Project Approval

Section 75J of the *Environmental Planning and Assessment Act 1979*

I approve the project application referred to in Schedule 1, subject to the conditions in Schedules 2 to 4.

These conditions are required to:
- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the Project.

Richard Pearson
Deputy Director-General

Sydney 26th July 2010

SCHEDULE 1

Application Number:	09_0090
Proponent:	Orica Australia Pty Ltd
Approval Authority:	Minister for Planning
Land:	George Booth Drive, Lot 2 DP 809377, Richmond Vale NSW
Project:	Orica Ammonium Nitrate Emulsion Project

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DEFINITIONS

Ammonium nitrate emulsion product	Ammonium nitrate emulsion (ANE) which conforms to the UN3375 classification. ANE is an explosive precursor which is sensitised to become an explosive only at the point of use i.e. the mine site.
ANE	Ammonium Nitrate Emulsion
BCA	Building Code of Australia
Council	Cessnock City Council
DECCW	Department of Environment, Climate Change and Water
Department	Department of Planning
Director-General	Director-General of Department of Planning, or delegate
EA	Environmental Assessment titled *Proposed Ammonium Nitrate Emulsion Production Facility and Continued Operation of Orica Mining Services Technology Centre, Richmond Vale, NSW* and dated October 2009
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000*
EPL	Environment Protection Licence
Minister	Minister for Planning, or delegate
Project	The development as described in the EA titled *"Proposed Ammonium Nitrate Emulsion Production Facility and Continued Operation of Orica Mining Services Technology Centre, Richmond Vale, NSW"*, Prepared by Umwelt Australia and dated December 2009.
Proponent	Orica Australia Pty Ltd, or its successors in title
Reasonable and Feasible	Reasonable relates to the application of judgment in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements. Feasible relates to engineering considerations and what is practical to build
Project Site	The land referred to in Schedule 1
Statement of Commitments	Statement of Commitments prepared by Umwelt within the EA
Documents	Any report, plan, management plan, study or strategy required by this project approval
Submissions Report	Submissions Report titled *Proposed Ammonium Nitrate Emulsion (ANE) Production Facility and Continued Operation of Orica Mining Services Technology Centre, Richmond Vale, NSW Response to Submissions* and dated March 2010
tpa	tonnes per annum

SCHEDULE 2
ADMINISTRATIVE CONDITIONS

Obligation to Minimise Harm to the Environment

1. The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction and/or operation of the Project.

Terms of Approval

2. The Proponent shall carry out the Project generally in accordance with the:
   a) EA;
   b) statement of commitments
   c) Submissions Report; and
   d) conditions of this approval.

3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.

4. The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
   a) any reports, plans, strategies, programs or correspondence that are submitted in accordance with this approval; and
   b) the implementation of any actions or measures contained in these reports, plans, strategies, programs or correspondence.

Limits on Approval

5. The Proponent shall not produce more than 250,000 tpa of ammonium nitrate emulsion product at the Project site.

Surrender of Existing Development Consents

6. Within 12 months of this approval, the Proponent shall surrender all existing development consents and project approvals for the site, apart from this project approval, in accordance with Clause 97 of the EP&A Regulation.

Submission of Documentation

7. With the approval of the Director-General, the Proponent may submit any plan, study or document required by this approval on a progressive basis.

   Note: The conditions of this approval require certain documents to be prepared for the Project. They also require these documents to be reviewed and audited on a regular basis to ensure they remain effective. However, in some instances, it will not be necessary or practicable to prepare these documents for the whole Project at any one time; particularly as these documents are intended to be dynamic and improved over time. Consequently, the documents may be prepared and implemented on a progressive basis. In doing this however, the Proponent will need to demonstrate that it has suitable documents in place to manage the existing operations of the Project Site.

Structural Adequacy

8. The Proponent shall ensure that all new buildings and structures on the Project Site are constructed in accordance with the relevant requirements of the Building Code of Australia.

