



# Environment Protection Licence

Licence - 2149

Licence Details	
Number:	2149
Anniversary Date:	02-July

Licensee	
ORICA AUSTRALIA PTY LTD	
GATE 1, 2 CHRISTINA ROAD	
VILLAWOOD NSW 2163	

Premises	
ORICA AUSTRALIA PTY LTD	
GATE 1, 2 CHRISTINA ROAD	
VILLAWOOD NSW 2163	

Scheduled Activity	
Contaminated soil treatment	
Waste storage	

Fee Based Activity	Scale
Contaminated soil treatment	Any annual handling capacity
Waste storage - hazardous, restricted solid, liquid, clinical and related waste and asbestos waste	Any listed waste type stored

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## 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).



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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:

ORICA AUSTRALIA PTY LTD
GATE 1, 2 CHRISTINA ROAD
VILLAWOOD NSW 2163

subject to the conditions which follow.

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## 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
Contaminated soil treatment	Contaminated soil treatment	Any annual handling capacity
Waste storage	Waste storage - hazardous, restricted solid, liquid, clinical and related waste and asbestos waste	Any listed waste type stored

A1.2 This licence authorises the carrying out of the scheduled development work listed below at the premises listed in A2.

There are 6 stages of works which are authorised by this licence namely:

Stage 1 Construction and Site Establishment Works;  
 Stage 2 DTD Plant Commissioning;  
 Stage 3 Proof of Performance (PoP) Testing;  
 Stage 4 Commercial Operations (Excavation and Treatment);  
 Stage 5 Decommissioning and Demobilisation; and  
 Stage 6 Reinstatement of site

Stage & Description	Details and general requirements
Stage 1 Construction and Site Establishment Works	<p>This stage permits:</p> <ul style="list-style-type: none"> <li>Construction of buildings, plant and facilities including water treatment plant and feed soil building extension;</li> <li>Excavation, stockpiling and classification of contaminated soil to be treated.</li> <li>Construction of the Directly-heated Thermal Desorption (DTD) Plant and adjacent sealed and bunded area;</li> <li>Installation of hardstand areas, internal haul roads, site offices, stores, work sheds, temporary site sheds, ablution blocks and decontamination units;</li> </ul>
	<ul style="list-style-type: none"> <li>Excavation, stockpiling, classification, preparation and transportation of contaminated soil for the purpose of Stage 2;</li> <li>Establishing the plant, but does not permit the operation of the DTD; and</li> <li>During this stage the licensee must submit a 'Commissioning and Proof of Performance (CPoP)' plan for assessment by EPA prior to commencement of the next stages.</li> </ul>

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Stage 2 DTD Plant Commissioning.	<p>At this stage (2A):</p> <ul style="list-style-type: none"> <li>The licensee must conduct a 'mechanical shakedown' which includes running the plant with no soil to ensure all process components are functioning (e.g. desorber, thermal oxidiser, scrubber);</li> <li>The licensee must conduct a 'clean soil shakedown' to test stable operation of process components (e.g. over 24 hours); and</li> <li>The licensee must conduct a 'contaminated soil shakedown' to demonstrate compliance with regulation/EPL limits by stack testing.</li> </ul>
	<ul style="list-style-type: none"> <li>The plant must then be shut down until stack test results are available. See A1.5 below.</li> </ul> <p>Desorber Temperature Optimisation Trial</p> <p>At this stage (2B):</p> <ul style="list-style-type: none"> <li>The licensee must conduct a thermal desorber temperature optimisation trial to establish: <ul style="list-style-type: none"> <li>i) Optimum desorber temperature for removal of contaminants; and</li> <li>ii) Stack test at highest desorber temp to generate data on performance against limits.</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>The licensee must consult with the EPA before proceeding. See A1.5 below.</li> </ul>
Stage 3 Proof of Performance testing	<p>At this stage:</p> <ul style="list-style-type: none"> <li>The licensee must conduct PoP tests to establish outer boundaries for operation (feed rate, mass loading to DTD) and involve three runs each with an associated stack test; and</li> <li>The licensee must shut down the plant at the end of the contaminated soil shakedown and PoP testing regimes unless otherwise agreed in writing by the EPA (EPA may agree on continued treatment at reduced feed rate after PoP testing, based on the data from commissioning and pre-testing).</li> </ul>
Stage 4 Commercial Operations	<p>At this stage:</p> <ul style="list-style-type: none"> <li>The licensee must conduct any permitted/further operation within the parameters established with the Commissioning and PoP stages as agreed by the EPA and as per licence conditions;</li> <li>Supplementary PoP tests will be required if the conditions in the feed – (e.g. concentration or feed rate differs significantly from conditions established).</li> </ul>
Stage 5 Decommissioning and Demobilisation	<p>At this stage:</p> <ul style="list-style-type: none"> <li>The licensee must decommission, demobilise and decontaminate the site buildings, plant and equipment and remove these facilities off-site.</li> </ul>
Stage 6 Reinstatement of site.	<p>At this stage:</p> <ul style="list-style-type: none"> <li>The licensee must reinstate and appropriately stabilise the site with treated and validated soil or other materials permitted by the Remedial Action Plan.</li> </ul>

## Requirement to consult with the EPA about reports and stack test results before proceeding.

- A1.3 The licensee must not commence activities defined under stages 2 and 3 until the Technology Assessment required by condition O5.3 of this licence and the CPoP plan have been completed to the satisfaction of the EPA.
- A1.4 Stage 1. The licensee may undertake works and activities described under Stage 1 above, but must not proceed with Stage 2 until the licensee receives and implements all formal written reasonable requirements of the EPA on the CPoP Plan. (Stage 1 activities include a requirement for the licensee to prepare and submit to the EPA a CPoP plan for its review).
- A1.5 Stage 2. Once the EPA has provided its formal written reasonable requirements on the CPoP report required under Stage 1 above, the licensee may proceed with works and activities permitted by Stage 2 (Shakedown and temperature optimisation). Based on stack test results, Stage 2A requires the licensee to prepare and submit to the EPA an Interim Shakedown Report. At this point the licensee must not proceed with the Desorber Temperature Optimisation Trial (DTOT) (Stage 2B) until the licensee receives

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and implements all formal written reasonable requirements of the EPA on the Interim Shakedown Report.

