

Environment Protection Licence



Licence - 13263

Licence Details	
Number:	13263
Anniversary Date:	27-May

Licensee
ORICA AUSTRALIA PTY LTD
16-20 BEAUCHAMP ROAD
MATRAVILLE NSW 2036

Premises
CAR PARK ENCAPSULATION AND DIRECTLY HEATED THERMAL DESORPTION PLANT
CORISH CIRCLE
BANKSMEADOW NSW 2019

Scheduled Activity
Contaminated Soil Treatment

Fee Based Activity	Scale
Contaminated soil treatment	Any handling capacity

Region
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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); and
- 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
16-20 BEAUCHAMP ROAD
MATRAVILLE NSW 2036

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 development work listed below at the premises listed in A2.

There are 6 stages to the scheduled development works of which the following stages are authorised by this licence:

1: Date of Commencement. 2: Construction & Site Establishment Works. 3: DTD Plant Commissioning & Proof of Performance (CPoP) Trials. 4: Commercial Operations (Excavation & Treatment). 5: Decommissioning & Demobilisation. 6: Reinstatement of CPWE site.

- A1.2 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 handling capacity

- A1.3 The Scheduled Development Works/Scheduled Activity at the premises are divided into six stages. This Environment Protection Licence is only valid for the stages stated in this condition.

The six distinct stages that will span for the entirety of this licence are:

Stages	Description
Stage 1 Date of Commencement	Defined as the first day of the commencement of any site establishment works.
Stage 2 Construction and Site Establishment Works	Construction of buildings, plant and facilities including: <ul style="list-style-type: none"> • Site establishment; • The Excavation Soil Building (ESB) and associated emission control system; • The Water Treatment Plant; • The Feed Soil Building (FSB) and associated emission control system; • The Directly-heated Thermal Desorption (DTD) Plant and adjacent sealed and bunded area;
	<ul style="list-style-type: none"> • Hardstand areas, internal haul roads, site offices, stores, work sheds, temporary site sheds, ablution blocks and decontamination units; and • Excavation, stockpiling, classification, preparation and transportation of contaminated soil for the purpose of Stage 3.

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Stage 3 DTD Plant Commissioning and Proof of Performance trials	Commissioning trials <ul style="list-style-type: none"> • These trials involve the work required to test the performance of all major process components including emission control systems using no soil, clean soils and then contaminated soils. Proof of Performance test <ul style="list-style-type: none"> • This test involves the work to prove the DTD plant's ability to meet all EPA performance and emission criteria.
	Both the commissioning trials and the Proof of Performance test must be undertaken in accordance with detailed plans that must be submitted to the EPA for comment. The detailed plans must demonstrate compliance with the Environment Protection Licence conditions. Work must not commence until the licensee receives and implements all formal written reasonable requirements of the EPA on the detailed plans.
Stage 4 Commercial Operations (Excavation and Treatment)	<ul style="list-style-type: none"> • Excavation within the ESB over 3 stages, including sequential construction of the ESB as excavation works progress and deconstruction of completed stages; • Coarse screening of excavated material within the ESB to remove oversized materials; • Transportation of contaminated soil in covered trucks from the ESB to the FSB along internal haulage roads;
	<ul style="list-style-type: none"> • Feeding of contaminated soil from the FSB into the DTD plant; • Treatment of contaminated soil in the DTD plant; • Validation testing of treated material and soils underlying and around the CPWE; • Supplementary Proof of Performance trials (if required); • Stockpiling of treated soil; and • Reinstatement of materials back into the excavation.
Stage 5 Decommissioning and Demobilisation	<ul style="list-style-type: none"> * Excavation of CPWE batters and garden embankment; * Stockpiling of treated soil and; * Reinstatement of materials back into the excavation. * Decommissioning and decontamination of the site buildings, plant and equipment and removal from site
Stage 6 Reinstatement of CPWE site	Reinstatement of the CPWE with treated and validated soil material and stabilisation using hydromulching and/or with turf.