   Notes:
   - *Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works.*
   - *Part 8 of the EP&A Regulation sets out the requirements for the certification of the Project.*

Protection of Public Infrastructure

9. The Proponent shall:
   a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the Project; and
   b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the Project.

10. Prior to commencement of construction, the Proponent shall prepare a dilapidation report of the public infrastructure in the vicinity of the Project Site (including roads, gutters, footpaths, etc) in consultation with the RTA and submit a copy of this report to the Director-General.

11. Prior to the construction of any utility works, the Proponent shall obtain the relevant approvals from service providers.

Operation of Plant and Equipment

12. The Proponent shall ensure that all plant and equipment used on the Project Site is:
    a) maintained in a proper and efficient condition; and
    b) operated in a proper and efficient manner.

SCHEDULE 3
SPECIFIC ENVIRONMENTAL CONDITIONS

HAZARDS

Pre-construction

1. At least one month prior to the commencement of construction of the proposed project (except for construction of those preliminary works that are outside the scope of the hazard studies), or within such further period as the Director-General may agree, the Proponent shall prepare and submit for the approval of the Director-General the studies set out under subsections (a) to (d) (the pre-construction studies). Construction, other than of preliminary works, shall not commence until approval has been given by the Director-General and, with respect to the Fire Safety Study, approval has also been given by the Commissioner of the NSW Fire Brigades.
   a) An update of the Fire Safety Study of the site to include the proposed ANE Facility. This study shall cover the relevant aspects of the Department of Planning's Hazardous Industry Planning Advisory Paper No. 2, 'Fire Safety Study Guidelines' and the New South Wales Government's 'Best Practice Guidelines for Contaminated Water Retention and Treatment Systems'. The study shall also be submitted for approval, to the NSW Fire Brigades.
   b) A Hazard and Operability Study for the proposed ANE Facility, chaired by a qualified person, independent of the development, approved by the Director-General prior to the commencement of the study. The study shall be consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 8, 'HAZOP Guidelines'. The study report must be accompanied by a program for the implementation of all recommendations made in the report. If the Applicant intends to defer the implementation of a recommendation, reasons must be documented.
   c) A Final Hazard Analysis of the proposed ANE Facility, consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 6, 'Guidelines for Hazard Analysis'.
   d) A Construction Safety Study for the ANE Facility, consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 7, 'Construction Safety Study Guidelines'. If the construction period exceeds six (6) months, the commissioning portion of the Construction Safety Study may be submitted two months prior to the commencement of commissioning.

Pre-commissioning

2. The Proponent shall develop and implement the plans and systems set out under subsections (a) to (b). No later than two months prior to the commencement of commissioning of the project, or within such further period as the Director-General may agree, the Proponent shall submit, for the approval of the Director-General, documentation describing those plans and systems. Commissioning shall not commence until approval has been given by the Director-General.
   a) An update of the existing Emergency Plan and the emergency procedures to include the ANE Facility. This plan shall include consideration of the safety of all people outside of the facility who may be at risk from the Facility. The plan shall be consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 1, 'Industry Emergency Planning Guidelines'.
   b) A document setting out a comprehensive Safety Management System, covering all operations and associated transport activities involving hazardous materials associated with the ANE Facility. The document shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to the procedures. Records shall be kept on-site and shall be available for inspection by the Director-General upon request. The Safety Management System shall be consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'.

Pre-startup

3. One month prior to the commencement of operation of the project, the Proponent shall submit to the Director-General, a Pre-startup Compliance Report detailing compliance with conditions 1 and 2, including:
   a) dates of study/plan/system submission, approval, commencement of construction and commissioning;
   b) actions taken or proposed, to implement recommendations made in the studies/plans/systems; and
   c) responses to each requirement imposed by the Director-General under condition 6.