On completion of the DTOT the licensee must complete and submit to the EPA a Contaminated Soil Shakedown Test Report comprising and summarising all run, temperature and stack data. At this point the licensee must not proceed to Stage 3 until the licensee receives and implements all formal written reasonable requirements of the EPA on the Contaminated Soil Shakedown Test Report.

- A1.6 Stage 3. Once the EPA has provided its formal written reasonable requirements on the Contaminated Soil Shakedown Test Report required under Stage 2 above, the licensee may proceed with works and activities permitted by Stage 3. (Stage 3 requires the licensee to prepare and submit to the EPA a Contaminated Soil Shakedown Report and consult with the EPA on PoP test conditions). To avoid any doubt, the licensee must shut down the plant at the end of the contaminated soil shakedown and PoP testing regimes unless otherwise advised in writing by the EPA. (The EPA may allow continued treatment at reduced feed rate after PoP testing, based on the data from commissioning and pre-testing).
- A1.7 Stage 4. Once the EPA has reviewed the PoP test results required under Stage 3 above, the licensee must not proceed to Stage 4 until the licensee receives and implements all formal written reasonable requirements of the EPA on the PoP test results. The licensee must advise the EPA of any significant excursions from the agreed PoP test conditions encountered during Commercial Operations. Significant changes in operating conditions of the DTD described in the licence will result in the requirement for supplementary PoP (supp-PoP) testing.

## Other regulatory requirements

- A1.8 Except as expressly provided by these conditions, the works and activities must be carried out in accordance with the proposals and requirements contained in the following documents:
- a) the Major Project application and Project Approval No. 09-0147, lodged under Part 3A of the Environmental Planning and Assessment Act and issued by the Department of Planning and Infrastructure on 18 May 2012;
  - b) remediation of 2 Christina Road Villawood, NSW – Environmental Assessment - dated February 2011
  - c) the Final report - Air quality impact assessment for Orica Villawood remediation project - Thiess Services Pty Ltd - Job No: 3672 - dated 27 September 2010;
  - d) the Final Human Health and Environmental Risk Assessment, Orica Villawood, prepared by URS Australia Pty Ltd (ref. 43217484, dated 12 August 2010) and the Remedial Action Plan, prepared by AECOM Australia Pty Ltd (ref. S4149701, dated 2 June 2010);
  - f) remediation of 2 Christina Road Villawood, NSW – Environmental Assessment Submissions Report - dated November 2011;
  - g) all additional information provided to the EPA in relation to the development; and
  - h) the Approved Technology Assessment



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## A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
ORICA AUSTRALIA PTY LTD
GATE 1, 2 CHRISTINA ROAD
VILLAWOOD
NSW 2163
LOT 1 DP 634604

## A3 Information supplied to the EPA

A3.1 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.

<i>Air</i>			
EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
1	Air emission monitoring Discharge to air	Air emission monitoring Discharge to air	Exhaust stack serving the Directly heated Thermal Desorption Plant labelled as Point 7 on Figure 18 "Remediation Areas and Infrastructure Layout" of the Remedial Action Plan dated 17 March 2011; E314209.7, N6249344
2	Parameter monitoring		Thermal Oxidiser serving the Directly heated Thermal Desorption Plant located at point 6 on Figure 18 "Remediation Areas and Infrastructure Layout" of the Remedial Action Plan dated 17 March 2011; E314209.7, N6249344

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3	Air emission monitoring Discharge to air	Air emission monitoring Discharge to air	Exhaust stack from the Emission Control System serving the Feed Soil Building labelled as Point 4 on Figure 18 "Remediation Areas and Infrastructure Layout" of the Remedial Action Plan dated 17 March 2011; E314224, N6249396
4	Feed Soil Building VOC monitoring point		Carbon bed inter-stage monitoring point in the Emission Control System serving the Feed Soil Building labelled as Point 4 - as described in the email from the licensee dated 11 December 2012.

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.

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 Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
5	Water quality monitoring		Outlet from Water Treatment Plant No 2 described as "WWTP 2 discharge tank" at the following coordinates 314118 easting 6249267 northing, supplied to the EPA by email on 30 October 2013.
6		Discharge to waters	Outlet from stormwater pit 2 at the following coordinates 314009 easting 6249183 northing, supplied to the EPA by email on 30 October 2013.

## 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 Concentration limits

L2.1 For each monitoring/discharge point or utilisation area specified in the table below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.