A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
CAR PARK ENCAPSULATION AND DIRECTLY HEATED THERMAL DESORPTION PLANT
CORISH CIRCLE
BANKSMEADOW
NSW 2019

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LOT 4 DP 1016112, PART LOT 9 DP 1016112, PART LOT 10 DP 1039919,
PART LOT 11 DP 1039919

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.

A4 Other administrative conditions

- A4.1 Completed - not applicable.

A4.2

Except as expressly provided by these conditions, the works and activities must be carried out in accordance with the proposal contained in:

- a) the Major Project Application No. 06-0197, lodged under Part 3A of the Environmental Planning and Assessment Act with the Department of Planning on 21 July 2006;
- b) Environmental Assessment – Remediation of Car Park Waste Encapsulation, Botany prepared by HLA-Envirosciences Pty Ltd dated July 2007; Industrial Park
- c) the revised Air Quality Impact Assessment prepared by Pacific Air Environment Pty Ltd dated 14 December 2007;
- d) the Final Amended Remedial Action Plan prepared by AECOM and submitted to the Department of Planning on 8 May 2009;
- e) the Human Health Impact Assessment prepared by URS Australia Pty Ltd dated 30 November 2007;
- f) the Submissions Report prepared by HLA-Envirosciences Pty Ltd dated 26 September 2007; and
- g) all additional information provided to the EPA in relation to the development.

Note: Where any of the above documents have multiple versions and/or where any inconsistency between versions arises, the most recent document applies to the extent of any inconsistency.

2 Discharges to Air and Water and Applications to Land

P1 Location of monitoring/discharge points and areas

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- 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
6	Parameter monitoring		Interstage monitoring between one of the lead and lag activated carbon filters for the emission control system serving the Feed Soil Building

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 Noise limits

- L2.1 Noise emissions emanating from all activities at the premises and when determined as a sound level contribution, shall not exceed the following amenity LAeq criteria when measured or computed at any point within one metre of the nearest boundary of any residence in the vicinity of the premises, using the "FAST" response on the sound level meter.

Time of Day	LAeq (15 minutes)
Day	65
Evening	55
Night	50

- L2.2 Noise from the premises is to be measured at the most affected point on or within the residential boundary to determine compliance with the LAeq (15 minute) noise limits in condition L2.1.

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 level where applicable.

- L2.3 The noise emission limits identified in condition L2.1 apply under meteorological conditions of:

- wind speeds up to 3 m/s at 10 metres above ground level; or
- temperature inversion conditions of up to 3°C/100m and wind speeds up to 2m/s at 10 metres above ground level.

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L2.4 For the purpose of Condition L2.1:

- Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays;
- Evening is defined as the period from 6pm to 10pm, and
- Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays.

L3 Potentially offensive odour

- L3.1 The licensee must not cause or permit the emission of offensive odour beyond the boundary of the premises.

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

L4 Other limit conditions

L4.1 Polychlorinated Biphenyls (PCBs) Scheduled Chemical Waste, Dioxins and Furans

The licensee must comply with the conditions as specified in this licence or where no specific conditions are outlined in this licence, the licensee must comply with the Chemical Control Order applicable to each type of waste (that is PCB's or Scheduled Chemical Wastes or Dioxins and Furans) made under the *Environmentally Hazardous Chemicals Act 1985*.

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

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b) must be operated in a proper and efficient manner.

O3 Dust

- O3.1 The licensee 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.
- O3.2 All activities on the site must be undertaken with the objective of preventing visible emissions of dust beyond the boundary of the premises. Should such visible dust emissions occur at any time, the licensee must identify and implement all practicable dust mitigation measures, including cessation of relevant works, as appropriate, such that emissions of visible dust cease.
- O3.3 The licensee must undertake all measures to eliminate or reduce, as far as practicable, fugitive dust emissions from transport of material from the Car Park Waste Encapsulation (CPWE) area to the Feed Soil Building (FSB).