Post-startup

4. Three months after the commencement of operation of the ANE Facility, the Proponent shall submit to the Director-General, a Post-startup Compliance report verifying that:

a) transport routes specified under in the *Technical Note ANE and ANS Transport Hazard Analysis, rev. 0* prepared by Sherpa and dated 8 Oct 2009, or other routes in accordance with the Traffic Management Plan, are being followed;
b) the Emergency Plan required under condition 2a) is in place and that at least one emergency exercise has been conducted; and
c) the Safety Management System required under condition 2b) has been fully implemented and that records required by the system are being kept.

Ongoing

5. Twelve months after the commencement of operations of the proposed ANE Facility and every three years thereafter, or at such intervals as the Director-General may agree, the Proponent shall carry out a comprehensive Hazard Audit of the site and within one month of each audit submit a report to the Director-General.
   a) The audits shall be carried out at the Proponent's expense by a qualified person or team, independent of the overall site, approved by the Director-General prior to commencement of each audit. Hazard Audits shall be consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 5, 'Hazard Audit Guidelines'.
   b) The audit report must be accompanied by a program for the implementation of all recommendations made in the audit report. If the Proponent intends to defer the implementation of a recommendation, reasons must be documented.

6. The Proponent shall comply with all reasonable requirements of the Director-General in respect of the implementation of any measures arising from the reports submitted in respect of conditions 1 to 5 inclusive, within such time as the Director-General may agree.

TRANSPORT

Design of Site Access, Internal Roads and Parking

7. The Proponent shall ensure that new site access points, internal roads and parking associated with the ANE Facility are designed, constructed and maintained in accordance with the latest versions of the Australian Standards *AS 2890.1:2004* and *AS 2890.2:2002* or as otherwise agreed by Council.

8. Prior to the commencement of operation of the ANE Facility, the Proponent shall prepare and implement a Concept Design Plan of the intersection of Echidna Drive with George Booth Drive. The Plan shall be prepared in consultation with the RTA and to the satisfaction of the Director-General. The Plan shall include:
   a) Details of the upgrade works to the existing advance intersection warning signage to type GI-207 and reposition the signage further in advance of George Booth Drive / Echidna Drive Intersection;
   b) Details of improvements of the delineation of the double barrier lines in George Booth Drive on the approaches to Echidna Drive; and
   c) Install a "Stop" sign at the Echidna Drive intersection.

9. The applicant will be required to enter into a Works Authorisation Deed with the RTA for implementation of required road works on George Booth Drive. In this regard the developer is required to submit detailed design plans and all relevant additional information, as may be required in the RTA's Works Authorisation Deed documentation, for each specific change to state road network for the RTA's assessment and final decision concerning the work.

Road Transport Protocol

10. Prior to the commencement of construction of the ANE Facility, the Applicant shall prepare and implement a Road Transport Protocol for heavy vehicles, in consultation with the RTA, to the satisfaction of the Director-General. This Protocol shall detail the management of heavy vehicles during both construction and operation of the ANE Facility, and where relevant:
    a) Define the routes to be used for heavy vehicles; the maximum number of road movements and the haulage hours;
    b) Include a **Traffic Management Plan**, which incorporates the requirements of the site's existing Traffic Management Protocol and addresses:
       - procedures to ensure that drivers adhere to the designated haulage route as required under this Protocol;
       - measures to achieve a low-frequency, regular trucking schedule during normal business hours rather than a high-frequency, campaign trucking schedule;
       - contingency plans where, for example the designated transport route is disrupted. This shall also address procedures for notifying relevant agencies and affected communities of the required implementation of any such contingency plans;

- details of procedures for receiving and addressing complaints from the community concerning traffic issues associated with haulage from the site; and
- measures to ensure that the provisions of the Traffic Management Plan are implemented, eg. education of drivers and any contractual agreements with operators of heavy vehicles which service the site;

c) Include a **Driver Code of Conduct** that addresses:
- driver licencing and training requirements in relation to the transport of dangerous goods;
- travelling speeds;
- staggering of truck departures to ensure a regular trucking schedule throughout the day;
- instructions to drivers not to overtake each other on the haulage route, as far as practicable, and to maintain appropriate distances between vehicles;
- instructions to drivers to restrict the use of exhaust brakes in accordance with the Submissions Report;
- instruction to drivers to adhere to the designated haulage route;
- instruction to drivers to be especially safety conscious and to ensure that traffic regulations are obeyed strictly;
- driver training in the Code to ensure that all drivers are made aware and to adhere to the Code; and
- procedures for ensuring compliance with and enforcement of the Code.