L2.2 Air Concentration Limits

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## POINT 1

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Carbon monoxide	milligrams per cubic metre	125			
Chlorine	milligrams per cubic metre	200			
Dioxins & Furans	nanograms per cubic metre	0.1			
Hydrogen chloride	milligrams per cubic metre	100			
Hydrogen fluoride	milligrams per cubic metre	35			
Nitrogen Oxides	milligrams per cubic metre	350			
Sulfuric acid mist and sulfur trioxide (as SO <sub>3</sub> )	milligrams per cubic metre	75			
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	20			
Solid Particles	milligrams per cubic metre	25			
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	1			
Cadmium	milligrams per cubic metre	0.2			
Mercury	milligrams per cubic metre	0.2			

## POINT 3

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	20			
Vinyl chloride	milligrams per cubic metre	0.014			
Mercury	milligrams per cubic metre	0.2			

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Cadmium	milligrams per cubic metre	0.2
Solid Particles	milligrams per cubic metre	25
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	1

## POINT 4

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	See note 2			

- L2.3 The emission limits detailed in Condition L2.2 will be reviewed following Commissioning and Proof of Performance Trials.  
For the purposes of those emission limits:
- volatile organic compounds (VOCs) are to be n-propane equivalent;
  - the reference conditions for all pollutants in those tables, except for Dioxins and Furans are dry, 273 K, 101.3 kPa; and
  - the reference conditions for Dioxin and Furans must be as specified in the *Protection of the Environment Operations (Clean Air) Regulation 2002*.
- Note 1:  
The oxygen correction factor for Point 1 will be determined following Commissioning trials and the Proof of Performance Tests. The licensee must determine an oxygen correction factor, and submit to the EPA for review, which reflects the operation of the equipment.
- Note 2:  
VOC concentration limit for the feed soil building (FSB) carbon bed interstage point (Point 4) to be determined once the emission control systems are operating.
- L2.4 The licensee must develop a site specific concentration limit for emissions of volatile organic compounds (VOCs) from discharge Point 4. The licensee must apply for a licence variation to remove the "See Note 2" reference from the licence and inclusion of the new concentration limit. This emission limit must reflect proper and efficient operation of the emission control system associated with the FSB.
- L2.5 For each monitoring/discharge point or utilisation area specified in the table below (by point number), the parameter must be equal to or greater than the limit specified for that parameter in the table:

### Point 2

Pollutant	Units of measurement	Lower Limit	Averaging period
Residence time	Seconds	2	Instantaneous
Temperature	Degrees C	980	Hourly rolling

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Note: The limits for residence time and temperature may be reviewed pending the results of the Commissioning trials and the Proof of Performance Test.

- L2.6 Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.
- L2.7 To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table/s.
- L2.8 Water and/or Land Concentration Limits

## POINT 6

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
1,1,2,-Trichloroethane	micrograms per litre				6500
1,2,3-trichloropropane	micrograms per litre				non-detect
1,2-Dichloroethane	micrograms per litre				1900
1,4-Dichlorobenzene	micrograms per litre				60
4,4'-DDD	micrograms per litre				non-detect
4,4'-DDE	micrograms per litre				non-detect
4,4'-DDT	micrograms per litre				non-detect
Benzene	micrograms per litre				950
Chlorobenzene	micrograms per litre				55
Endosulfan	micrograms per litre				non-detect
Hexachlorobenzene	micrograms per litre				non-detect
Lindane	micrograms per litre				non-detect
Naphthalene	micrograms per litre				50

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Polycyclic aromatic hydrocarbons	micrograms per litre	non-detect
Tetrachloroethene (tetrachloroethylene)	micrograms per litre	non-detect
TPH C10-C14 Fraction	micrograms per litre	50
TPH C15-C28 Fraction	micrograms per litre	100
TPH C29-C36 Fraction	micrograms per litre	50
TPH C6-C9 Fraction	micrograms per litre	20

## L3 Waste

L3.1 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	Waste	Any waste received on site that is below licensing thresholds in Schedule 1 of the POEO Act, as in force from time to time	-	NA
N120	Soils contaminated with a controlled waste	As defined in Schedule 1 of the POEO Act as in force from time to time	Waste storage	Licensee cannot receive any additional contaminated soil for waste storage. The current quantities may remain on the premises, as below: ·10,000m3 stored

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				in the "Secure Storage Facility" building; · 1428.14m <sup>3</sup> stored at the eastern end of the premises and identified as "VSP01"; and · 332.81 m <sup>3</sup> stored at the eastern end of the premises and identified as "VSP02".
NA	General or Specific exempted waste	Waste that meets all the conditions of a resource recovery exemption under Clause 51A of the Protection of the Environment Operations (Waste) Regulation 2005	As specified in each particular resource recovery exemption	NA

## L4 Noise limits

L4.1 Noise generated at the premises must not exceed the noise limits presented in the table below.

All feasible and practicable noise mitigation measures shall be implemented with the aim of minimising noise impacts from the development relative to the day time noise goals in the table below. If noise exceeds the day time noise goals the licensee shall investigate, establish the reason and implement all additional feasible and practicable measures.

The location(s) referred to in the table below are indicated in the relevant Figure 4.2 – Location of Noise Sensitive Receivers in the Report "Orica Villawood Remediation – Noise and Vibration Assessment – (Report No. 09295 Version C) dated November 2010.

Location	LAeq, 15 minute (day time) Noise Goal	LAeq 15 minute (evening) Noise Limit	LAeq 15 minute (night time) Noise Limit	LA1 1 minute (Noise Limit)
159 Waldron Road	54	39	38	45
183 Miller Road	48	35	35	45
190 Virgil Ave	49	40	40	45
Epic Place Detention Centre	61	39	35	45

Note: For the purpose of condition L4.1;

i) Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sunday and Public Holidays;

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ii) Evening is defined as the period 6pm to 10pm; and

iii) Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sunday and Public Holidays.

## Hours of Operation

L4.2 Hours of operation must be in accordance with the times defined in *Table 2: Site Establishment and Operation hours* - Condition 23, Schedule 3 of Project Approval number 09\_0147.

