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:

- 1. a Statement of Compliance,
- 2. a Monitoring and Complaints Summary,
- 3. a Statement of Compliance Licence Conditions,
- 4. a Statement of Compliance Load based Fee,
- 5. a Statement of Compliance Requirement to Prepare Pollution Incident Response Management Plan,
- 6. a Statement of Compliance Requirement to Publish Pollution Monitoring Data; and
- 7. a Statement of Compliance Environmental Management Systems and Practices.

At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.

- R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.
- Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

R1.3 Where this licence is transferred from the licensee to a new licensee:a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and

b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

- Note: An application to transfer a licence must be made in the approved form for this purpose.
- R1.4 Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:

a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or

b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.

R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').

Licence - 4460



- R1.6 The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.
- R1.7 Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:
 - a) the licence holder; or
 - b) by a person approved in writing by the EPA to sign on behalf of the licence holder.

R2 Notification of environmental harm

- R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.
- R2.2 The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.
- Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.

R3 Written report

R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:

a) where this licence applies to premises, an event has occurred at the premises; or

b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,

and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.

- R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.
- R3.3 The request may require a report which includes any or all of the following information:

a) the cause, time and duration of the event;

b) the type, volume and concentration of every pollutant discharged as a result of the event;

c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;

d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;

e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;

f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and

g) any other relevant matters.

Licence - 4460



R3.4 The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

R4 Other notifications

Blast Exceedance Notification

R4.1 The licensee must report any exceedance of licence blasting limits to the EPA Hunter at <u>hunter.region@epa.nsw.gov.au</u> as soon as practicable after the exceedance becomes known to the licensee or to one of the licensee's employees or agents.

Noise Exceedance Notification

R4.2 The licensee must report any exceedance of licence noise limits to the EPA Hunter at <u>hunter.region@epa.nsw.gov.au</u> as soon as practicable after the exceedance becomes know to the licensee or to one of the licensee's employees or agents

R5 Other reporting conditions Blast Monitoring Reporting

R5.1 The results of the blast monitoring required by the licence must be submitted to the EPA, with each Annual Return, at the end of each reporting period. The monitoring results must identify any exceedance of licence limits.

Noise Monitoring Report

R5.2 The Licensee must provide the EPA with its Annual Return an annual noise compliance assessment report prepared by an appropriately qualified acoustic consultant. The report must include an assessment of any exceedance of noise limits and justification that the noise monitoring points identified in Condition P1.4 are still representative of the sensitive receivers within the noise monitoring groups on Figure 2.

Water Quality Monitoring Report

R5.3 The licensee must provide the EPA with its Annual Return an annual water quality monitoring report prepared by an appropriately qualified and experienced person that includes the following:

a) for the monitoring required by the licence during the reporting period to which the Annual Return relates:

(i) a summary of results for all ambient water quality monitoring required by the licence in table form and graphical form;

(ii) total daily rainfall records from the premises meteorological monitoring required by the licence on the day that the sampling was undertaken in table form;

- (iii) total daily continuous rainfall records in graphical form; and
- (iv) a plan with the monitoring locations.

Licence - 4460



b) A graphical presentation of the trends of monitoring results required by the licence for the reporting period to which the Annual Return relates and the preceeding data for the period of record the licensee has monitoring results for the licensed location.

c) A graphical representation of total daily continuous rainfall records required by the licence for the record that matches the ambient water quality results, if available.

Sewage Treatment Systems

- R5.4 The sewage treatment system maintenance program required by Condition O2.6 must be submitted annually to the EPA with the Annual Return.
- R5.5 The licensee must retain a copy of each report required by Condition O2.5 for 3 years from the date each record is made.

7 General Conditions

G1 Copy of licence kept at the premises or plant

- G1.1 A copy of this licence must be kept at the premises to which the licence applies.
- G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.
- G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.

G2 Other general conditions

G2.1 Completed Programs

Program	Description	Completed Date
Montior salinity levels	During the next HRSTS discharge the licensee must montior salinity levels at the nearest downstream irrigation off-take point, to coincide with the peak flow of discharge water. A report must be submitted to the RM within 30 days after sampling. The purpose is to ensure that the discharge of saline water is mixing sufficiently prior to it reaching the nearest downstream irrigation off-take point.	21-October-2014
Coal Mine Particulate Matter Control Best Practice.	Requires licensee to conduct a site specific Best Management Practice (BMP) determination to identify ways to reduce particle emissions.	11-November-2012

Licence - 4460



Particulate Matter Control Best Practice Implementation – Wheel Generated Dust	Implementation of particulate matter best management practices to address wheel-generated dust.	15-August-2014
Particulate Matter Control Best Practice Implementation – Disturbing and Handling Overburden under Adverse Weather Conditions	Implementation of particulate matter best management practices to address the handling of overburden during adverse weather.	15-August-2014
Particulate Matter Control Best Practice Implementation – Trial of Best Practice Measures for Disturbing and Handling Overburden	Investigation to establish best practice measures for the handling of overburden.	14-April-2014
Coal Mine Wind Erosion of Exposed Land Assessment	Assessment of predicted vs actual exposed lands.	05-June-2015