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.

O5 Processes and management

O5.1 Wastewater management

The licensee must ensure that all contaminated water at the premises is managed in a manner that will prevent pollution of waters.

O5.2 Noise and Vibration Management Plan

The licensee must prepare a Noise and Vibration Management Plan (NVMP) in respect of the project addressing the following:

- Appropriate noise monitoring program for the project including details of periodic noise and vibration testing to be undertaken during activities deemed likely to generate high noise and vibration levels;
- Management of vibration during any use of piling rig and roller;
- Scheduling of works/respite periods from activities likely to generate high levels of noise

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- during major sporting events at Hensley Athletics Field;
- d) Notification to all those impacted by works likely to cause excessive vibration and noise i.e. if sheet piling is required; and
- e) Provision of a 24 hour community hotline to allow the local community to register complaints regarding noise at the Site.

O5.3 Handling contaminated soil

All unloading, handling and sampling involving contaminated soil must only occur within the FSB.

Note: For this scheduled activity to be undertaken contaminated soil may be appropriately excavated from the identified hot spot areas in the CPWE batters and eastern embankment and transported between the CPWE and FSB for assessment and classification.

O5.4 Feed soil management

Not applicable

O5.5 Stockpile Management

- (a) Stockpiling of contaminated soil must only be undertaken inside the FSB;
- (b) Not applicable;
- (c) Any contaminated water run off from stockpile areas or any other contaminated areas must be collected and treated;
- (d) All stockpiles of treated and validated soil must have appropriate controls in place to minimise or prevent the emission of dust and sediment from the site; and
- (e) Hypalon liner and other wastes that are not suitable for processing in the DTD plant or disposal offsite to a licensed waste facility must be stockpiled in the FSB and then appropriately packaged and transferred to the onsite HCB stores.

Note: For this scheduled activity to be undertaken contaminated soil may be appropriately transported to FSB for assessment and classification purposes.

O5.6 Technology assessment

Not applicable

O5.7 Decommissioning DTD Plant

Not applicable

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O6 Waste management

- O6.1 The licensee must not cause, permit or allow any waste generated:
- outside the premises to be received at the premises; and
 - on-site to be disposed of outside of the premises except as permitted by O6.2, and O6.3.
- O6.2 The licensee must assess, classify and manage any waste generated at the premises in accordance with the *Waste Classification Guidelines* 2009 prior to transporting the waste off site.
- O6.3 If waste is transported from the premises, the licensee must ensure that the waste is transported by a waste transporter authorised to transport such waste and is transported to a place that can lawfully accept that waste.

O7 Other operating conditions

- O7.1 For the purposes of this condition:
- "Operation" includes all plant and equipment, excavating and transporting hot spot material from the CPWE area to the FSB, handling treated material and reinstating validated material into the CPWE area, but excludes the emission control system for the FSB which is permitted to be used 24 hours per day;
 - "CPWE area" is defined as the excavated area and the surrounding batters and garden embankment; and
 - "DTD compound" is defined as the area of the site containing the DTD plant, the air emissions control plant, the water treatment plant and the treated soil stockpile area.

The hours of operation permitted by this licence are:

Activity	Day	Time
Operation of CPWE area and DTD compound.	Monday to Saturday	7am to 7pm
Operation of CPWE area and DTD compound.	Sunday and Public Holidays	Not permitted
Decommissioning and decontamination of site buildings, plant and equipment.	Monday to Saturday	7am to 7pm
Decommissioning and decontamination of site buildings, plant and equipment.	Sundays and Public Holidays	Not permitted
Use of emission control system for Feed Soil Building (FSB)	All Days	24 hour per day use permitted

- O7.2 Decommissioning and decontamination activities may be conducted outside the hours listed in the table in O7.1 provided those activities are inaudible at any residential receiver outside the premises.

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O7.3 Not applicable.