Activity	Day	Time
Site Establishment; and Decommissioning and site reinstatement	Monday - Friday	7am to 6pm
	Saturday	8am to 1pm
	Sunday and Public Holidays	Nil
Operational activities external to a building	Monday - Friday	7am to 6pm
	Saturday	8am to 1pm
	Sunday and Public Holidays	Nil
Operational activities excluding rock breaking external to a building during NSW Daylight Savings time	Monday - Friday	7am to 7pm
	Saturday	8am to 1pm
	Sunday and Public Holidays	Nil
Operational activities within a building and Operation of the Directly-heated thermal desorption plant (DTD), Water Treatment Plant (WTP) and Emissions Control System (ECS).	Monday - Sunday	Any time

L4.3 The noise limits set out in condition L4.1 apply under all meteorological conditions except for any one of the following:

- i) Wind speeds greater than 3 metres/second at 10 metres above ground level; or
- ii) Stability category F temperature inversion conditions and wind speeds greater than 2 metres/second at 10 metres above ground level; or
- iii) Stability category G temperature inversion conditions.

For the purposes of condition L4.3:

The meteorological data to be used for determining meteorological conditions is the data recorded by the meteorological weather station established at this site for the purposes of this Environment Protection Licence. Stability category temperature inversion conditions are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the NSW Industrial Noise Policy.



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- L4.4** For the purposes of determining the noise generated at the premises a Class 1 or 2 noise monitoring equipment as defined by AS IEC61672.1-2004 and AS IEC61672.2-2004, or other noise monitoring equipment accepted by the EPA in writing, must be used.
- L4.5** To determine compliance:
- a) with the  $L_{eq}(15 \text{ minute})$  noise limits in condition L4.1, the noise monitoring equipment must be located:
    - i) within 30 metres of a dwelling façade where any dwelling on the property is situated more than 30 metres from the property boundary that is closest to the premises; or
    - ii) approximately on the boundary where any dwelling is situated 30 metres or less from the property boundary that is closest to the premises; or
    - iii) within approximately 50 metres of the boundary of a National Park or a Nature Reserve.
  - b) with the  $LA_{1,1min}$  noise limits in condition L4.1, the noise monitoring equipment must be located within 1 metre of a dwelling façade.
  - c) the noise monitoring equipment must be located in a position that is:
    - at the most affected point at a location where there is no dwelling at the location; or
    - at the most affected point within an area at a location prescribed by conditions L4.5(a) or L4.5(b)
- L4.6** An exceedance will still occur where noise generated from the premises in excess of the appropriate limit specified in the condition L4.1 is detected:
- in an area at a location other than an area prescribed by condition L4.5; and/or  
at a point other than the most affected point at a location.
- L4.7** For the purposes of determining the noise generated at the premises the modification factors in Section 4 of the NSW Industrial Noise Policy must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.

## **L5 Potentially offensive odour**

- L5.1** No condition of this licence identifies a potentially offensive odour for the purposes of section 129 of the Protection of the Environment Operations Act 1997.

**Note:** Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and

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the odour was emitted in accordance with the conditions of a licence directed at minimising odour.

## 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.

### O3 Dust

O3.1 i) The applicant must design, construct, commission, operate, maintain and decommission the scheduled development works and scheduled activities covered in this licence in a manner that minimises or prevents dust emissions from the site, including wind-blown and traffic-generated dust; and

ii) All activities on the site must be undertaken with the objective of preventing visible emissions of dust from the site. Should such visible dust emissions occur at any time, the applicant must identify and implement all practicable dust mitigation measures, including cessation of relevant works, as appropriate, such that emissions of visible dust cease; and

iii) The applicant must undertake all measures to eliminate or reduce, as far as practicable, fugitive dust emissions from transport of material from the remediation areas to the Feed Soil Building (FSB) or soil stockpile areas.

### O4 Emergency response

O4.1 The licensee must maintain, and implement as necessary, a current emergency response plan for the premises. The licensee must keep the emergency response plan on the premises at all times. The emergency 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. If a current emergency response plan does not exist at the date on which this condition is attached to the licence, the licensee must develop an emergency response plan within three months of that date.

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## O5 Processes and management

- O5.1 The licensee must ensure that waste identified for recycling is stored separately from other waste.

### Technology Assessment

- O5.2 The licensee must complete a Technology Assessment in accordance with the requirements of the National Protocol Approval / Licensing of Technologies for the Treatment/ Disposal of Schedule X Wastes July 1994 and the National Protocol Approval/ Licensing of Commercial-Scale Facilities for the Treatment/ Disposal of Schedule X Wastes July 1994, Environmentally Hazardous Chemicals Act (1985) and the Chemical Control Order in Relation Scheduled Chemical Wastes (2004).

The Technology Assessment must be submitted to the EPA for review. DTD Plant Commissioning and Proof of Performance trials work must not commence until the licensee receives and implements all formal written reasonable requirements of the EPA on the Technology Assessment.

The licensee must construct and operate the plant generally in accordance with the specification outlined in the Technology Assessment document provided to the EPA.

### Discharge point design parameters

- O5.3 Except during start-up and shutdown, the design parameters for discharge points 1 and 3 when operating must meet the requirements specified in the table below

During work hours and at all other times except during essential shutdowns for maintenance or repair the exit velocity at point 3 must be enough to maintain negative pressure inside the FSB and to prevent fugitive releases from the FSB.

EPA Identification Point	Minimum Stack Height above ground level (m)	Minimum Stack Discharge Velocity (m/s)	Maximum Stack Diameter (m)
1	30	18.3	1.2
3	21.5	11.0	1.3

## O6 Other operating conditions

### Excavation & Feed Soil Building

- O6.1 From the day of commencement of operations and thereafter the emission control systems on the FSB must operate at all times except for periods of essential maintenance.
- O6.2 Excavated contaminated soil may be mixed within the FSB to ensure a homogenous feed soil (in terms of moisture and size particles) prior to treatment.