Independent Traffic Audit

11. Within 6 months of the commencement of operation of the ANE Facility, and every 3 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission a suitably qualified person, whose appointment has been approved by the Director-General, to conduct an Independent Traffic Audit of the development. This audit must:
    a) have the verification component of the audit undertaken without prior notice to the Proponent,
    b) assess the impact of the development on the performance of the road network;
    c) investigate any incidents involving haulage vehicles from the development;
    d) assess the effectiveness of the Driver's Code of Conduct; and, if necessary,
    e) recommend measures to reduce or mitigate any adverse (or potentially adverse) impacts.

    Within 1 month of commissioning the audit, or as otherwise agreed by the Director-General, the Proponent shall submit a copy of the audit report to the Director-General, with a response to any of the recommendations contained in the audit report.

FLORA AND FAUNA

Offset Strategy

12. Within 6 months of the date of this approval, the Proponent shall implement the offset strategy to the satisfaction of the Director-General. The Proponent shall:
    a) implement the offset strategy described in the Response to Submissions and summarised in Table 3 (shown in Appendix B); and
    b) make suitable arrangements, in consultation with DECCW, to provide for appropriate long term conservation security for the offset area.

Table 3: Offset Strategy

Offset Area	***Minimum Size***
Biodiversity Offset Area	31.7 ha

13. The mechanism for securing the Biodiversity Offset Area, referred to in condition 12, shall not be extinguished or altered without the written consent of the Director-General.

Vegetation Management Plan

14. The Proponent shall prepare and implement a Vegetation Management Plan for the project to the satisfaction of the Director-General. The plan must:
    a) be prepared in consultation DECCW, and be approved by the Director-General prior to the commencement of operation of the ANE Facility;
    b) describe the detailed measures that would be implemented to protect the Biodiversity Offset Areas; and

c) describe the ongoing management measures that would be undertaken to maintain the Biodiversity Offset Areas for the life of the project.

Vegetation Clearing Protocol

15. The Vegetation Clearing Protocol shall:
    a) clearly identify the location and type of vegetation to be retained and to be removed from the site;
    b) detail measures that would e implemented for vegetation clearing;
    c) detail procedures to manage impacts on fauna including translocation of fauna (if appropriate); and
    d) detail the staging of construction to avoid, where possible, breeding times for key species on site or alternatively minimise impacts during clearing activities.

AIR QUALITY

Mitigation

16. The Proponent shall carry out all reasonable and feasible measures to minimise dust generated by the Project.

17. During construction, the Proponent shall ensure that:
    a) all trucks entering or leaving the Project Site with loads have their loads covered; and
    b) trucks associated with the Project do not track dirt onto the public road network.

NOISE

18. The Proponent shall ensure that the noise generated from the construction and operation of the project does not exceed 35 dB(A) $L_{Aeq(15\ minute)}$ at the nearest residential receptor at any time.