O7.4 At any time when material removed from the CPWE batters and garden embankment is stored inside the FSB, the emission control system on the FSB must be operated 24 hours per day, 7 days per week, except for periods of essential maintenance.

O7.5 The following activities may be carried out at the premises outside hours specified:

- a) The delivery and removal of plant and materials which are required by the NSW Police Department or Roads and Traffic Authority, for safety reasons, to be delivered and removed outside the normal decommissioning and decontamination hours specified in condition O7.1 is permitted; and
- b) Emergency work to avoid the loss of lives, property and/or to prevent environmental harm.

O7.6 The licensee must submit an application to vary the licence when it requests approval to undertake out of hours decommissioning and demobilisation activities not specified elsewhere in this licence. The EPA will assess each application to undertake out of hours decommissioning and demobilisation activities on its merits.

O7.7 Not applicable

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.

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:

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M2.2 Air Monitoring Requirements

POINT 6

Pollutant	Units of measure	Frequency	Sampling Method
volatile organic compounds as n-propane equivalent	parts per million	Continuous	Special Method 1

M2.3 For the purpose of the table/s in Condition M2.2:

- **Special Method 1** means sampling methods CEM–8, CEM–9 or CEM–10.

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".

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.

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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.

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:

- a) the date of the issue of this licence or
- b) if this licence is a replacement licence within the meaning of the Protection of the Environment Operations (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.

M6 Other monitoring and recording conditions

M6.1 Ambient air monitoring program

(a) The licensee must implement the Ambient Air Monitoring Program developed for the project.

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

M6.2 Remediation Technology Monitoring Program

Not applicable

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:

- a) a Statement of Compliance; and
- b) a Monitoring and Complaints Summary.

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.

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- 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.
- R1.5 The Annual Return for the reporting period must be supplied to the EPA 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 Statement 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.
- R1.8 A person who has been given written approval to certify a certificate of compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review of this licence.
- 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

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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.
- 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, until the completion of stage 6, prepare and submit to the EPA, a Monthly Performance Report. The Report must review the performance of the development against the requirements of this Environment Protection Licence, and must include:
- a) all monitoring data collected for the development during the month, in accordance with the Environment Protection Licence;
 - 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 supplementary Proof of Performance 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

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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.

- R4.2 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.
- 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 Commissioning Trials

- E1.1 Not applicable - commissioning trials have been completed

E2 Proof of Performance Test for treatment of contaminated excavated soils

- E2.1 Not applicable

E3 Supplementary Proof of Performance Trials

- E3.1 Not applicable

E4 Commercial Operations Plan

- E4.1 Not applicable

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E5 CPWE Conditions (previously under EPL 2148)

E5.1 Preamble

a) The timeline provided in E5 is based on remediation of the Car Park Waste as described in the project Environmental Assessment and Remediation Action Plan (final amended) submitted by Orica to the NSW Department of Planning.

b) Should the results of the current monitoring program indicate that more timely attention is required by Orica, the timeline provided for the remediation works may be modified.

c) For the purposes of all special condition(s) in Section E5 – E8:

i) 'Impacted soils' is defined as: any soils contaminated by hexachlorobutadiene (HCB) and/or associated compounds, within the immediate vicinity of the Car Park Waste Encapsulation cell.

ii) 'Car Park Waste Encapsulation (CPWE)' or 'HCB encapsulation cell' is defined as: the encapsulation cell that lay beneath the former car park on the North East boundary of the Botany Industrial Park (BIP) as shown on map Fig 4.1 from "HCB Encapsulation Groundwater Monitoring Report No 7" dated 28 August 2003.

iii) 'Car Park Waste' is defined as: Approximately 45 000 cubic metres of a mixture of sand and coal ash containing hexachlorobenzene (HCB) and other chlorinated materials including HCB, interred under a paved car park area containing approximately 0.18% of HCB and other chlorinated materials (Ref.: Hexachlorobenzene Waste Management Plan, Australian and New Zealand Environment Conservation Council (ANZECC), 1996).

iv) 'Remediation' is defined as:

(a) preparing a long-term management plan (if any) for the land, and
(b) removing, destroying, reducing, mitigating or containing the contamination of the land, and

(c) eliminating or reducing any hazard arising from the contamination of the land (including by preventing the entry of persons or animals on the land).