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- O6.3 All contaminated soil, including treated soil that is determined not to meet the treatment criteria post validation sampling, must only be stockpiled inside the FSB.
- O6.4 The licensee must:
- i) Operate the Feed Soil Building Emission Control System in a manner that prevents any exceedance of EPA's air emissions criteria;
  - ii) Only excavate one area at a time consistent with the term "Remediation Areas" in Section 3.5.1 in the Technology Assessment and/or the Air Quality Impact Assessment (whichever results in disturbance of the smaller in area);
  - iii) Ensure that all soil from zones to be remediated or elsewhere must be covered when stockpiled if they are required to be stockpiled for more than 24 hours;
  - iv) Ensure that excavations are covered so that emissions are eliminated or minimised to the maximum extent practicable at the end of each day; and
  - v) Ensure that all loads in trucks are suitably covered during vehicle movements in and from the site.

## Contaminated soil treatment parameters

- O6.5 The licensee must ensure that at all times when contaminated soil is being fed into the DTD plant, that it is operated within the following parameters (except during a 90 minute start-up period):
- (a) Except as otherwise specified in this licence, the combined mass load of dichlorodiphenyltrichloroethane (DDT) dichlorodiphenyldichloroethylene (DDE) and dichlorodiphenyldichloroethane (DDD) fed to the Dryer must be no greater than 31.4 kilograms per hour, when measured as an hourly rolling average;
  - (b) For treatment of material that includes Chester Hill stockpile material, the combined mass load of chlorine from DDX and other Contaminants of Concern (as determined in Condition M6.3(d)) to the Dryer must be no greater than 14.75 kilograms per hour.
  - (c) The dryer exit gas temperature must be greater than 512 degrees Celcius when measured as an hourly rolling average;
  - (d) The scrubber pH must be greater than 7.3 when measured as an hourly rolling average; and
  - (e) The scrubber recycle flow rate must be greater than 1,459 litres per minute when measured as an hourly rolling average.

Note: DDT (dichlorodiphenyltrichloroethane) DDE (dichlorodiphenyldichloroethylene) DDD (dichlorodiphenyldichloroethane) DDT, DDE and DDD are collectively referred to as DDX.

## Dryer exit temperature

- O6.6 The licensee must ensure that if the Dryer exit temperature falls below the temperature required by condition O6.5(b):
- (1) All contaminated soil being fed to the Dryer is diverted to the reject stockpile; and
  - (2) The licensee must continue to divert all contaminated soil being fed to the Dryer to the reject stockpile

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until the licensee can demonstrate full compliance with condition O6.5(b); and

(3) The contaminated soil within the reject stockpile must be:

- (a) validated as a discrete stockpile in accordance with Section 19.9 of the RAP; or
- (b) transported to the FSB for blending with the feed stockpile and retreated.

(4) Re-use of reject stockpile material, on the basis of validation sampling and analysis results, shall be subject to the approval of the site auditor.

O6.7 The licensee must operate the Water Treatment Systems in the following manner:

## Dry weather

In dry weather all surface and groundwater from System 2 and System 3 areas of the site must be collected and appropriately treated prior to discharge to the sewer in accordance with the relevant trade waste agreement Number 36008 issued to Enviropacific Services. No discharges are permitted to stormwater except for clean System 1 stormwater which drains directly offsite without treatment or testing. System 1 System 2 and System 3 are as defined in the document titled WP04 EYR3014 Orica Villawood Water Management Plan Revision 4.2.

## Wet weather

In wet weather treated water from System 2 and treated by WWTP 2 (as defined in the document titled *WP04 EYR3014 Orica Villawood Water Management Plan Revision 4.2*) may be discharged directly to stormwater **through discharge point 6** (i.e. by-passing System 3 ponds) after appropriate sampling in accordance with condition **M.2.3**

Wet weather is defined as: Greater than 10mm/hour rainfall and one hour after the rain event has ceased.

Dry weather is defined as: Any other time and as defined in the document titled *WP04 EYR3014 Orica Villawood Water Management Plan Revision 4.2*.

## 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.

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.

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## 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 1

Pollutant	Units of measure	Frequency	Sampling Method
Cadmium	milligrams per cubic metre	Special Frequency 1	TM-12, TM-13 & TM-14
Carbon monoxide	milligrams per cubic metre	Continuous	CEM-4
Chlorine	milligrams per cubic metre	Special Frequency 1	TM-7
Dioxins & Furans	nanograms per cubic metre	Special Frequency 1	TM-18
Dry gas density	kilograms per cubic metre	Special Frequency 1	TM-23
Hydrogen chloride	milligrams per cubic metre	Special Frequency 1	TM-8
Hydrogen fluoride	milligrams per cubic metre	Special Frequency 1	TM-9
Mercury	milligrams per cubic metre	Special Frequency 1	TM-12, TM-13 & TM-14
Nitrogen Oxides	milligrams per cubic metre	Continuous	CEM-2
Oxygen (O <sub>2</sub> )	percent	Continuous	CEM-3
Solid Particles	milligrams per cubic metre	Special Frequency 1	TM-15
Sulfuric acid mist and sulfur trioxide (as SO <sub>3</sub> )	milligrams per cubic metre	Special Frequency 1	TM-3
Temperature	degrees Celsius	Continuous	TM-2
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Special Frequency 2	TM-12, TM-13 & TM-14
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	Special Frequency 1	TM-34
Volumetric flowrate	normalised cubic metres per second	Continuous	TM-2