    Notes:

    a) *To determine compliance with the $L_{Aeq\ (15\ minute)}$ noise level limit in condition 17, noise from the project is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of a dwelling where the dwelling (rural situations) is more than 30 metres from the boundary. Where it can be demonstrated that direct measurement of noise from the project is impractical, the Department may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy).*
    The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.

    b) *The noise emission limits identified above apply under meteorological conditions of:*
       - *wind speeds of up to 3 m/s at 10 metres above ground level; and*
       - *temperature inversion conditions of up to 3°C/100m, and wind speeds of up to 2 m/s at 10 metres above ground level.*

19. The Proponent shall conduct a Noise Audit for the premises within 3 months of the commencement of operation of the ANE Facility or as otherwise agreed by the Director-General. This audit shall:
    a) be undertaken by a suitability qualified and experienced person during a period in which the ANE Facility is operating at normal capacity;
    b) assess whether the project is complying with the noise limits in this approval;
    c) identify what additional measures would be implemented to ensure compliance should any non-compliance be detected and clearly indicate who would implement these measures, when these measures would be implemented, and how the effectiveness of these measures would be measured and reported to the Director-General; and
    d) provide details of any complaints received relating to noise generated by the project, and action taken to respond to those complaints.

    Within one month of conducting the Noise Audit, the Proponent shall provide the Director-General and DECCW with a copy of the Noise Audit report.

BUSHFIRE MANAGEMENT

20. The Proponent shall implement the recommendations of the 'Bushfire Threat Assessment' included with the EA and also any additional bushfire hazard reduction measures outlined in the Submissions Report.

SOIL AND WATER

Discharges

21. The Proponent shall comply with Section 120 of the *Protection of the Environment Operations Act 1997.*

Bunding

22. The Proponent shall ensure that all chemicals, fuels and oils associated with the Project are stored in appropriately bunded areas, with impervious flooring and sufficient capacity to contain 110% of the largest container stored within the bund. The bund(s) shall be designed and installed in accordance with:
    a) the requirements of all relevant Australian Standards; and
    b) the DECCW's Storing and Handling Liquids: Environmental Protection, Participants Manual.

Soil and Water Management Plan

23. The Proponent shall prepare and implement a **Soil and Water Management Plan** for the project to the satisfaction of the Director-General. This plan must:
    a) be submitted to the Director-General for approval prior to construction;
    b) be prepared by a suitably qualified and experienced expert; and
    c) include, where relelvant:
        - a Stormwater Management Plan; and
        - an Erosion and Sediment Control Plan.

24. The Stormwater Management Plan must:
    a) include detailed plans of the stormwater management system for the site, including any rainwater harvesting infrastructure;
    b) be consistent with the guidelines *Managing Urban Stormwater: Harvesting and Reuse (DECC);*
    c) demonstrate that post development flows will not exceed predevelopment flows for a range of ARI from 1 year up to and including the 100 year ARI;
    d) describe the procedures for the installation, inspection and maintenance of the stormwater system; and
    e) include a stormwater quality monitoring program for including procedures to be undertaken if any non-compliance is detected.

25. The Erosion and Sediment Control Plan shall be prepared in accordance with *Landcom's 2004 Managing Urban Stormwater: Soils and Construction.*

VISUAL

Lighting

26. The Proponent shall ensure that lighting associated with the Project:
    a) complies with the latest version of *Australian Standard AS 4282(INT)-Control of Obtrusive Effects of Outdoor Lighting*; and
    b) is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network.

WASTE

Operating Conditions

27. The Proponent shall ensure that all waste generated by the Project during construction and operation is classified in accordance with the DECCW's *Waste Classification Guidelines 2008* and if required, disposed of to a facility that may lawfully accept the waste.

ABORIGINAL HERITAGE

28. In the event that skeletal remains, or an Aboriginal object is identified, all construction activities that will or would have the potential to impact on indigenous heritage item(s), shall cease until the DECCW is consulted and their directions complied with.

SCHEDULE 4
ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL MANAGEMENT STRATEGY

1. The Proponent shall prepare and implement an Environmental Management Strategy for the Project to the satisfaction of the Director-General. This strategy must be submitted to the Director-General prior to commencement of construction, and:
   a) provide the strategic context for environmental management of construction and operation of the Project;
   b) identify the statutory requirements that apply to the Project;
   c) describe in general how the environmental performance of the Project would be monitored and managed;
   d) describe the procedures that would be implemented to:
      - keep the local community and relevant agencies informed about the operation and environmental performance of the Project;
      - receive, handle, respond to, and record complaints;
      - resolve any disputes that may arise in relation to operations at the Project;
      - respond to any non-compliance;
      - manage cumulative impacts; and
      - respond to emergencies; and
   e) describe the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the Project.