Reference: *Contaminated Land Management Act* 1997 No 140

Note: (i) in this context "land" includes the Car Park Waste and Impacted Materials;

(ii) the Scheduled Chemical Waste Chemical Control Order (CCO) does not permit 'dispersion' to meet limits; and

(iii) the aim of these works also includes protection of groundwater.

E6 Timetable for Remediation of Car Park Waste and Impacted Soils

E6.1 Not applicable

E7 Progress reporting on remediation works to remove the source of hexachlorobutadiene (HCB) and associated compounds

E7.1 Every six months after commencement of the Construction and Site Establishment Works, the licensee must submit a report to Manager Sydney Industry, EPA, PO Box 668,

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Parramatta 2124 containing the following information:

- a) Progress report on the remediation works;
- b) Confirmation that the works have been undertaken in accordance with the EPA's waste guidelines and *Protection of the Environment (Waste) Regulation 2005*;
- c) Results of any additional monitoring or alternative works to demonstrate as far as practical that this action has been effective in removing the source that led to the detection of HCBd in groundwater at the groundwater monitoring point at WG95S;
- d) An interpretive report on the results of groundwater and/or soil monitoring and an assessment of the effectiveness of the remediation works to achieve an HCBd groundwater concentration not greater than 0.04µg/L at the boundary of the CPWE part of Lot 11 in DP1039919; and
- e) Any revisions to the project timetable (as a Gantt Chart or equivalent).

Note: the above concentration is a low reliability trigger value taken from ANZECC and Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ) 2000 water quality guidelines. Exceedances of such levels trigger further investigation

E8 Ongoing Groundwater monitoring around the CPWE

- E8.1 a) On a six monthly basis until the commencement of the Construction and Site Establishment Works the licensee must conduct a groundwater monitoring program around the encapsulation. The program should at least include monitoring at the following wells – WG50S, WG93S/I/D, WG94S, WG95S, WG96S/I/D, WG200S/I/D, WG202S/I/D, WG203I/D, WG218S/I/D, WG219S/I/D and WG220S/I/D for the chemicals listed below.
- b) The licensee must submit a six monthly progress report which includes the results of the above monitoring and an interpretive comment on the monitoring results to Manager, Sydney Industry, EPA, PO Box 668 Parramatta 2124.
- c) At least two months prior to the commencement of the Construction and Site Establishment Works, the licensee must provide the EPA with a proposal for ongoing groundwater monitoring around the encapsulation. The proposal must include groundwater monitoring at a minimum of once every three months for the first year after Construction and Site Establishment Works commence and every six months for not less than four years thereafter, unless otherwise agreed in writing by the EPA. The proposal is to be implemented at the commencement of the Construction and Site Establishment Works.

Chemicals to be analysed in the Car Park groundwater monitoring program

VOLATILE CHLORINATED HYDROCARBONS

Chlorinated Methanes

Pentachloroethane

1,1,1,2-Tetrachloroethane

1,1,2,2-Tetrachloroethane

1,1,1-Trichloroethane

1,1,2-Trichloroethane

1,2-Dichloroethane

1,1-Dichloroethane

Chloroethane

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Tetrachloroethene
Trichloroethene
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene
1,1-Dichloroethene
Vinyl chloride

SEMIVOLATILE CHLORINATED HYDROCARBONS

1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4- Dichlorobenzene
1,2,4-Trichlorobenzene
1,3,5-Trichlorobenzene
1,2,4,5-Tetrachlorobenzene
Pentachlorobenzene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Hexachloropropylene

E9 Completion reporting

- E9.1 Within three months of the completion of the reinstatement of the CPWE Site (Stage 6) the licensee must provide a report to the EPA, the Community Participation and Review Committee (CPRC) and the NSW Office of Water demonstrating complete achievement of the remediation objectives for the Car Park Waste.