#### POINT 2

Pollutant	Units of measure	Frequency	Sampling Method
Temperature	degrees Celsius	Continuous	TM-2

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Volumetric flowrate	normalised cubic metres per second	Continuous	TM-2
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## POINT 3

Pollutant	Units of measure	Frequency	Sampling Method
Cadmium	milligrams per cubic metre	Special Frequency 2	TM-12, TM-13 & TM-14
Mercury	milligrams per cubic metre	Special Frequency 2	TM-12, TM-13 & TM-14
Solid Particles	milligrams per cubic metre	Special Frequency 2	TM-15
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Special Frequency 2	TM-12, TM-13 & TM-14
Vinyl chloride	milligrams per cubic metre	Special Frequency 2	TM-34
volatile organic compounds as n-propane equivalent	milligrams per normalised cubic metre	Special Frequency 2	TM-34

## POINT 4

Pollutant	Units of measure	Frequency	Sampling Method
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	Continuous	Special Method 1

## M2.3 Water and/ or Land Monitoring Requirements

## POINT 5

Pollutant	Units of measure	Frequency	Sampling Method
1,1,2,-Trichloroethane	micrograms per litre	Daily during any discharge	Method approved in writing by the Authority
1,2,3-trichloropropane	micrograms per litre	Daily during any discharge	Method approved in writing by the Authority
1,2-Dichloroethane	micrograms per litre	Daily during any discharge	Method approved in writing by the Authority
1,4-Dichlorobenzene	micrograms per litre	Daily during any discharge	Method approved in writing by the Authority
4,4'-DDD	micrograms per litre	Daily during any discharge	Method approved in writing by the Authority
4,4'-DDE	micrograms per litre	Daily during any discharge	Method approved in writing by the Authority
4,4'-DDT	micrograms per litre	Daily during any discharge	Method approved in writing by the Authority



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Benzene	micrograms per litre	Daily during any discharge	Method approved in writing by the Authority
Chlorobenzene	micrograms per litre	Daily during any discharge	Method approved in writing by the Authority
Hexachlorobenzene	micrograms per litre	Daily during any discharge	Method approved in writing by the Authority
Lindane	micrograms per litre	Daily during any discharge	Method approved in writing by the Authority
Polycyclic aromatic hydrocarbons	micrograms per litre	Daily during any discharge	Method approved in writing by the Authority
Tetrachloroethene (tetrachloroethylene)	micrograms per litre	Daily during any discharge	Method approved in writing by the Authority
TPH C10-C14 Fraction	micrograms per litre	Daily during any discharge	Method approved in writing by the Authority
TPH C15-C28 Fraction	micrograms per litre	Daily during any discharge	Method approved in writing by the Authority
TPH C29-C36 Fraction	micrograms per litre	Daily during any discharge	Method approved in writing by the Authority
TPH C6-C9 Fraction	micrograms per litre	Daily during any discharge	Method approved in writing by the Authority

Note: For the purposes of the above table/s:

- Monitoring for Point 1 (above), **Special Frequency 1** requires sampling to be completed during each Proof of Performance run to demonstrate compliance, and then monthly for the duration of the excavation and treatment operations.
- Monitoring for Point 3 (above), **Special Frequency 2** requires sampling to be conducted post commissioning then at three monthly intervals from the commencement of operations.
- The sampling of volatile organic compounds must be reported as n-propane equivalent.
- Special Method 1 means sampling methods CEM-8, CEM-9 or CEM-10.

## Ambient Air Monitoring Program

M2.4 The licensee must develop an ambient air monitoring program to monitor fugitive emissions from site works including chemicals known to be present in the contaminated soil surrounding the excavation area and FSB. A report detailing the type, location and frequency of monitoring must be submitted to the EPA for comment. DTD Plant Commissioning and Proof of Performance trials work must not commence until the licensee receives and implements all formal written reasonable requirements of the EPA on the report.

The licensee must ensure the ambient air monitoring program is underway when excavation begins to demonstrate the effective operation of the emission control systems on the FSB.

Any sampling required by the license must be analysed, by a Laboratory accredited by NATA or equivalent, for the relevant sample analysis and matrix.

## VOC Breakthrough Action Plan

M2.5 Prior to the commencement of contaminated material treatment, the licensee must submit a VOC breakthrough action plan to the EPA for comment. As a minimum the plan must:



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- i) propose a preferred method for continuously monitoring VOC breakthrough in the FSB. The preferred method must have an adequate lower detection limit to achieve meaningful comparison with licensee defined carbon breakthrough trigger(s);
- ii) nominate a VOC breakthrough trigger(s); and
- iii) define, in detail, breakthrough actions for implementation upon measurement of a VOC concentration at and above the nominated breakthrough trigger level.

## 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.
- 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.

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".

## M4 Recording of pollution complaints

- M4.1 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.
- M4.2 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.
- M4.3 The record of a complaint must be kept for at least 4 years after the complaint was made.
- M4.4 The record must be produced to any authorised officer of the EPA who asks to see them.

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## M5 Telephone complaints line

- M5.1 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.
- M5.2 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.
- M5.3 The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.

## M6 Other monitoring and recording conditions

### Noise Monitoring

- M6.1 To assess compliance with the noise limits of this licence, attended noise monitoring must be undertaken:
- at the locations listed in the noise limit conditions of this licence; and
  - at sufficient frequency to demonstrate compliance as defined in the NSW Industrial Noise Policy.