ENVIRONMENTAL REPORTING

Annual Environmental Management Report

2. Within 12 months of this approval, and annually thereafter, the Proponent shall submit an Annual Environmental Management Report (AEMR) for the Project to the Director-General. The report must:
   a) identify the standards and performance measures for the Project;
   b) describe the works carried out in the past 12 months and the works to be carried out in the next 12 months;
   c) include a summary of complaints received in the past year and provide comparison with previous years;
   d) report results of all monitoring required by this approval and an EPL for the Project;
   e) provide analysis of monitoring results in the context of relevant criteria and limits, previous monitoring results and the predictions made in the EA;
   f) identify any trends in monitoring results over the life of the Project; and
   g) report on compliance with the project approval, summarise non-compliances in the previous 12 months and report on actions taken to rectify non-compliances.

Incident

3. The Proponent shall notify the Director-General and any other relevant agencies of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment associated with the Project as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of the date of the incident, the Proponent shall provide the Director-General and any relevant agencies with a detailed report on the incident.

AUDITING

Independent Environmental Audit

4. Within 2 years of the commencement of operations of the ANE Facility, and every 3 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the Project. This audit must:
   a) be conducted by a suitably qualified, experienced, and independent expert whose appointment has been endorsed by the Director-General;
   b) assess the environmental performance of the Project, and its effects on the surrounding environment;
   c) assess whether the Project is complying with the relevant standards, performance measures, and statutory requirements;
   d) review the adequacy of any strategy/plan/program required under this approval; and, if necessary,
   e) recommend measures or actions to improve the environmental performance of the Project, and/or any strategy/plan/program required under this approval.

ACCESS TO INFORMATION

5. From the end of 2010, the Proponent shall provide regular reporting on the environmental performance of the Project on its website, including ensuring the following information is publicly available on its website:
   a) a copy of all current statutory approvals;
   b) a copy of the current environmental management strategy and associated plans and programs;
   c) a copy of any Annual Reports (over the last 5 years);
   d) a copy of any Independent Environmental Audit, and the Proponent's response to the recommendations in any audit; and
   e) any other matter required by the Director-General.