E10 Specific Requirements for Commissioning and Proof of Performance

E10.1 Specific Requirements for Commissioning Trials

Not applicable: Commissioning trials have been completed

E11 Directly-heated Thermal Desorption Plant Shut Down

- E11.1 completed - not applicable

E12 Pre-start up Test

- E12.1 completed - not applicable

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E13 Restricted start up and operation

E13.1 completed - not applicable

E14 Precautionary Operation

E14.1 Not applicable

E15 Specific definitions

E15.1 Specific Definitions

Term	Specific Definition
24 hour test	means testing of the DTD plant while processing clean soil to demonstrate operational reliability for a period of 24 hours
Commissioning trials	these trials involve the work required to test the performance of all major process components including emission control systems using no soil, clean soils and then contaminated soils as well as the initial start-up of buildings, plant and facilities, including excavation and feed soil buildings, water treatment plant, DTD plant hardstand areas, internal haulage roads, site offices and decontamination units
CPWE	means Car Park Waste Encapsulation
DTD Plant	means Directly-heated Thermal Desorption plant
EPA Exemption Order	means the Order Granting Exemption under Section 284 of the Protection of the Environment Operations Act 1997 granted by the EPA
ESB	means the Excavation Soil Building
FSB	means the Feed Soil Building
Pre-test	means a full stack test to establish that compliance with stack test parameters is possible and that logistics associated with sampling and analysis are practicable
Proof of Performance Test	this test involves the work to prove the DTD plant's ability to meet all EPA performance and emission criteria
Treatment criteria	means the treatment criteria listed under Schedule 3 in Condition 21 of the Department of Planning's Project Approval 06_0197 dated 12 November 2009
Soil	means any substance removed from within and surrounding the Car Park Waste Encapsulation liner and the liner itself. These substances may include other materials directly contaminated by remediation activities such as drum and other storage containers, capping material and landscaping

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Soil shakedown	means trials to perform a sensitivity study on key soil processing parameters, such as soil feed rate and soil treatment temperature, to determine soil treatment parameters
Supplementary Proof of Performance	means supplementary Proof of Performance Trials that replicate trials of remediation technology carried out while processing contaminated soil, in accordance with defined conditions, designed to establish compliance with soil treatment standards, air emission criteria and other licence conditions when the nature of the contamination changes or changes to operational parameters are proposed
VOC	means Volatile Organic Compound, a substance which contains carbon and has a vapour pressure greater than 2 mm of mercury at 25 deg.C and 101.3 kPa
Water Treatment Plant	means the wastewater treatment plant associated with the development

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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
AM	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> .
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
EPA	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

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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 Environment 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
TM	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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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 James Goodwin

Environment Protection Authority

(By Delegation)

Date of this edition: 27-May-2010

End Notes

- 1 Licence varied by notice 1120629, issued on 18-Nov-2010, which came into effect on 18-Nov-2010.
- 2 Licence varied by notice 1128083, issued on 23-Jun-2011, which came into effect on 23-Jun-2011.
- 3 Licence varied by notice 1500355 issued on 16-Sep-2011
- 4 Licence varied by notice 1501813 issued on 14-Oct-2011
- 5 Licence varied by notice 1502253 issued on 20-Oct-2011
- 6 Licence varied by notice 1504161 issued on 06-Feb-2012
- 7 Licence varied by notice 1504288 issued on 15-Feb-2012
- 8 Licence varied by notice 1505125 issued on 22-Mar-2012
- 9 Licence varied by notice 1505484 issued on 18-Apr-2012
- 10 Licence varied by notice 1505663 issued on 24-Apr-2012
- 11 Licence varied by notice 1505997 issued on 17-May-2012