### Remediation Technology Monitoring Program

- M6.2 The licensee must prepare and implement a Remediation Technology Monitoring Program to monitor and record critical operating parameters during Stage 4. The following operating data must be monitored and recorded, with the records to be retained in an on-site log. These records must include, but need not be limited to:
- The quantities of materials fed into the remediation process;
  - The characterisation of matrices constituting materials fed into the process;
  - The operating temperatures of the Thermal Oxidiser recorded every 5 minutes;
  - The residence times for materials processed through the thermal oxidiser must be determined and recorded every 5 minutes;
  - The feed rate into the Dryer when determined as an hourly rolling average recorded every 5 minutes;
  - The flow rate within the Scrubber recorded every 5 minutes;
  - The pH level within the Scrubber recorded every 5 minutes;
  - The carbon monoxide concentration recorded every 5 minutes;
  - The negative pressure (suction) at the feed end of the Dryer recorded every 5 minutes;
  - The baghouse inlet temperature and evaporative cooling unit exit temperature recorded every 5 minutes;
  - The Dryer exit gas temperature as an hourly rolling average recorded every 5 minutes;
  - The Dryer exit soil temperature as an hourly rolling average recorded every 5 minutes; and
  - The output measured by the broken bag detector recorded every 5 minutes.
- M6.3 Except as noted in (g) below, the licensee must calculate the mass load of DDX to the dryer in accordance with the following:
- One composite sample of contaminated soil must be collected at frequency that ensures a minimum of one composite sample for every 24 hours of DTD plant operation;
  - Each composite sample collected as a requirement of Condition M6.3(a) must be composited from a

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minimum of three sub-samples of contaminated soil collected from the Dryer feed belt;

(c) The sub-samples required by Condition M6.3(b) must be collected at equally spaced intervals (plus or minus ten percent) when assessed in terms of tonnage of contaminated soil treated between consecutive composite samples;

(d) Each composite sample must be analysed by a NATA accredited laboratory for DDX and each other Contaminant of Concern as listed in Table 21 of the document Remedial Action Plan 2 Christina Road, Villawood, NSW (URS 17 March 2011).

(e) A five-sample rolling average of the DDX load (as determined in Condition M6.3(d)) must be calculated for every consecutive composite sample collected as a requirement of Condition M6.3(a);

(f) If the chlorine load (as determined in Condition M6.3(d)) exceeds 14.75 kilograms per hour for three consecutive five-sample rolling averages as calculated in accordance with Condition M6.3(e), then the licensee must comply with Condition E2.1 in relation to supplementary Proof of Performance Trials; and

(g) The stockpiled material from Orica's former Chester Hill site may be blended and processed with DDX contaminated soil provided the combined mass load of chlorine from DDX and other Contaminants of Concern (as determined in Condition M6.3(d)) to the Dryer is less than 14.75 kilograms per hour.

## 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 notification that the Annual Return is due.

R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.

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.

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.

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- 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').
- 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.
- 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.

Note: An application to transfer a licence must be made in the approved form for this purpose.

## 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;

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- 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.

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 reporting conditions

R4.1 The licensee must, throughout the life of the operation of the DTD Plant and associated activities, prepare and submit to the EPA, a Monthly Performance Report. The Report must review the performance of the development against the requirements of this EPL, and must include:

- a) all monitoring data collected for the development during the month, in accordance with the EPL;
- b) an analysis of the monitoring data required by a) must be undertaken and include any trends in the data towards any non-compliance with conditions of this licence;
- c) results of any SPoP trials undertaken during that month depending on the receipt of analytical results;
- d) a copy of the Complaints Register for the month and details of how the complaints were addressed and resolved;
- e) identification of any non-compliance with the conditions of this licence; and
- f) details of additional measures to be implemented to address any non-compliance with the licence.

The first report must be submitted within one month of the Date of Commencement (Stage 1), and every month thereafter, or as otherwise agreed to in writing by the EPA. Each monthly report must be provided to the EPA within 14 days of the end of the month.

The licensee must advise the EPA within twenty four hours of receiving any final analytical results if the concentration of any parameter exceeds the applicable limit at any sampling point.

## 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.

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- G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.

## 8 Special Conditions

### E1 Establishment of Public Positive Covenant

- E1.1 The Licensee must prepare and register a public positive covenant in accordance with section 88B of the Conveyancing Act 1919 with the following terms ('Covenant'):
- a) The prescribed authority that is imposing the public positive covenant is the EPA;
  - b) The land on which the public positive covenant is to be registered is the Proposed Lot 1;
  - c) The obligations imposed by the public positive covenant binds the Owner, as land owner, and all subsequent land owner(s) of the Proposed Lot 1;
  - d) The Owner must use its best endeavours to secure reasonable access to the Off-site Land at its own cost for the purposes of meeting the any requirements specified in the GMP; and
  - e) The public positive covenant is to require the Owner to comply with all of its obligations under the GMP, which should include a formal process to request access to monitoring wells where access has not been granted through informal requests. In circumstances where access to monitoring well(s) is not possible, the Owner is to install replacement monitoring wells on nearby sites.
- E1.2 The Covenant must be prepared, negotiated (if required) and registered on the Proposed Lot 1 at the expense of the Licensee to the satisfaction of the EPA, simultaneous with registration of subdivision of the Premises. The Licensee bears all costs associated with obtaining required consent from any persons against whom the Covenant is enforceable.
- E1.3 The Covenant must be registered by the date notified to the Licensee in writing by the EPA.
- E1.4 The Licensee must ensure that the Covenant incorporates the most recent version of the GMP (as approved by the Site Auditor) at all times, including arranging the variation of the Covenant at its own cost.
- E1.5 In these special conditions:
- a) 'approved by the Site Auditor' means:
    - i. for any minor amendment to the GMP, issue of an interim audit advice by a Site Auditor to confirm that the changes are minor and appropriate. A minor amendment includes any amendment to the GMP in response to changes in policy or guidelines, revision of toxicity reference values, reconditioning of wells, replacement or relocation of wells to appropriate nearby sites or the installation of any additional wells to expand the monitoring programme;
    - ii. completion by the Site Auditor of a B2 Site Audit under the *Contaminated Land Management Act 1997* within ten years of the Site Auditor issuing any interim advice in relation to a minor amendment as set out at i. unless a B2 Site Audit as set out at iii. is completed during that ten year period; and
    - iii. for any other amendment to the GMP, completion by a Site Auditor of a B2 Site Audit under the *Contaminated Land Management Act 1997* to determine the appropriateness of the management plan.
  - b) 'EPA' means the New South Wales Environment Protection Authority.
  - c) 'GMP' means the most recent version of the Groundwater Monitoring Plan as approved by the Site