APPENDIX A
SITE PLANS

Figure 1: *Site Layout*

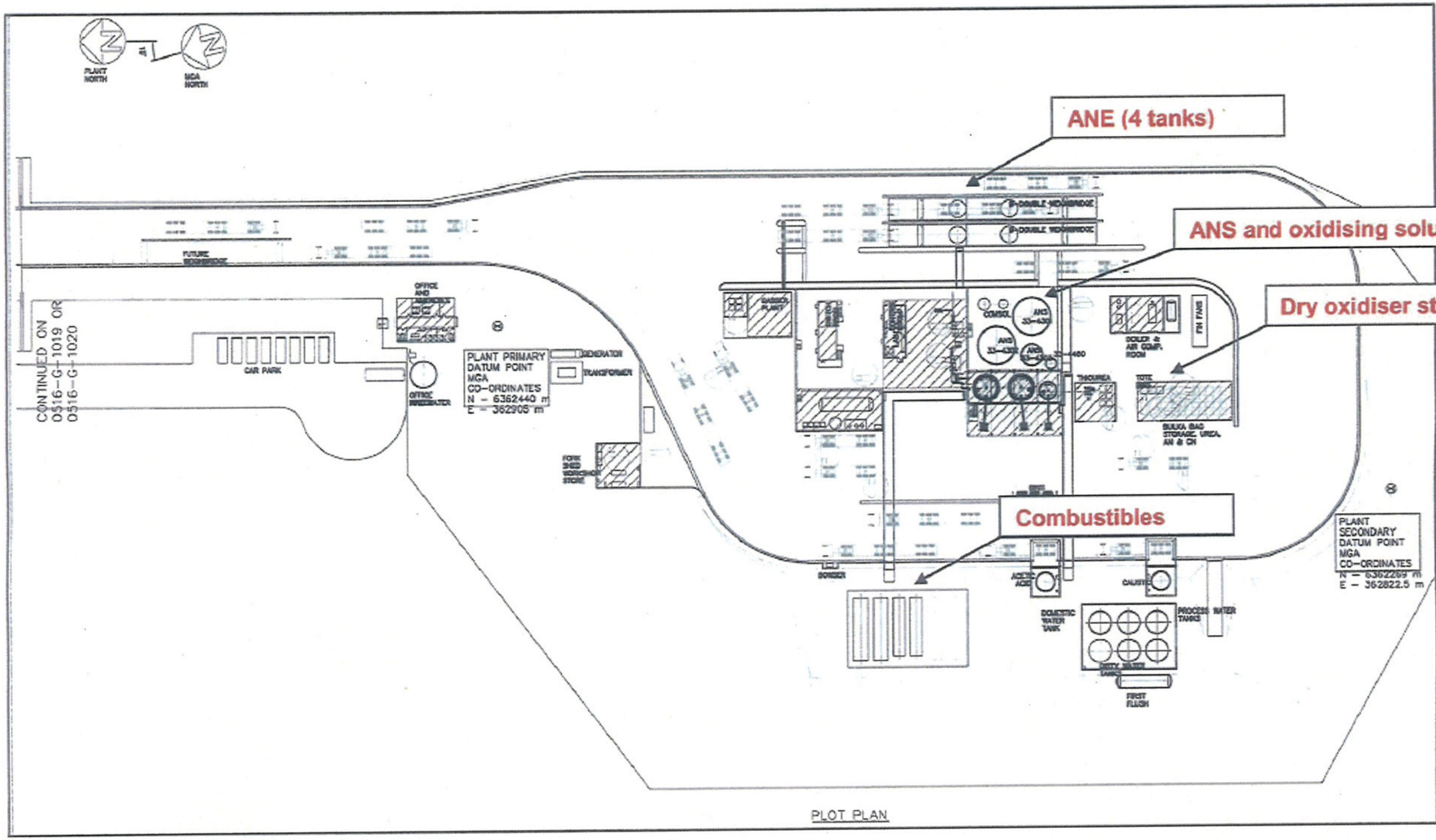

Figure 2: Conceptual Plant Layout

APPENDIX B
BIODIVERSITY OFFSET AREA

***Figure 3:** Biodiversity Offset Area*

7.0 Draft Statement of Commitments

The DGRs for the Project require that the EA includes a Statement of Commitments which details the measures proposed by Orica for environmental mitigation, management and monitoring of the Project.

If approval is granted under Part 3A of the EP&A Act for the proposed Project, Orica will commit to the following controls.

Issue	Commitment	Timing
Compliance with the EA	The Project will be carried out generally in accordance with the Project application and the EA.	Ongoing
Ecology	The Construction Safety Environmental Management Plan (CSEMP) will include:	
	• measures to clearly define the limits of the clearing activities associated with the proposed ANE Production Facility and associated works.	Prior to clearing
	• a clearing procedure for the protection of fauna will be developed in accordance with the procedures outlined in **Section 6.2.4** of the EA and implemented during clearing activities.	Prior to and during construction
	• requirements for the management of erosion and sedimentation during the construction of the facility.	During construction
	The security fencing for the ANE Production Facility will be restricted to the building perimeter at the 30 metre fire break and will not require further vegetation clearing.	During clearing
	Existing Technology Centre site perimeter fencing will remain unchanged so as to allow fauna movement through the site.	Ongoing
	Utility easements needing to be created will, where possible, following existing fire trails/roads and other cleared areas to minimise vegetation clearing. Any minor clearing associated with utility easements will be stabilised and reseeded, where necessary, following completion of works.	During construction
	A Biodiversity Offset area is proposed to be established within the study area to offset the vegetation clearing associated with the proposed ANE Production Facility.	Ongoing