Licence - 4460



Dictionary

General Dictionary

3DGM [in relation to a concentration limit]	Means the three day geometric mean, which is calculated by multiplying the results of the analysis of three samples collected on consecutive days and then taking the cubed root of that amount. Where one or more of the samples is zero or below the detection limit for the analysis, then 1 or the detection limit respectively should be used in place of those samples	
Act	Means the Protection of the Environment Operations Act 1997	
activity	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997	
actual load	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009	
АМ	Together with a number, means an ambient air monitoring method of that number prescribed by the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales.	
AMG	Australian Map Grid	
anniversary date	The anniversary date is the anniversary each year of the date of issue of the licence. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.	
annual return	Is defined in R1.1	
Approved Methods Publication	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009	
assessable pollutants	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009	
BOD	Means biochemical oxygen demand	
CEM	Together with a number, means a continuous emission monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .	
COD	Means chemical oxygen demand	
composite sample	Unless otherwise specifically approved in writing by the EPA, a sample consisting of 24 individual samples collected at hourly intervals and each having an equivalent volume.	
cond.	Means conductivity	
environment	Has the same meaning as in the Protection of the Environment Operations Act 1997	
environment protection legislation	Has the same meaning as in the Protection of the Environment Administration Act 1991	
ЕРА	Means Environment Protection Authority of New South Wales.	
fee-based activity classification	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.	
general solid waste (non-putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997	

Licence - 4460



flow weighted composite sample	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.	
general solid waste (putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environmen t Operations Act 1997	
grab sample	Means a single sample taken at a point at a single time	
hazardous waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997	
licensee	Means the licence holder described at the front of this licence	
load calculation protocol	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009	
local authority	Has the same meaning as in the Protection of the Environment Operations Act 1997	
material harm	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997	
MBAS	Means methylene blue active substances	
Minister	Means the Minister administering the Protection of the Environment Operations Act 1997	
mobile plant	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997	
motor vehicle	Has the same meaning as in the Protection of the Environment Operations Act 1997	
O&G	Means oil and grease	
percentile [in relation to a concentration limit of a sample]	Means that percentage [eg.50%] of the number of samples taken that must meet the concentration limit specified in the licence for that pollutant over a specified period of time. In this licence, the specified period of time is the Reporting Period unless otherwise stated in this licence.	
plant	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.	
pollution of waters [or water pollution]	Has the same meaning as in the Protection of the Environment Operations Act 1997	
premises	Means the premises described in condition A2.1	
public authority	Has the same meaning as in the Protection of the Environment Operations Act 1997	
regional office	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence	
reporting period	For the purposes of this licence, the reporting period means the period of 12 months after the issue of the licence, and each subsequent period of 12 months. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.	
restricted solid waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997	
scheduled activity	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997	
special waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997	
тм	Together with a number, means a test method of that number prescribed by the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales.	

Licence - 4460



TSP	Means total suspended particles	
TSS	Means total suspended solids	
Type 1 substance	Means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements	
Type 2 substance	Means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements	
utilisation area	Means any area shown as a utilisation area on a map submitted with the application for this licence	
waste	Has the same meaning as in the Protection of the Environment Operations Act 1997	
waste type	Means liquid, restricted solid waste, general solid waste (putrescible), general solid waste (non - putrescible), special waste or hazardous waste	

Mr Mitchell Bennett

Environment Protection Authority

(By Delegation)

Date of this edition: 14-June-2000

Licence - 4460



End Notes

- 1 Licence varied by notice 1003027, issued on 06-Dec-2000, which came into effect on 31-Dec-2000.
- 2 Licence varied by notice 010750, issued on 08-Aug-2000, which came into effect on 02-Sep-2000.
- 3 Licence varied by notice 1008498, issued on 24-Sep-2001, which came into effect on 24-Sep-2001.
- 4 Licence varied by notice 1012303, issued on 05-Nov-2001, which came into effect on 30-Nov-2001.
- 5 Condition HRSTS Dis Note varied by notice issued on <issue date> which came into effect on <effective date>
- 6 Licence varied by notice 1013419, issued on 07-Dec-2001, which came into effect on 01-Jan-2002.
- 7 Licence varied by notice 1025551, issued on 25-Mar-2003, which came into effect on 19-Apr-2003.
- 8 Licence varied by notice 1040314, issued on 06-Oct-2004, which came into effect on 31-Oct-2004.
- 9 Licence varied by notice 1043273, issued on 07-Mar-2005, which came into effect on 30-Mar-2005.
- 10 Licence transferred through application 143347, approved on 01-Apr-2005, which came into effect on 01-Apr-2005.
- 11 Licence fee period changed by notice 1065975 approved on 09-Oct-2006.
- 12 Licence varied by notice 1067160, issued on 14-Dec-2006, which came into effect on 14-Dec-2006.
- 13 Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
- 14 Licence varied by notice 1106347, issued on 27-Nov-2009, which came into effect on 27-Nov-2009.
- 15 Licence varied by notice 1109537, issued on 01-Dec-2009, which came into effect on 01-Dec-2009.
- 16 Licence varied by notice 1109741, issued on 08-Dec-2009, which came into effect on 08-Dec-2009.
- 17 Licence varied by notice 1110500, issued on 08-Jan-2010, which came into effect on 08-Jan-2010.
- 18 Licence varied by notice 1501355 issued on 16-Nov-2011

Licence - 4460



19	Licence transferred throug effect on 21-Nov-2011	gh application 1502790 approved on 16-Nov-2011 , which came into
20	Licence varied by notice	1502881 issued on 22-Dec-2011
21	Licence varied by notice	1510459 issued on 25-Mar-2013
22	Licence varied by notice	1516174 issued on 05-Sep-2013
23	Licence varied by notice	1524152 issued on 13-Aug-2014
24	Licence varied by notice	1524947 issued on 16-Oct-2014
25	Licence varied by notice	1525741 issued on 07-Nov-2014
26	Licence varied by notice	1530173 issued on 27-Apr-2015
27	Licence varied by notice	1531408 issued on 09-Jul-2015
28	Licence varied by notice	1535924 issued on 07-Dec-2016
29	Licence varied by notice	1554662 issued on 17-Aug-2017