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Auditor.

d) 'Licensee' means Orica Australia Pty Ltd ACN 004 117 828.

e) 'Off-site Land' means the land required to be accessed in order to meet the requirements of the offsite groundwater monitoring under the GMP.

f) 'Owner' means Orica Limited ACN 004 145 868, and any current or future owner(s) of the Proposed Lot 1.

g) 'Premises' means:

i. Lot 1 DP 634604, being known as 2 Christina Road Villawood NSW 2163;

ii. any subsequent lot(s) or parcel(s) of land which result from the subdivision of Lot 1 DP 634604; and

iii. the amalgamation of titles which include Lot 1 DP 634604.

h) 'Proposed Lot 1' means the proposed lot 1 in plan of subdivision DP 1258519, as shown on the plan of subdivision as approved under Major Projects Approval No. MP09\_0147- Mod-3.

i) 'Proposed Lot 2' means the proposed lot 2 in plan of subdivision DP 1258519, as shown on the plan of subdivision as approved under Major Projects Approval No. MP09\_0147- Mod-3.

j) 'Site Auditor' means a person accredited under the EPA's NSW Site Auditor Scheme.



# Environment Protection Licence

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## Dictionary

### General Dictionary

<b>3DGM [in relation to a concentration limit]</b>	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
<b>Act</b>	Means the Protection of the Environment Operations Act 1997
<b>activity</b>	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
<b>actual load</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>AM</b>	Together with a number, means an ambient air monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
<b>AMG</b>	Australian Map Grid
<b>anniversary date</b>	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.
<b>annual return</b>	Is defined in R1.1
<b>Approved Methods Publication</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>assessable pollutants</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>BOD</b>	Means biochemical oxygen demand
<b>CEM</b>	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> .
<b>COD</b>	Means chemical oxygen demand
<b>composite sample</b>	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.
<b>cond.</b>	Means conductivity
<b>environment</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>environment protection legislation</b>	Has the same meaning as in the Protection of the Environment Administration Act 1991
<b>EPA</b>	Means Environment Protection Authority of New South Wales.
<b>fee-based activity classification</b>	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.
<b>general solid waste (non-putrescible)</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997



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<b>flow weighted composite sample</b>	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
<b>general solid waste (putrescible)</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>grab sample</b>	Means a single sample taken at a point at a single time
<b>hazardous waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>licensee</b>	Means the licence holder described at the front of this licence
<b>load calculation protocol</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>local authority</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>material harm</b>	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
<b>MBAS</b>	Means methylene blue active substances
<b>Minister</b>	Means the Minister administering the Protection of the Environment Operations Act 1997
<b>mobile plant</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>motor vehicle</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>O&amp;G</b>	Means oil and grease
<b>percentile [in relation to a concentration limit of a sample]</b>	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.
<b>plant</b>	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
<b>pollution of waters [or water pollution]</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>premises</b>	Means the premises described in condition A2.1
<b>public authority</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>regional office</b>	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
<b>reporting period</b>	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.
<b>restricted solid waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>scheduled activity</b>	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
<b>special waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>TM</b>	Together with a number, means a test method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .



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

Mr Tim Gilbert

Environment Protection Authority

(By Delegation)

Date of this edition: 12-May-2000

# Environment Protection Licence

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## End Notes

- 1 Licence transferred through application 140093, approved on 01-Dec-2000, which came into effect on 01-Jul-2000.
- 2 Licence varied by notice "TRANSFER", issued on 01-Dec-2000, which came into effect on 01-Dec-2000.
- 3 Licence varied by notice 1004949, issued on 19-Apr-2001, which came into effect on 14-May-2001.
- 4 Licence varied by EPA subregion incorrect, issued on 01-Jul-2002, which came into effect on 01-Jul-2002.
- 5 Licence varied by notice 1044303, issued on 04-Feb-2005, which came into effect on 01-Mar-2005.
- 6 Licence varied by notice 1078161, issued on 14-Sep-2007, which came into effect on 14-Sep-2007.
- 7 Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
- 8 Licence varied by notice 1093235, issued on 18-May-2009, which came into effect on 18-May-2009.
- 9 Licence varied by notice 1113109, issued on 23-Apr-2010, which came into effect on 23-Apr-2010.
- 10 Licence varied by Correction to EPA Region data record., issued on 22-Jun-2010, which came into effect on 22-Jun-2010.
- 11 Licence varied by notice 1507913 issued on 21-Mar-2014
- 12 Licence varied by notice 1524948 issued on 15-Sep-2014
- 13 Licence varied by notice 1527968 issued on 09-Feb-2015
- 14 Licence varied by notice 1528895 issued on 04-Mar-2015
- 15 Licence varied by notice 1530139 issued on 23-Apr-2015
- 16 Licence varied by notice 1591821 issued on 30-Jun-2020
- 17 Licence varied by notice 1604059 issued on 17-May-2021