Issue	Commitment	Timing
Aboriginal Heritage	Surface collection of artefact scatter Orica AS will be undertaken in accordance with the methodology in the Aboriginal Cultural Heritage Assessment.	Prior to disturbance of the site
	Topsoil removal associated with the construction of the ANE Production Facility will be subject to monitoring by representatives of the Aboriginal community in accordance with the methodology in the Aboriginal Cultural Heritage Assessment.	During topsoil removal
	An Aboriginal Cultural Heritage module will be developed in consultation with the registered Aboriginal stakeholders for inclusion in the site induction training for construction personnel.	Prior to construction
	The CSEMP will detail the management of Aboriginal heritage material in accordance with Aboriginal Heritage Assessment Report.	During construction
Historical Heritage	If any places, sites or items of potential European heritage significance are identified during the construction phase of the Project, all activities would cease in the immediate area of the site until such time as an appropriate assessment of heritage significance is undertaken and plans to manage the site have been developed in consultation with DoP and, where relevant, the NSW Heritage Office.	During construction
Traffic	A Traffic Management Protocol and Code of Conduct for Drivers operating heavy vehicles to and from the Technology Centre will be implemented.	Prior to the commencement of transport activities associated with the proposed ANE Production Facility
Noise	The use of exhaust brakes will be restricted in both directions between John Renshaw Drive and the intersection of Echidna Drive and George Booth Drive.	Operation
	During construction, higher noise generating activities will be conducted during the day where possible.	During construction
	Investigations will be undertaken in response to any concerns raised by the community regarding traffic noise associated with the Project.	Ongoing
Hazards	Orica will design, construct and manage the Project such that the relevant risk criteria are met within the Technology Centre boundary and do not extend off site.	Ongoing
	Orica will manage potential hazards related to the transport of ANE and ANS in accordance with measures outlined in **Section 6.6.2.2** including product contamination, heavy vehicles controls, and driver training.	Ongoing
Air and odour	The CSEMP will include measures to minimise air and odour impacts as a result of construction.	During construction
	The Operational Environmental Management Plan (OEMP) will detail measures to minimise air and odour during ongoing operations.	During operation

Issue	Commitment	Timing
Greenhouse Gas and Energy	A review of energy efficiency will be undertaken as part of plant and equipment procurement.	During construction
	Orica will consider the implementation of energy efficiency opportunities as described in **Section 6.8.3.**	Ongoing
Water	The CSEMP will include requirements to manage the erosion and sediment control measures.	During construction
	An OEMP will detail the measures to be undertaken to ensure that the water controls are being effectively maintained. This plan will include the requirements for any water quality monitoring, inspection of the diversion drains, erosion control measures and maintenance of the water management systems within the operational areas of the plant.	Operation
Bushfire	A 30 metre Asset Protection Zone (APZ) will be constructed around the proposed ANE Production Facility and maintained in accordance with the requirements of the Inner Protection Area.	During construction and ongoing
	Construction materials for the proposed ANE Production Facility will comply with the Building Code of Australia (BCA) for bushfire protection where applicable.	During construction
	The proposed ANE Production Facility access road will be sized to provide sufficient width to allow fire fighting access.	During construction
	Water supplies will be easily accessible and suitable connections for water tanks will be provided so Rural Fire Service (RFS) tankers can refill.	Ongoing
	The Site Emergency Plan and Fire Safety Management Plan will be updated to include the proposed ANE Production Facility.	During construction and operation
Waste	The CSEMP will include measures to manage waste through the design and procurement of construction materials and establishment of recycling and waste disposal systems.	During construction
	The OEMP details the management of waste materials generated during the operation of the Project.	Ongoing